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Source: *The Journal of Higher Education*, Jul. - Aug., 1993, Vol. 64, No. 4 (Jul. - Aug., 1993), pp. 434-452

Published by: Taylor & Francis, Ltd.

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Minority-Status Stresses and the College Adjustment of Ethnic Minority Freshmen

In the ten-year period between 1969 and 1979, minority students enrolled in predominantly White colleges in increasing numbers, due in part to the greater access afforded by affirmative action programs [14]. Since the early 1980s, however, there has been a disturbing regressive trend in the enrollment, academic performance, and retention of these students. For example, African-American and other non-Asian minority students attending predominantly White colleges are less likely to graduate within five years, have lower grade point averages, experience higher attrition rates, and matriculate into graduate programs at lower rates than White students and their counterparts at predominantly Black or minority institutions [3, 6].*

Efforts to account for these regressive trends suggest that intellectual and academic background factors (that is, aptitude test scores, high-school preparation, and so on) and non-cognitive, contextual, and socio-cultural factors may be differentially associated with the college adjustment and performance of minority and non-minority students [6, 23, 26, 29, 35, 36]. For example, African-American students are more likely

*For purposes of simplicity, the term "Black" will be used interchangeably with "African-American" to refer to U.S. born students of African descent.

The preparation of this manuscript was supported in part by doctoral dissertation grants from the UCLA Institute for American Cultures and the Center for Afro-American Studies to the first and third authors. The authors would like to acknowledge the technical assistance of Jim Sidanius in data analysis.

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Journal of Higher Education, Vol. 64, No. 4 (July/August 1993)
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than Whites to view predominantly White campuses as hostile, alienating, and socially isolating [1, 2, 4, 10, 16, 28, 30, 34, 35, 36], and as less responsive to their needs and interests [4]. African-American students have also been found to experience greater estrangement from the campus community [16, 34] and heightened discomfort in interactions with faculty and peers [20, 30]. In addition, Tracey and Sedlacek [35] and Nettles, Theony, and Gosman [27] have found that the academic adjustment and achievement of African-American and other minority students are influenced by different sociocultural and contextual factors (for example, student satisfaction with college, peer group relations) than those that have an impact on White students.

In order to define conceptually how these factors might contribute to minority student college adjustment, we have proposed a multidimensional stress-coping model [33] which identifies three sets of factors as important in minority college student adjustment and achievement: (1) individual attributes that enhance or moderate students' vulnerability to academic failure (for example, academic preparation, intelligence, self-confidence, social maturity); (2) the psychological and sociocultural stresses students face during their academic careers (for example, stresses that are experienced on campus, in the community, and so on); and (3) the strategies students use to cope with these stresses (for example, individual and group appraisals of stresses and the strategies used to cope with them). Consistent with a transactional model of stress and coping [22], we view the types of stresses experienced, the coping styles used, and the outcomes obtained as mutually interacting. Consequently, the pattern of relationships among these variables are likely to vary as a function of individual, group, and college campus characteristics.

We also note that many of the experiences reported by minority students at predominantly White colleges are experienced by and affect all college students and are integral to the role of college student (for example, academic demands, relationship problems, financial worries, and so on). These student role strains constitute a generic pathway of influences and contribute to college maladjustment for all students. However, these generic role strains should be distinguished from the more unique stresses experienced by minority students that heighten feelings of not belonging and interfere with minority students' effective integration into the university community (for example, experiences with racism, questions about their right to be on campus). These experiences are conceptualized as *minority status stresses* and constitute a separate and additional pathway of risk for maladjustment (that is, an additional stress load).

These status stresses are believed to exert their pathogenic effects in at least two ways. First, they can exert a direct, independent effect, as in the case of those stressful experiences that are attributable to minority group membership (for example, experiences of overt racial prejudice or discrimination) [12, 24, 25]. Because these experiences are due to the specific physical or cultural attributes that define membership in an ethnic minority group, such experiences have limited direct relevance to White students, and affect them only indirectly (for example, being treated with suspicion and mistrust by minority students). Second, minority status stresses can exert an indirect effect by compounding the episodic and chronic stresses faced by all students, due to the marginal social, political, and economic status of many minority students [3, 21]. Such stressors as financial problems, pressures at home, conflicts with faculty and peers, and academic weaknesses may all be experienced as more stressful and may have more negative consequences for the minority student [1, 8].

The purpose of this study, therefore, was to ascertain whether the hypothesized minority status stresses confer an additional risk for poor college adjustment for minority students beyond that attributable to the chronic student role strains and episodic life event stresses experienced by these students.

Method

Sample

The data reported here were obtained in a larger doctoral dissertation study [32] that examined the role of stress and coping on the adjustment of freshmen students to college. The study was conducted in a large university whose student body was predominantly White (56 percent), and included 17.5 percent Asians, 11.8 percent Hispanics, 7.1 percent African-American, 4.1 percent Pilipinos, 0.7 percent American Indians, and 2.3 percent Others. Of the minority students, a large percentage (58 percent) were women. All 1,096 minority freshmen (African-American, Chicano, Latino, American Indian, and Pilipino students) and a random sample of 300 White freshmen entering the university in 1986 were recruited to participate. A questionnaire measuring a variety of academic, psychosocial and background variables was mailed to these students at three times during the freshman year (the summer prior to starting classes [t_1], in mid Fall quarter [t_2], and in late spring [t_3]). Potential respondents could participate at any data collection point, even if they had not returned questionnaires at t_1 or t_2 .

Relevant variables for this study were measured at the last assessment

point. Therefore, only data collected from the 161 minority students who responded at t_3 are reported here. These include data from 45 African-American, 54 Chicano, 25 Latino, and 37 Pilipino students. Of this sample, 91 students returned questionnaires at the two previous data collection points. Attrition analyses revealed that students who responded at all three data collection points had significantly higher high-school grade-point averages and Scholastic Aptitude Test scores than students who responded to questionnaires at t_1 or t_2 only. In addition, over 70 percent of the participants at t_3 were women (47 males and 114 females). Despite the relatively poor representation of minority group males, the sample reflects the larger proportion of women (58:42) in the population of minority freshmen attending the university.

As seen in tables 1a and 1b, the ethnic groups differed significantly on socioeconomic (SES) status, especially in terms of parental education and maternal occupation, as well as on level of educational preparation. Newman-Keuls post-hoc tests of SES, as defined by Hollingshead's (1974) criteria, indicated that Pilipinos came from higher SES backgrounds ($p < 0.05$), and had higher average high-school GPAs ($p < 0.05$) and SAT scores ($p < 0.05$) than African-Americans and Chicanos. Chicanos also had higher high-school GPAs than African-Americans ($p < 0.05$). Overall, SAT scores of the four ethnic groups are considerably higher than the national average, reflecting the academic selectivity of the university and the relatively strong academic preparation of the students in this sample.

Measures

Sources of stress. Separate scales were used to measure the two "generic" stresses and the minority status stresses which are conceptualized as important predictors of minority college student adjustment. Episodic Life Events Stresses (LES) were measured with the Life Events Survey for College Students, which is a modified version of the 120-item Life Events Survey [19]. The LES includes items from several life-event lists and omits items that might be confounded with depressive symptomatology. Students were asked to circle events experienced during the past year and then to indicate whether the event occurred before coming to college in the fall, since they came to college, or during both times. Event impact ratings were made on a 7-point scale ranging from extremely negative impact (-3) to extremely positive impact (+3), and an overall life change stress score was obtained by computing a weighted algebraic sum. The LES has been shown to be a very reliable and valid measure of episodic life stresses among college student samples [19].

TABLE 1a
Demographic Background Variables by Ethnic Group

| | Black (n = 45) | Chicano (n = 54) | Latino (n = 25) | Pilipino (n = 37) | χ^2 (df) |
|--|-------------------|---------------------|--------------------|----------------------|---------------|
| Gender | | | | | |
| Male | 15 | 15 | 7 | 10 | |
| Female | 30 | 39 | 18 | 27 | 0.53 (3) |
| SES | | | | | |
| Low | 24 | 34 | 11 | 12 | |
| High | 21 | 20 | 14 | 25 | 8.75* (3) |
| Maternal Education | | | | | |
| Partial HS | 3 | 20 | 3 | 3 | |
| HS diploma | 8 | 9 | 6 | 4 | |
| Partial college or BA | 29 | 19 | 12 | 23 | |
| Prof. or grad. degree | 4 | 5 | 4 | 7 | 24.98** (9) |
| Paternal Education | | | | | |
| Partial HS | 8 | 18 | 1 | 3 | |
| HS diploma | 8 | 9 | 5 | 0 | |
| Partial college or BA | 24 | 18 | 13 | 22 | |
| Prof. or grad. degree | 4 | 6 | 6 | 10 | 27.94*** (9) |
| Maternal Occupation | | | | | |
| Unemployed | 13 | 20 | 12 | 2 | |
| Unskilled | 4 | 6 | 0 | 3 | |
| Semiskilled | 6 | 3 | 1 | 2 | |
| Skilled | 11 | 13 | 6 | 11 | |
| Sales, technical, professional | 11 | 12 | 6 | 19 | 24.83* (12) |
| Paternal Occupation | | | | | |
| Unemployed | 12 | 7 | 4 | 4 | |
| Unskilled | 3 | 10 | 2 | 4 | |
| Semiskilled | 3 | 8 | 3 | 3 | |
| Skilled | 14 | 12 | 8 | 10 | |
| Sales, technical, professional | 13 | 17 | 8 | 16 | 11.49 (12) |
| Ethnic Composition of Neighborhood of Origin | | | | | |
| Same race | 15 | 15 | 12 | 12 | |
| Predominantly White | 14 | 26 | 8 | 16 | |
| Integrated | 16 | 13 | 5 | 9 | 6.36 (6) |

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

TABLE 1b
Academic Background Variables by Ethnic Group

| | Black (n = 45) | Chicano (n = 54) | Latino (n = 25) | Pilipino (n = 37) | F (df) |
|-----------|-------------------|---------------------|--------------------|----------------------|-----------------|
| HS GPA | 3.363 (0.33) | 3.598 (0.33) | 3.477 (0.34) | 3.802 (0.42) | 10.78** (3,153) |
| SAT Total | 941.1 (140.0) | 968.2 (149.3) | 997.6 (167.1) | 1047.6 (160.4) | 3.40* (3,153) |

NOTE: Newman-Keuls post-hoc tests ($p < 0.05$) revealed that Pilipinos had significantly higher high-school grades and SAT scores than Black and Chicano students, and that Chicanos obtained significantly higher high-school grades than Blacks.

* $p < 0.05$ ** $p < 0.001$

Chronic Student Role Strain (CRS) was measured with the Current Concerns Scale [32]. CRS reflects the ongoing stressors that are part of a student's role (for example, academic demands) and the normal life demands of late adolescence/early adulthood (for example, romance, family, friendships, financial problems, illness). The Current Concerns Scale was developed specifically for this study, and measures role strains in seven functional domains: school-academics, romance, family, adjusting to college, neighborhood/living situation, extracurricular activities, and personal life. Students rated each domain on a 4-point scale from (1) not at all, to (4) very much, to reflect the importance and the degree to which they had had problems in each domain during the past three months. They also identified the most problematic domain, described the specific problem experienced, and assigned a stressfulness rating on a 5-point scale from (1) not at all stressful to (5) extremely stressful. A chronic role strain score was calculated as the weighted sum of ratings (that is, sum of stress ratings multiplied by their importance rating), and was found to be moderately reliable ($\alpha = 0.61$).

Minority Status Stresses (MSS) were measured with the 37-item Minority Student Stress Scale, which was developed for this project. Items for the MSS scale were obtained from student stress scales [13, 38] and from issues and experiences suggested by a pilot sample of 100 minority students who participated in a university summer school program. The MSS items reflect both unique, minority-specific stressors (for example, "Too many people of my race are employed in low-status jobs at the university"), as well as "generic" student role stresses that are compounded by a students' racial/ethnic or social class background (for example, "being the first from my family to attend college"). Students were asked to rate each item on a six-point scale, from (0) does not apply, to (5) extremely stressful.

A principal components analysis with varimax rotation identified five stable and reliable factors (Chronbach's α values ranged from 0.76 to 0.93) that accounted for 58 percent of the common variance. Only items with factor loadings above 0.30 were retained. The factor solution, which is presented in table 2, included: an 11-item first factor that assessed Social Climate Stresses, a 7-item second factor that tapped Interracial Stresses, a 5-item third factor that reflected students' concerns about actual or perceived experiences with Racism and Discrimination, a 4-item fourth factor that tapped students' concerns about Within-group Stresses, and a fifth factor, termed Achievement Stresses, that reflected student's concerns about their academic preparation and ability and high family expectations for their success. The items on each factor were summed to generate five minority status stress scores.

TABLE 2

Minority Status Stress Scales and Items (Factor solution accounts for 53 percent of the variance)

| Scales and Items | Factor Loading |
|--|----------------|
| <i>Factor 1: Social Climate Stresses</i> (33% of variance; alpha = 0.93) | |
| The university does not have enough professors of my race | 0.76 |
| Few students of my race are in my classes | 0.75 |
| Racist policies and practices of the university | 0.74 |
| The university lacks concern and support for the needs of students of my race | 0.66 |
| Seeing members of my race doing low status jobs and Whites in high status jobs on campus | 0.65 |
| Few courses involve issues relevant to my ethnic group | 0.61 |
| Negative attitudes/treatment of students of my race by faculty | 0.52 |
| White students and faculty expect poor academic performance from students of my race | 0.49 |
| Pressure that what "I" do is representative of my ethnic group's abilities, behavior, and so on. | 0.49 |
| Tense relationships between Whites and minorities at the university | 0.47 |
| The university is an unfriendly place | 0.37 |
| <i>Factor 2: Interracial Stresses</i> (6% of variance; alpha = 0.85) | |
| Difficulties with having White friends | 0.70 |
| Negative relationships between different ethnic groups at the university | 0.69 |
| The White-oriented campus culture of the university | 0.64 |
| Having to live around mostly White people | 0.52 |
| The lack of unity/supportiveness among members of my race at the university | 0.51 |
| Trying to maintain my ethnic identity while attending the university | 0.44 |
| Having to always be aware of what White people might do | 0.44 |
| <i>Factor 3: Racism and Discrimination Stresses</i> (5% of variance; alpha = 0.87) | |
| Being treated rudely or unfairly because of my race | 0.91 |
| Being discriminated against | 0.74 |
| White people expecting me to be a certain way because of my race (i.e., stereotyping) | 0.60 |
| Others lacking respect for people of my race | 0.48 |
| Having to "prove" my abilities to others (i.e., work twice as hard) | 0.41 |
| <i>Factor 4: Within-Group Stresses</i> (4% of variance; alpha = 0.78) | |
| People close to me thinking I'm acting "White" | 0.68 |
| Pressures to show loyalty to my race (e.g., giving back to my ethnic group community) | 0.58 |
| Pressures from people of my same race (e.g., how to act, what to believe) | 0.58 |
| Relationships between males and females of my race (e.g., lack of available dating partners) | 0.52 |
| <i>Factor 5: Achievement Stresses</i> (3% of variance; alpha = 0.76) | |
| Doubts about my ability to succeed in college | 0.74 |
| Feeling less intelligent or less capable than others | 0.72 |
| My family has very high expectations for my college success | 0.62 |
| My academic background for college being inadequate | 0.55 |
| My family does not understand the pressures of college (e.g., amount of time or quiet needed to study) | 0.41 |
| Being the first in my family to attend a major university | 0.32 |

Outcome measures. Three indicators of college adjustment were measured which reflect both personal/social adjustment and academic achievement: level of psychological distress, feelings of well-being, and academic achievement.

Psychological Distress (PD) was measured with the Hopkins Symptom Checklist (HSCL-58). The HSCL is a 58-item self-report measure that asks respondents to rate on a 4-point scale from (1) = not at all to (4) = very often the frequency with which a list of physical and psychological symptoms are experienced [11]. The scale yields five reliable and valid symptom clusters: anxiety, somatization, interpersonal sensitivity, obsessive-compulsiveness, and depression [11]. For purposes of the present study, only the sum HSCL score was used as a global measure of psychological distress.

Feelings of Well-Being were measured with eight items from the General Well-Being Questionnaire (GWB) [37] that measure positive adjustment [5, 9]. The GWB provides a reliable self-report of perceived psychological well-being and distress and includes items that measure health, worry/concern, energy level, mood, emotional stability, control, tension/nervousness, and positive expressions of well-being. The first six items measure the intensity or relative frequency of positive feelings and perceptions, and the last two items measure the degree of relaxation and energy felt for the past three months. Items are scored such that high scores indicate positive well-being. These two subscales of well-being have been used with multi-ethnic samples and have been found to be inversely related to stress and depression [5], and to be enhanced by the availability of social supports [5, 9].

Finally, Academic Achievement was measured using the students' official cumulative grade point average (GPA) at the end of the freshman year.

Results

Between-Group Differences

Because of the small sample size, the four SES groups were first reduced to two by combining Hollingshead levels I, II, and III into a low SES group, and levels IV and V into a high SES group. A series of two-way race X SES analyses of variance (ANOVAs) were then conducted on each of the independent and dependent variables. As shown in table 3, the four ethnic groups differed significantly on overall minority status stresses ($p < 0.001$), and specifically on social climate stresses ($p < 0.001$), within-group stresses ($p < 0.001$), interracial stresses ($p < 0.001$), and on

TABLE 3

Race by SES Differences on Academic Background, Life Stresses, and Academic Achievement (*N* = 161)

| SES <i>N</i> | Black | | Chicano | | Latino | | Filipino | | F Race | F SES | F R x SES |
|--------------------------------------|------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|-------------------|---------|--------|-----------|
| | low 28 | high 17 | low 36 | high 18 | low 13 | high 12 | low 12 | high 25 | | | |
| Academic Background | | | | | | | | | | | |
| High-school GPA | 3.37 (0.35) | 3.36 (0.32) | 3.57 (0.32) | 3.64 (0.35) | 3.49 (0.37) | 3.46 (0.32) | 3.70 (0.27) | 3.85 (0.47) | 10.17** | 0.61 | 0.75 |
| SAT total score | 913.5 (130.5) | 971.4 (146.8) | 944.4 (136.2) | 1008.8 (165.0) | 1002.7 (123.7) | 993.6 (199.4) | 956.4 (168.4) | 1091.3 (139.8) | 2.53 | 6.93** | 1.06 |
| Chronic role strain | 83.3 (21.4) | 68.1 (21.8) | 71.8 (15.7) | 63.6 (17.0) | 77.4 (16.7) | 73.6 (23.8) | 75.2 (17.2) | 72.6 (17.4) | 1.99 | 7.45** | 0.86 |
| Life change stress | 18.9 (13.3) | 20.4 (9.1) | 23.2 (12.7) | 21.3 (10.9) | 27.4 (13.1) | 26.6 (12.5) | 28.6 (15.7) | 21.5 (12.5) | 2.14 | 0.85 | 0.76 |
| Minority-Status Stresses | | | | | | | | | | | |
| Social climate | 2.47 (1.03) | 1.76 (1.14) | 1.57 (1.10) | 1.04 (0.67) | 0.87 (0.24) | 1.22 (0.83) | 1.36 (0.66) | 1.05 (0.51) | 9.52** | 6.12* | 0.17 |
| Interracial stresses | 1.51 (0.58) | 1.55 (1.06) | 1.20 (0.80) | 0.83 (0.35) | 0.71 (0.36) | 0.99 (0.43) | 1.12 (0.23) | 1.11 (0.31) | 6.20* | 0.31 | 1.36 |
| Racism | 2.24 (1.05) | 2.19 (1.39) | 1.54 (1.15) | 0.92 (0.64) | 1.02 (1.06) | 1.23 (1.02) | 0.90 (0.90) | 1.40 (1.13) | 8.30* | 0.12 | 1.73 |
| Within-group stresses | 2.17 (1.09) | 2.10 (1.31) | 1.12 (0.84) | 0.91 (0.67) | 0.89 (0.60) | 1.02 (0.68) | 0.98 (0.69) | 1.09 (0.62) | 15.33* | 0.09 | 0.28 |
| Achievement stresses | 2.33 (1.04) | 1.78 (1.11) | 2.42 (1.01) | 1.99 (0.91) | 1.91 (0.78) | 2.47 (1.10) | 2.29 (0.91) | 2.40 (0.95) | 0.63 | 1.33 | 1.83 |
| General well-being | 31.8 (8.5) | 32.1 (10.0) | 33.2 (7.2) | 37.3 (8.5) | 34.1 (8.2) | 32.3 (8.9) | 33.2 (6.6) | 35.0 (8.7) | 1.13 | 1.33 | 0.80 |
| Psychological distress | 130.5 (33.8) | 124.3 (25.9) | 120.7 (24.8) | 109.6 (26.5) | 125.7 (31.3) | 117.7 (18.0) | 123.7 (13.8) | 125.2 (24.3) | 1.99 | 2.37 | 0.40 |
| Freshman year grade-point average | 2.41 (0.60) | 2.50 (0.61) | 2.50 (0.52) | 2.61 (0.58) | 2.65 (0.42) | 2.50 (0.69) | 2.52 (0.55) | 2.77 (0.47) | 0.96 | 0.92 | 0.60 |

p* < 0.05 *p* < 0.001

racism and discrimination stresses ($p < 0.001$). Post-hoc Neuman-Keuls tests revealed that African-Americans reported significantly higher mean stress levels ($p < 0.05$) than the other ethnic groups on each of these sources of stress.

Significant SES differences on social climate stresses ($p < 0.001$) and on chronic student role strains ($p < 0.01$) were also obtained. In both cases, lower SES students reported higher mean stress levels. No significant race X SES interactions were obtained.

Finally, a series of two-way race X gender ANOVAs were conducted on each of the independent and dependent variables. These analyses, not shown here, revealed no significant race X gender interactions, and only one significant gender difference among the variables. Females reported significantly higher levels of achievement stresses ($M = 2.41$) than males ($M = 1.80$), $F(1, 113) = 11.53, p < 0.01$.

Relative Contribution of Minority Status Stresses

A series of setwise, hierarchal regression analyses were conducted to test whether minority status stresses would contribute to the explanation of variance for each of the three indexes of college adjustment, after accounting for the effects of race, gender, SES, prior levels of academic preparation, and “generic” student stresses. In each case, gender and SES were entered first as a set, followed by race. Dummy coding (that is, 1, 0) was used to generate three separate dummy variables for the racial groups, and gender was coded as 0 = male and 1 = female. High-school grade-point average and total Scholastic Aptitude Test (SAT) scores were then entered as a set, followed by chronic student role strain (CRS) and life event stress (LES), in separate steps. Finally, the set of five minority status stress (MSS) scores were entered into the equation. In each equation missing data were replaced by the overall mean for each variable. To reduce capitalization on chance variation in the data, adjusted R^2 values are reported for each equation.

General well-being. A significant setwise regression equation on well-being was obtained which accounted for 16 percent of the variance in the dependent variable ($F = 3.25, p < 0.001$). As shown in table 4, after the effects of gender and SES (0.0 percent of variance), race (2.0 percent of variance) and high-school grades and SAT scores (1.0 percent of variance) were accounted for, chronic role strain was the only variable significantly associated with well-being. Chronic role strain accounted for an additional 14 percent of the variance and was inversely related to well-being scores (beta = -0.31 , F change = $27.35, p < 0.001$). Neither life event stress nor minority status stresses were significantly associated

TABLE 4
 Hierarchical Regression Analysis of General Well-Being from Student Background Variables, Chronic Role Strain, Life Events, and Minority Status Stresses ($N = 161$)

| Step | Variable(s) | R^2 Change | F Change | Beta |
|------|--------------------------|--------------|------------|----------|
| 1. | Gender | 0.00 | 0.37 | -0.03 |
| | Socioeconomic status | | | -0.05 |
| 2. | Race | 0.02 | 1.16 | |
| | African-American | | | -0.13 |
| | Chicano | | | 0.00 |
| | Latino | | | -0.06 |
| 3. | SAT total score | 0.01 | 0.72 | -0.04 |
| | High-school GPA | | | 0.03 |
| 4. | Chronic role strain | 0.14 | 26.43*** | -0.31*** |
| 5. | Life events | 0.00 | 0.95 | -0.04 |
| 6. | Minority status stresses | 0.05 | 2.07 | |
| | Interracial stresses | | | 0.06 |
| | Racism stresses | | | -0.18 |
| | Achievement stresses | | | -0.06 |
| | Within-group stresses | | | 0.19 |
| | Social climate stresses | | | -0.18 |

R^2 equation = 0.22, (adjusted $R^2 = 0.16$), F (equation) = 3.25, $p < 0.001$

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

with well-being, although minority status stress did account for an additional 5 percent of the variance.

Psychological distress. Results of the setwise regression indicated that all three sources of stress were significantly associated with symptoms of psychological distress, and all independent variables accounted for 28 percent of the cumulative variance in symptoms ($F = 5.43$, $p < 0.001$). As shown in table 5, after the effects of gender, SES, race, high-school GPA, and SAT scores were accounted for (5 percent), chronic role strain accounted for an additional 14 percent of the variance in distress (beta = 0.21, F change = 26.28, $p < 0.001$), while life event stress accounted for an additional 3 percent of the variance (beta = 0.13, F change = 5.89, $p < 0.05$). Consistent with the stress-load hypothesis, minority status stresses accounted for a significant additional 12 percent of the variance in psychological distress (F change = 5.43, $p < 0.001$), with achievement stresses (beta = 0.32, $p < 0.001$) emerging as the most important source of status-related stress.

Academic achievement. Results of the setwise regression on student grade-point average indicated that none of the "generic" sources of stress were significant correlates of GPA. However, minority status stress accounted for an additional and significant 9 percent of the variance in

TABLE 5
 Hierarchical Regression Analysis of Psychological Distress from Student Background Variables, Chronic Role Strain, Life Events, and Minority Status Stresses (*N* = 161)

| Step | Variable(s) | R ² Change | F Change | Beta |
|------|--------------------------|-----------------------|----------|---------|
| 1. | Gender | 0.01 | 0.92 | 0.01 |
| | Socioeconomic status | | | 0.05 |
| 2. | Race | 0.03 | 1.56 | |
| | African-American | | | 0.09 |
| | Chicano | | | -0.10 |
| | Latino | | | -0.04 |
| 3. | SAT total score | 0.01 | 0.72 | 0.04 |
| | High-school GPA | | | 0.01 |
| 4. | Chronic role strain | 0.14 | 26.28*** | 0.21** |
| 5. | Life events | 0.03 | 5.89* | 0.13 |
| 6. | Minority status stresses | 0.12 | 5.43*** | |
| | Interracial stresses | | | -0.12 |
| | Racism stresses | | | 0.04 |
| | Achievement stresses | | | 0.32*** |
| | Within-group stresses | | | -0.01 |
| | Social climate stresses | | | 0.19 |

R² equation = 0.34, (adjusted R² = 0.28), F (equation) = 5.42, *p* < 0.001

**p* < 0.05

***p* < 0.01

****p* < 0.001

cumulative grades (*F* change = 4.49, *p* < 0.01), after controlling for demographic attributes, prior academic preparation, and “generic” stress. Again, this finding is consistent with the stress load hypothesis. As shown in table 6, gender, SES, and race differences were found to account for a non-significant 6 percent of the variance in grades. As expected, high-school GPA and SAT scores accounted for the greatest amount of variance in college grades (23 percent of variance, *F* change = 24.69, *p* < 0.001), and were positively related to GPA. Status-related achievement stresses were the only minority status stressor that was significantly and inversely associated with academic achievement (beta = -0.31, *p* < 0.001).

Discussion

This study investigated the relationship of student role strains, life events stresses, and minority status stresses with the psychological and academic adjustment of minority freshmen at a major university. Specifically, we hypothesized that minority status stresses would confer an additional burden of stress and would be associated with an increased risk for negative outcomes beyond that which is attributable to the stresses

TABLE 6
 Hierarchical Regression Analysis of Grade-Point Average from Student Background Variables, Chronic Role Stresses, Life Events, and Minority Status Stresses ($N = 161$)

| Step | Variable(s) | R^2 Change | F Change | Beta |
|------|--------------------------|--------------|------------|----------|
| 1. | Gender | 0.04 | 3.48* | 0.03 |
| | Socioeconomic status | | | 0.12 |
| 2. | Race | 0.02 | 1.13 | |
| | African-American | | | -0.10 |
| | Chicano | | | 0.05 |
| 3. | Latino | 0.23 | 24.69*** | 0.09 |
| | SAT total score | | | 0.30*** |
| | High-school GPA | | | 0.34*** |
| 4. | Chronic role strain | 0.00 | 0.00 | 0.00 |
| 5. | Life events | 0.00 | 0.02 | -0.02 |
| 6. | Minority status stresses | 0.09 | 4.49** | |
| | Interracial stresses | | | 0.06 |
| | Racism stresses | | | 0.13 |
| | Achievement stresses | | | -0.31*** |
| | Within-group stresses | | | 0.06 |
| | Social climate stresses | | | 0.15 |

R^2 equation = 0.38, (adjusted $R^2 = 0.33$), F (equation) = 6.55, $p < 0.001$

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

of being a student at a highly competitive academic institution. Our results generally confirm this hypothesis. They indicate that chronic student role strains and life events stresses are important correlates of psychological distress in minority freshmen, and that minority status stresses make a substantial additional contribution to this correlation. Our findings also confirm previous evidence that psychological stresses, regardless of their source, are not as important as academic aptitude (that is, prior academic preparation and performance) in accounting for current academic performance. However, the significant association of minority status-related achievement stresses with lower GPA suggests that conflicts between academic expectations and questions about readiness to compete academically are an important additional source of academic vulnerability for these students. Finally, only chronic student role strain was an important and negative correlate of feelings of psychological well-being.

These results provide additional empirical support for the hypothesis that sociocultural and contextual stresses play a significant role in the adaptation of minority freshmen to a predominantly White college. Status-related pressures are associated with increased feelings of distress and pose additional demands on students' coping resources. These

stresses emerge from various sources, including contact and conflict from within and between racial and ethnic groups. As described in previous studies, the minority freshmen studied here evidenced considerable psychological sensitivity and vulnerability to the campus social climate; to interpersonal tensions between themselves and White students and faculty; and to experiences of actual or perceived racism, racist attitudes and expectations, and discrimination. Such external pressures are often compounded by pressures for loyalty and solidarity from within the respective ethnic groups, which become more salient as campus race relations are experienced to be more conflictual [2, 13, 17, 35].

Our results also indicate, however, that minority students' status-related pressures are also experienced as heightened concerns over their academic preparedness, questions about their legitimacy as students at the university, perceptions of negative expectations from White peers and from the faculty, and concerns over parental/family expectations and lack of understanding of the peculiar demands of attending a highly competitive university. These more personal sources of stress may be due in part to minority students' status as entering freshmen, but also reflect a sensitivity to their stigmatized "special status" as beneficiaries of affirmative action decisions, despite their individual accomplishments. The latter is especially significant, given that the students sampled here are a very select group of minority students whose academic credentials (that is, combined SAT scores of 950–1050) are above the national average for such students.

These results are not surprising and underscore the complexity of the problem of minority student adjustment to White college campuses. The highly competitive atmosphere of the university in which this study was conducted and the consequent pressures on students for academic achievement is a normal role-related source of stress for all students. However, for some minority students this source of college student stress may be compounded by actual or perceived weaknesses in academic preparation due to limited educational opportunities relative to their White peers, doubts about their abilities, or concerns that faculty and peers may question their legitimacy as college students. All of these factors threaten the effective early adjustment to college of minority freshmen students.

Contrary to the hypothesis, minority status stresses were not significantly associated with feelings of well-being. Chronic role strain, however, was associated with lower feelings of well-being. It is possible that minority status stresses have a domain-specific effect on functioning (that is, they exert a more powerful influence on negative than positive

outcomes). Alternatively, the effects of minority status stresses on well-being may be mediated by factors that help to maintain minority students' self-esteem and sense of positive health. For example, minority students' social, political, and/or cultural orientations (for example, sense of ethnic identity and collective consciousness) may serve to buffer the effects of status-related pressures on well-being [17, 18].

It is not surprising that academic performance during the freshman year was most strongly associated with prior academic preparation and achievement. Negative life events and chronic role strain were not correlated with poor academic outcomes. Minority status stresses, however, were inversely associated with academic achievement. It is important to recognize that minority status-related sources of stress may also be operative in the educational system and have an impact on student adjustment long before college. Minority students from elementary through high school may experience similar disincentives, including teacher and peer expectations for their failure, intergroup conflicts, racist policies and practices of school districts, and culturally insensitive curricula. If this is the case, then academic performance may be affected by these minority status stresses very early in a student's schooling. Therefore, what we may be observing in high-school grades and SAT scores is the cumulative impact of these status stresses over time. Our understanding of this problem would be enhanced by future studies that investigate this cumulative status-related effect on the academic achievement of minority students longitudinally from grade school through college.

Our results also indicate, somewhat surprisingly, that the more visible and attention-grabbing stresses (for example, interracial conflicts and experiences of overt racism and discrimination) were less important correlates of distress. This should not be interpreted as suggesting that such experiences have limited impact or are of relatively less concern for these students. Rather, these results may reflect the relatively low frequency of occurrence of those overt conflicts and experiences in comparison to more covert and subtle pressures. We would expect that when overt conflicts and expressions of racism occur, they magnify the effects of the more subtle but chronic minority status stresses (for example, feelings of alienation from the university).

In summary, it appears that the more debilitating minority status stressors were those that undermined students' academic confidence and ability to bond to the university. These stresses come from both internal sources as well as from the demographic composition and social climate of the campus. Initial group differences suggest that these minority status stresses may be greater for African-American freshmen than for other minority freshmen. Due to the small number of subjects sampled

from each racial group, however, it is difficult to determine whether African-Americans are at greater risk for the pathogenic effects of status-related stresses than other minority students. Future studies should investigate conditional effects of minority status stresses (that is, race-by-stress interactions) to determine if these stresses tend to exert their effects differentially by racial group membership.

These findings suggest that intervention programs designed to improve minority student retention are likely to be more effective if they focus attention on helping minority freshmen to understand the interplay of the additional social and academic stresses they will face from their peers and from faculty in addition to providing academic support services. Such interventions should emphasize enhancing the effectiveness of the students' efforts to cope with these status-related demands and should target those students who are finding it particularly difficult to handle both generic student role strains and minority status stresses.

The present research also suggests, however, that it is equally important to intervene at the level of the university environment. Many of the items that minority students identified as stressful point to failures of the university structure to meet the needs of minority students. This requires that such campuses be made less alien and more culturally and emotionally accessible to a diverse student population [4, 10, 16]. Effective and culturally sensitive interventions should be developed that target not only the individual student, but also the policies, atmosphere, demographics, and structure of the university.

Finally, although the results obtained confirm our hypotheses, the relatively small sample, the overrepresentation of women, the focus on freshmen, and the single university setting require replication with other larger and more representative samples and more diverse academic settings. It would be useful to begin identifying those contextual variables that promote positive outcomes among minority students as a step toward creating university-centered solutions to the problem of minority student retention. In addition, future research is needed to identify those coping resources and styles that moderate the negative effects of the minority status stress load in order to insure more positive psychological, social, and academic outcomes in minority students who attend predominantly White colleges and universities.

References

1. Allen, W. R. "Correlates of Black Student Adjustment, Achievement, and Aspirations at a Predominantly White Southern University." In *Black Students in Higher Education*, edited by G. E. Thomas. Westport, Conn.: Greenwood Press, 1981.

2. ———. "Black Student, White Campus: Structural, Interpersonal, and Psychological Correlates of Success." *Journal of Negro Education*, 54 (1985), 137–47.
3. ———. "The Education of Black Students on White College Campuses: What Quality the Experience?" In *Toward Black Undergraduate Student Equality in American Higher Education*, edited by M. T. Nettles, pp. 57–86. Westport, Conn.: Greenwood Press, 1988.
4. ———. "Improving Black Student Access and Achievement in Higher Education." *Review of Higher Education*, 11 (1988), 403–16.
5. Aneshensel, C. S., and R. R. Frerichs. "Stress, Social Support and Depression: A Longitudinal Causal Model." *Journal of Community Psychology*, 10 (1982), 363–76.
6. Astin, A. W. *Minorities in Higher Education: Recent Trends, Current Prospects, and Recommendations*. San Francisco: Jossey-Bass, 1982.
7. Burbach, H. J., and M. A. Thompson. "Alienation among College Freshmen: A Comparison of Puerto Rican, Black, and White Students." *Journal of College Student Personnel*, 12 (1971), 248–52.
8. Burrell, L. F., and T. B. Trombley. "Academic Advising with Minority Students on Predominantly White Campuses." *Journal of College Student Personnel*, 24 (1983), 121–26.
9. Cohen, P., et al. "Community Stressors, Mediating Conditions and Well-Being in Urban Neighborhoods." *Journal of Community Psychology*, 10 (1982), 377–91.
10. Crossen, P. H. "Four-Year College and University Environments for Minority Degree Achievement." *Review of Higher Education*, 11 (1988), 365–82.
11. Derogatis, L. R., et al. "The Hopkins Symptom Checklist (HSCL): A Self-Report Symptom Inventory." *Behavioral Science*, 19 (1974), 1–15.
12. Dohrenwend, B. S., and B. P. Dohrenwend. "Class and Race as Status-Related Sources of Stress." In *Social Stress*, edited by S. Levine and N. A. Scotch. Chicago: Aldine Press, 1970.
13. Edmunds, G. J. "Needs Assessment Strategy for Black Students: An Examination of Stressors and Program Implications." *Journal of Non-White Concerns in Personnel and Guidance*, 12 (1984), 48–56.
14. Evans, G. "Black Students Who Attend White Colleges Face Contradictions in Their Campus Life." *Chronicle of Higher Education* (30 April 1986), 29–30.
15. Fleming, J. "Blacks in Higher Education to 1954: A Historical Overview. In *Black Students in Higher Education*, edited by G. E. Thomas. Westport, Conn.: Greenwood Press, 1981.
16. ———. *Blacks in College: A Comparative Study of Student's Successes in Black and White Institutions*. San Francisco: Jossey-Bass, 1984.
17. Gibbs, J. L. "Patterns of Adaptation among Black Students at a Predominantly White University: Selected Case Studies." *American Journal of Orthopsychiatry*, 44 (1974), 729–40.
18. Gurin, P., and S. Epps. *Black Consciousness: Identity and Achievement*. New York: Wiley and Sons, 1975.
19. Hammen, C., T. Marks, A. Mayo, and R. deMayo. "Depressive Self-Schemas, Life Stress, and Vulnerability to Depression." *Journal of Abnormal Psychology*, 94 (1985), 308–19.

20. Keller, J., C. Piotrowski, and D. Sherry. "Perceptions of the College Environment and Campus Life: The Black Experience." *Journal of Non-White Concerns in Personnel and Guidance*, 10 (1982), 126–32.
21. Kessler, R. C. "Stress, Social Status, and Psychological Distress." *Journal of Health and Social Behavior*, 20 (1979), 259–72.
22. Lazarus, R. S., and S. Folkman. *Stress, Appraisal and Coping*. New York: Springer Press, 1984.
23. Lunneborg, C. E., and P. W. Lunneborg. "Beyond Prediction: The Challenge of Minority Achievement in Higher Education." *Journal of Multicultural Counseling and Development*, 14 (1986), 77–84.
24. Moritsugu, J., and S. Sue. "Minority Status as a Stressor." In *Preventive Psychology: Theory, Research, and Practice*, edited by R. D. Felner, L. A. Jason, J. Moritsugu, and S. S. Farber. New York: Praeger Press, 1983.
25. Myers, H. F. "Stress, Ethnicity, and Social Class: A Model for Research with Black Populations." In *Minority Mental Health*, edited by E. Jones and S. Korchin. New York: Holt, Rinehart and Winston, 1982.
26. Nelson, R. B., T. B. Scott, and W. A. Bryan. "Precollege Characteristics and Early College Experiences as Predictors of Freshman Year Persistence." *Journal of College Student Personnel*, 25 (1984), 50–54.
27. Nettles, M. T., A. R. Theony, and E. J. Gosman. "Comparative and Predictive Analyses of Black and White Students' College Achievement and Experiences." *Journal of Higher Education*, 57 (May/June 1986), 289–318.
28. Oliver, M. L., C. J. Rodriguez, and R. A. Mickelson. "Brown and Black in White: The Social Adjustment and Academic Performance of Chicano and Black Students in a Predominantly White University." *The Urban Review*, 17 (1985), 3–24.
29. Pascarella, E. T. "Racial Differences in Factors Associated with Bachelor's Degree Completion: A Nine-Year Follow-up." *Research In Higher Education*, 24 (1986), 351–73.
30. Patterson, A. M., W. E. Sedlacek, and F. W. Perry. "Perceptions of Blacks and Hispanics of Two Campus Environments." *Journal of College Student Personnel*, 25 (1984), 513–18.
31. Pierce, C. M. "Psychiatric Problems of the Black Minority." In *American Handbook of Psychiatry*, edited by S. Arieti and G. Caplan. Vol 2, 2nd ed. Basic Books, 1974, 512–23.
32. Prillerman, S. L. *Coping with a Stressful Transition: A Prospective Study of Black Student Adjustment to a Predominantly White University*. Ph.D. dissertation, University of California at Los Angeles, 1988.
33. Prillerman, S. L., H. F. Myers, and B. D. Smedley. "Stress, Well-Being, and Academic Achievement in College." In *Black Students: Psychosocial Issues and Academic Achievement*, edited by G. L. Berry and J. K. Asamen. Newbury Park, Calif.: Sage, 1989.
34. Sedlacek, W. E. "Black Students on White Campuses: 20 Years of Research." *Journal of College Student Personnel*, 28 (1987), 484–95.
35. Tracey, T. J. and W. E. Sedlacek. "The Relationship of Noncognitive Variables to Academic Success: A Longitudinal Comparison by Race." *Journal of College Student Personnel*, 26 (1985), 405–10.

36. ———. "Prediction of College Graduation Using Noncognitive Variables by Race." *Measurement and Evaluation in Counseling and Development*, 19 (1987), 177–184.
37. U.S. National Center for Health Statistics. "Plan and Operation of the Health and Nutrition Examination, United States, 1971–1973." (Vital and Health Statistics Series 1, No. 10b, DHEW Publication No. HSM 73–1310). Rockville, Md.: National Center for Health Statistics, 1973.
38. Zitzow, D. "The College Adjustment Rating Scale." *Journal of College Student Personnel*, 25 (1984), 160–64.