Ethnically Diverse College Students' Psychological Sense of Community: Do Their Perceptions of Campus Racial Climate Influence It?

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Colleges often seek to promote a psychological sense of community (PSOC) among their students. However, there is limited research on factors promoting PSOC, and little empirical evidence on whether students of different ethnic backgrounds might experience PSOC differently. This study, which took place on a predominantly White campus, explored whether ethnically diverse students' perceptions of racial climate contributed to their PSOC, after controlling for other variables that predict sense of community. Regression analyses demonstrated that racial climate was related to PSOC for students of color, a trend that also was nearly significant for White students. We discuss implications of the findings, highlighting suggestions for campuses interested in enhancing PSOC for students of diverse ethnic backgrounds.

Colleges frequently are encouraged to promote a psychological sense of community (PSOC), or the perception among students that they belong in a setting and are involved harmoniously with others there (e.g., McDonald, 2002; Spitzberg & Thorndike, 1992). There are limited studies of PSOC in educational settings (see Berger, 1997; Lounsbury & DeNeui, 1995). However, extant research points to positive outcomes for students with high levels of PSOC in elementary school (Solomon, Watson, Battistich, Schaps, & Delucchi, 1996), middle and high school (Pretty, Conroy, Dugay, Fowler, & Williams, 1996; Royal & Rossi, 1996), and college (Berger, 1997; McCarthy, Pretty, & Catano, 1990). Thus the goal of promoting students' PSOC appears to be laudable.

Yet colleges seeking to enhance PSOC will find limited help from social scientists. Previous research primarily has demonstrated that a number of personal factors are associated with an enhanced PSOC, a construct that is often defined and measured in diverse ways. Variables that have predicted higher levels of PSOC include:

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Demographic variables. In a study of students at 23 colleges, females were more likely to experience higher levels of campus PSOC, probably because they are more sociable than males (Lounsbury & DeNeui, 1995). Out-of-state residency also was associated with higher PSOC, possibly because students living farther from their universities have no other ties. Advanced students (i.e., seniors) had lower sense of community, possibly because they were disengaging from campus life. Students living on campus also tended to have higher levels of PSOC.

Big Five personality characteristics. Four of the "Big Five" – neuroticism, extraversion, agreeableness and conscientiousness – were related to PSOC in one study of college students, making the authors question whether PSOC is primarily a personality construct rather than a community one (Lounsbury, Loveland, & Gibson, 2003). Extraversion may be particularly important, as its correlation was strongest (Lounsbury et al.) and other studies also have demonstrated its link to PSOC among college students (DeNeui, 2003; Lounsbury & DeNeui, 1996).

Involvement. Being involved in campus organizations is related to PSOC, with students participating in more campus activities having greater sense of community (DeNeui, 2003). Interpersonal support also is associated with higher PSOC (Pretty, 1990).

While many studies focus on students' traits that might contribute to PSOC, one characteristic that has received limited attention is ethnicity. Psychological sense of community traditionally has been studied and found in homogeneous settings (Dalton, Elias, & Wandersman, 2001), which is not the makeup of most college campuses. Thus the ethnic diversity of campuses may result in students of varying backgrounds experiencing PSOC differently; students of color in particular may be likely to have a distinct experience from their White counterparts on predominantly White campuses. However, this assumption is without empirical support.

One potential influence on students' PSOC is their perception of racial climate for diversity at their institutions. Racial climate, a complex construct that has evolved from multiple disciplines, can be defined in different ways. Its psychological component consists of factors such as student perceptions of racial tension, ethnic discrimination, and relations among members of varying ethnic groups (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998). Not surprisingly, White students tend to view campus racial climates more positively than students of color, who report feeling less supported and facing more discrimination (Hurtado et al.).

Although studies operationalize the constructs differently, racial climate and PSOC are typically correlated. For example, a negative racial climate is associated with lower PSOC for Latino students (Hurtado & Carter, 1997; Hurtado, Carter, & Spuler, 1996; Hurtado & Ponjuan, 2005). Perceptions of prejudice on campus have a negative, but relatively weak, association with institutional commitment for both minority (African American, Latino, and Asian American) students as well as White students (Nora & Cabrera, 1996).

At the same time, academic climate, or students' views of their scholarly environment, may be more strongly related to PSOC than racial climate. Two studies involving African American, Latino, and Asian American students demonstrate that academic climate outranks racial climate in its influence on variables that are conceptually similar to PSOC. In the first study, in-class experiences, such as being discouraged from participating in class discussions, was the only prejudice-related factor that predicted feelings of alienation on campus, a construct that is conceptually the opposite of PSOC (Cabrera & Nora, 1994). In the second, academic climate, particularly treatment by instructors, outweighed racial climate in its relationship with student views of general campus climate, a construct similar to PSOC as it centers on fitting in and feeling positive about the university (Reid & Radhakrishnan, 2003).

In summary, college students' PSOC has been influenced by factors ranging from demographics and personality to campus climate variables. Furthermore, PSOC has largely been studied in the context of homogenous environments, although that is not the reality of most college campuses. Colleges typically desire ethnic diversity and a positive PSOC among students, but achieving the former goal may make the latter one more complicated. Hence empirical evidence that tests the relationship between ethnicity and PSOC at predominately White campuses is warranted.

This study took place when a professor and five undergraduate students collaborated in an undergraduate community psychology seminar on campus diversity. We sought to test if racial climate would be associated with PSOC for White students and students of color on a predominantly White campus after controlling for other variables likely to influence students' sense of community. Our hypothesis was that positive views of racial climate would predict greater PSOC for students of color, but not White students.

Method

The study was conducted at a predominantly White public university in the Southeastern United States. At the time of the study, the university had about 3,300 students, most of them full time and 91% of them White, with the remainder of students being African American, Latino, Asian, American Indian and other.

Participants

Participants in this study were 237 full-time students. Students ranged from having attended 1 to 12 semesters at the university; the mean number of semesters was 4.0 (SD=2.1). Participants' mean age was 20.6 (SD=2.6). Females comprised 58% of the sample and in-state residents, 75%.

In terms of ethnicity, the sample was 58% White, 16% African American, 11% Asian/Pacific Islander, 7% Latino, 0.4% Native American/Indian, and 7% biracial/mixed race or other.

Procedure

The research team utilized various methods of recruitment for students of different ethnicities. The majority of White students were randomly selected for participation through a stratified random selection of sections of a required course sequence taken in the freshmen, sophomore, junior and senior years. Eight sections (two for the freshman course, two for the sophomore, etc.) were selected, and all professors agreed to allow their students to participate, except one professor who cited being too busy to give up class time for the survey. The professor in the next class section in the random assignment list was contacted and agreed to participate. A member of the research team asked students in the classes to complete the questionnaire after informing them of the nature of the study. No students refused to participate. There was no compensation for participation.

Because the university had a low number of students of color, we needed to oversample participants from this group. While a few students of color participated in the random selection, the vast majority took part after either (1) being approached at a public site on campus (e.g., the student union) by a member of the research team or (2) hearing a research team member request their participation at a student club meeting (e.g., Black Student Association) or athletic team meeting. We included three athletic teams on the basis of their having significant numbers of students of color. White student-athletes on those teams also participated, both to avoid singling out students of color and to permit athletic status to be part of analyses for both groups of students. Thus we oversampled student athletes, who made up 22% of participants (32 White, 15 African American, and 5 students of other ethnic backgrounds).

Measures

Participants completed a questionnaire that included:

- Demographic information: gender, athlete status, ethnicity, resident status (in-state versus out-of-state), semesters attended, and semesters lived on campus.
- Big Five personality traits, measured with the Ten Item Personality Inventory (TIPI), designed for studies in which personality was not the primary variable of interest (Gosling, Rentfrow, & Swann, 2003). Cronbach's alpha are .68, .40, .50, .73, and .45 for the Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness scales (Gosling, et al., 2003). In this study the alphas were .74, .23, .53, .61, and .43. While these alphas are low, that is not surprising given that each scale has two items. Gosling et al. (2003) note that test-retest reliability is more appropriate for short scales and that for the TIPI's five scales it averages .72, only slightly below much longer Big Five measures. Likewise, the convergent, discriminant, and external correlations of the TIPI approach that of longer Big Five measures (Gosling et al., 2003).
- Number of campus organizations in which students were active participants.
- Strength of friendships with fellow students, measured with a single question.
- A six-item academic climate scale that measures students' views of treatment by instructors (e.g., "I feel comfortable approaching my instructors for advice and assistance"; Reid & Radhakrishnan, 2003).
 Alpha for the scale is .75 (Reid & Radhakrishnan, 2003); in this study it was .85.
- A racial climate scale of five items tapping student experiences (e.g., "I have experienced racial insensitivity from other students") and views of climate (e.g., "The interracial climate on this campus is tense"), with higher scores indicating a less desirable climate (Reid & Radhakrishnan, 2003). Alpha for the scale is .70 (Reid & Radhakrishnan, 2003); in this study it was .86.
- A 14-item sense of community scale designed for college students; in the measure PSOC refers to feelings of belonging to the campus as a whole (Lounsbury & DeNeui, 1996). Alpha for the measure ranges between .88 and .92 (Lounsbury & DeNeui, 1995); in this study it was .92.

All of these measures, excluding demographic questions and number of campus organizations, used a seven-point Likert-type response scale, ranging from strongly disagree to strongly agree. A few additional questions and measures of perceptions of the university were in the questionnaire packet, but they were not part of the analyses in the current study.

Analyses

Excluded from analyses were five students (2% of participants) who did not complete the entire survey. For 15 participants who failed to answer questions (usually just one item), we employed mean substitution to replace missing data.

Because of the low number of students of color at our university, we combined students of non-White backgrounds and compared them with White students. First, we compared means for variables of interest, and then examined correlations among variables and multiple regression equations for the two groups.

Results

The first set of analyses investigated whether students of color and White students differed on nominal variables. Pearson's Chi-square demonstrated that there were no significant differences between the groups on gender, $\chi^2(1, N = 237) = .74$, p > .05; athletic status, $\chi^2(1, N = 237) = .30$, p > .05; or state residence status, $\chi^2(1, N = 237) = 2.24$, p > .05. Means for students of color and White students for other variables were compared with a one-way ANOVA (see Table 1), resulting in few group differences. Students of color were active in significantly more organizations, F(1, 235) = 9.35, p < .01, had been at the university longer, F(1, 235) = 5.55, p < .05 and had lived on campus more semesters than White students, F(1, 235) = 4.46, p < .05. Students of color also reported a significantly less desirable racial climate than their White counterparts, F(1, 235) = 33.23, p < .01.

Comparisons of Means and ANOVA for Students of Color and White Students

	Students	of color	White		
	(n =	99)	(n =		
Variable	M	SD	М	SD	F(1, 235)
PSOC	65.65	16.20	68.89	13.78	2.74
Extraversion	8.71	3.22	8.67	3.24	.01
Agreeableness	10.07	2.01	10.20	2.22	.22
Conscientiousness	10.98	2.47	10.63	2.56	1.12
Neuroticism	5.85	2.72	6.09	2.51	.53
Openness	11.36	2.30	11.34	1.92	.01
Sems. at university	4.35	2.33	3.70	1.92	5.55*
Sems. live campus	2.79	2.45	2.20	1.81	4.46*
Friendship strength	5.62	1.54	5.63	1.68	.00
Org. involvement	1.30	1.28	.80	1.21	9.35**
Climate (instruct.)	34.03	6.16	32.89	5.39	2.29
Racial climate	15.24	7.53	10.71	4.53	33.23*

Note. Sems. at university = semesters completed at university; Sems. live campus = semesters lived on campus;

Org. involvement = involvement in campus organizations Climate (instruct.) = academic climate (treatment by instructors)

Correlations of variables for students of color and White students are reported in Table 2. For both groups, the principal variable of interest, PSOC, was significantly related to racial climate, academic climate in terms of treatment by instructors, and strength of campus friendships, with each correlation being more robust for students of color. In addition, for students of color, higher scores on three personality variables (conscientiousness, neuroticism, and openness) were significantly related to PSOC, though modestly so, with correlations in the .20 range. For White students, personality variables had no statistically significant relationships with PSOC. Finally, for students of color, being an athlete had a modest negative correlation with PSOC, r(97) = -.22, p < .05, whereas for White students being an athlete had only a slight, statistically non-significant negative correlation with PSOC, r(136) = -.06, p > .05.

^{*}p < .05; ** p < .01

Table 2

Intercorrelations Between Model Variables for Students of Color and White Students

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					S	tudents	of color	(n = 99)							
1. PSOC		.03	22*	01	.00	.11	.26*	21*	.22*	08	05	.36**	19	.57**	48*
2. Gender		200	25*	.03	.16	.02	.05	.33**	.13	.03	09	.03	.07	.17	.14
3. Athlete				.00	.22*	22*	.00	.07	22*	03	.20*	.04	08	25*	06
4. Residence status				-	10	19	19	.04	10	22*	10	.01	.00	01	08
5. Extraversion						08	.18	.11	.26**	.14	.09	.10	.17	.07	.01
6. Agreeable						100	.29**	36**	.33**	04	.00	.20*	.00	.20	15
7. Conscientious								22*	.26*	.21*	.15	.20	.11	.44**	22*
8. Neuroticism									30**	.05	.10	04	.01	21	.15
9. Openness									0.00	.16	.02	.31**	.12	.33**	05
10. Sems. at univ.										448	.55**	.11	.36**	.04	.28*
11. Sems. live											1000	.22*	.45**	.03	.23*
12. Friendship												- 22	.10	.41**	19
strength															
13. Org. inv.													-	05	.36**
14. Climate														122	37*
(instruct.)															
15. Racial Climate															220
1. PSOC	_	.13	06	14	.14	hite Stu	.03	.02	.08	.00	.12	.20*	03	.38**	18*
2. Gender			08	07	.14	.23**	.21*	.18*	.08	11	06	14	11	.09	02
3. Athlete			0.22	.21*	.12	.05	.09	22*	08	.17	.23**	.12	.15	13	.06
4. Residence status				-	.02	.05	.15	06	.07	07	06	.03	.01	06	03
5. Extraversion					-	.04	.01	10	.17*	.15	.17*	.12	.08	02	02
6. Agreeable							.33**	25**	.00	08	12	.00	05	.09	37*
7. Conscientious								22*	.04	.08	18	21*	.03	.32**	13
8. Neuroticism								122	.04	02	.05	.02	.01	07	.13
9. Openness									-	.03	.09	04	14	.17*	.05

Table 2 (continued)

	 .17*	.28**	.13	.16
	: 155 8	.14	01	.19*
			08	.11
			23	19*
nate				5 75 8

Note. Sems. at univ. = semesters completed at university; Sems. live = semesters lived on campus; Org. inv. = involvement in campus organizations; Climate (instruct.) = academic climate (treatment by instructors).

Coding for nominal variables: gender (female = 1; male =0); athlete (athlete = 1; non-athlete = 0); residence (out-of-state resident = 1; state resident = 0)

To determine whether racial climate predicted PSOC after controlling for other variables, we employed two hierarchical multiple regression equations, one for students of color and one for White students. We entered demographic, personality and other variables previously noted to be significant predictors of sense of community in step one and racial climate in step two. Our hypothesis that racial climate would predict PSOC for students of color was confirmed. Table 3 displays the equations for both groups. After controlling for other variables, racial climate (for which higher scores indicate a less favorable climate) was a significant predictor of PSOC, $\beta = -.31$ (p < .01). The change in R^2 was .06 (p < .01). Racial climate also was nearly a significant predictor of PSOC for White students, $\beta = -.17$ (p = .06) and a change in R^2 of .02 (p = .06). As seen in Table 3, other significant predictors for both groups were strength of campus friendships, $\beta = .21$, p < .05 for students of color; $\beta = .23$, p < .01for White students; and academic climate in terms of treatment by instructors, $\beta = .27$, p < .05 for students of color; $\beta = .34$, p < .01 for White students. In addition, being a student athlete was a significant predictor of PSOC for students of color, $\beta = -.25$, p < .05, but not for White students.

The full models were significant predictors of PSOC, both for students of color F(14, 84) = 5.66, p < .01, and for White students, F(14, 123) = 2.97, p < .01. However, the model for students of color was more highly predictive, with an adjusted R^2 of .40 versus .17 for White students, indicating that approximately 40% of the variance for students of color and 17% of the variance for White students in PSOC could be accounted for by the linear combination of variables.

^{*}p < .05; ** p < .01

Table 3
Summary of Hierarchical Regression Analyses for Variables Predicting PSOC

	Students	Students of color $(n = 99)$ White students						
Variable	В	SE B	β	В	SE B	β		
Step 1								
Gender	-1.08	3.13	03	2.44	2.50	.09		
Athlete	-8.71	4.11	22*	06	2.88	.00		
Residence status	-1.05	3.08	03	-3.84	2.77	16		
Extraversion	.21	.48	.04	.48	.36	.13		
Agreeableness	-1.09	.81	14	.39	.55	.06		
Conscientiousness	.54	.67	.08	33	.53	06		
Neuroticism	80	.62	13	.18	.49	.03		
Openness	01	.73	.00	.02	.60	.00		
Sems. at university	92	.75	13	29	.67	04		
Sems. live campus	.68	.76	.10	.32	.75	.04		
Friendship strength	2.44	1.04	.23*	1.55	.69	.19*		
Org. involvement	-2.83	1.26	22*	27	.98	02		
Climate (instruct.)	.98	.29	.37**	.95	.23	.37**		

Table 3 (Continued)

.91	3.04	.03	3.07	2.50	.11
-9.86	3.92	25*	.01	2.85	.00
-1.98	2.95	06	-3.97	2.75	12
.16	.50	.03	.40	.36	.10
-1.33	.77	17	02	.58	.00
.25	.64	.04	26	.52	05
89	.59	15	.17	.48	.03
.08	.70	.01	.13	.60	.02
61	.72	09	10	.67	01
.96	.73	.14	.38	.75	.05
2.16	.99	.21*	1.86	.70	.23**
-1.92	1.22	15	23	.97	02
.71	.29	.27*	.86	.23	.34**
67	.21	31**	52	.28	17
	-9.86 -1.98 .16 -1.33 .2589 .0861 .96 2.16 -1.92 .71	-9.86 3.92 -1.98 2.95 .16 .50 -1.33 .77 .25 .6489 .59 .08 .7061 .72 .96 .73 2.16 .99 -1.92 1.22 .71 .29	-9.86 3.9225* -1.98 2.9506 .16 .50 .03 -1.33 .7717 .25 .64 .0489 .5915 .08 .70 .0161 .7209 .96 .73 .14 2.16 .99 .21* -1.92 1.22 .15 .71 .29 .27*	-9.86 3.92 25* .01 -1.98 2.95 06 -3.97 .16 .50 .03 .40 -1.33 .77 17 02 .25 .64 .04 26 89 .59 15 .17 .08 .70 .01 .13 61 .72 09 10 .96 .73 .14 .38 2.16 .99 .21* 1.86 -1.92 1.22 15 23 .71 .29 .27* .86	-9.86 3.92 25* .01 2.85 -1.98 2.95 06 -3.97 2.75 .16 .50 .03 .40 .36 -1.33 .77 17 02 .58 .25 .64 .04 26 .52 89 .59 15 .17 .48 .08 .70 .01 .13 .60 61 .72 09 10 .67 .96 .73 .14 .38 .75 2.16 .99 .21* 1.86 .70 -1.92 1.22 15 23 .97 .71 .29 .27* .86 .23

Note. Sems. at univ. = semesters completed at university; Sems. live campus = semesters lived on campus; Org. involvement = involvement in campus organizations; Climate (instruct.) = academic climate (treatment by instructors).

Adjusted $R^2 = .34$ (p < .01) for Step 1 with students of color; $\Delta R^2 = .06$ for Step 2 (p < .01).

Adjusted $R^2 = .15$ (p < .01) for Step 1 with White Students; $\Delta R^2 = .02$ for Step 2 (p = .06).

Coding for nominal variables: gender (female = 1; male =0); athlete (athlete = 1; non-athlete =

0); residence (out-of-state resident = 1; state resident = 0)

Discussion

Our study demonstrated that perceptions of racial climate significantly account for the PSOC of students of color, even after controlling for other variables previously related to sense of community. Racial climate also was nearly a significant predictor of White students' PSOC. The findings suggest that universities concerned with increasing PSOC should do something that most PSOC researchers have not: pay attention to the heterogeneous nature of most college campuses and take steps to promote a positive racial climate for

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^{*}p < .05; ** p < .01

students of all ethnic backgrounds. Our suggestions for doing that, while potentially applicable to any campus, are particularly directed to predominantly White institutions.

One pathway colleges often take is to enhance educational opportunities on diversity, and such approaches have led to promising results. For example, requiring courses that emphasize the benefits of diversity has resulted in more favorable attitudes among White students toward Black counterparts (Chang, 2002). Offering diversity workshops has been associated with students having a greater openness to diversity (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996). Presumably such efforts can have a positive impact on racial climate.

Such approaches do not ensure regular cross-race contacts, which should extend the impact of educational efforts. For example, increased cross-racial contacts for White students result in their having more positive feelings toward African Americans (McClelland & Linnander, 2006). Hence, colleges should consider creating new settings where such contacts can take place, such as learning communities. Directly designed to enhance sense of community, learning communities frequently entail interactions among ethnically diverse students (see Akens, 2002). These communities, which can be created around curricula, residences or other organizational formats, often are aimed at freshmen or transfer students to help them adjust to college (Lenning & Ebbers, 1999).

This focus on adjustment does not typically put explorations of ethnic diversity at the forefront, but one exception is MRULE, the Multi-Racial Unity Living Experience, created in 1996 at Michigan State University. It allows students in residence halls to come together for discussions, community service and other activities with an explicit focus on confronting issues such as White privilege (MRULE website, n.d.). One study demonstrated that students who had completed two years in MRULE had more positive attitudes and knowledge about race than both counterparts who had just joined the organization and students not taking part in MRULE (Muthuswamy, Levine, & Gazel, 2006). The study did not measure sense of community, but did examine race-related behaviors such as spending time with people of different ethnic groups. Students with two years of MRULE experience reported doing such behaviors significantly more than students in the two other groups.

Despite their promise, however, learning communities are not a panacea. For example, students in one learning community that focused on creating a civil society did not report improvements over time in their attitudes toward diversity (Longerbeam & Sedlacek, 2006). Students' diversity attitudes also did not differ from those of peers not in the community, which, for the authors, underscores the difficulties of changing student views. Just as Allport (1954)

predicted, contact alone between people of different races in learning communities does not appear to be sufficient to change attitudes. Thus for learning communities to result in improved racial climate, a focus on diversity or diversity-related issues may be essential.

In addition to creating new settings, universities can encourage faculty members to provide a positive academic climate for all students, particularly those of minority status. This was an important factor in predicting PSOC for students of color and White students in the current study, as well as that of Reid and Radhakrishnan (2003). One way to begin that process would be for institutions to collect academic climate data and examine its relationship to variables of interest such as PSOC and academic engagement. Some data that might persuade professors to change already exist. For example, one study demonstrated that African American students at historically Black colleges and universities have more interactions with faculty than students at predominantly White institutions (Flowers, 2003). Sharing data with professors, who presumably would take empirical approaches seriously, might encourage them to undertake efforts to create a positive climate. It also might help them see the need to attend workshops that could assist them in becoming more understanding and aware of the lived experiences of students of color. Educators sometimes use the term "safe spaces" to discuss places where students in the minority feel comfortable. Having a faculty dedicated to creating a positive academic climate for students of color could create such safe spaces throughout a campus.

The collection of data itself also could become a means toward enhancing sense of community. That is, students and professors could undertake research projects designed to shed light on campus sense of community for varying ethnic groups, as we did in the current study. A disadvantage to our study, however, was that we alone designed the research and method, which in the end left us pursuing data from students in a process that felt impersonal and did little to create community connections. Future endeavors could follow a more empowering approach akin to what Rappaport (1990) and Kelly (2003) suggest. That is, they could engage members of the university community as collaborators in thinking about matters such as racial climate and PSOC on their campus, how variables related to it can be measured and how data can inform decision making. For example, a student-professor research team could partner with a university's African American student association to investigate how the group enhances its members' PSOC or how professors create a climate that makes students of color more comfortable at predominantly White institutions. This type of approach would allow students to be collaborators in research endeavors – a shift in roles that could promote a sense of investment and belonging.

In our investigation, personality variables were not significant predictors of PSOC, unlike in previous studies (e.g., Lounsbury et al., 2003). Part of the reason may be methodological. In the interest of time, we employed a brief measure of "Big Five" personality traits, making the measurement of those constructs less optimal (Gosling et al., 2003). Hence it is possible that personality variables would have been more strongly related to PSOC had they been measured with more precision. At the same time, extraversion, which previously has been related to PSOC (Lounsbury & DeNeui, 1996; Lounsbury et al., 2003), had an alpha of .74 in our study and still was not a significant predictor of sense of community.

Although they did not prove significant in the regression equations, the relationships between PSOC and personality variables in our study were different for students of color and White students. There were no significant relationships for White students, but conscientiousness, openness, and neuroticism had significant, albeit modest, correlations for students of color (neuroticism was negatively correlated). Previous studies on the relationship between PSOC and personality have not considered ethnicity of participants; our study suggests that ethnicity should be taken into account.

Given that most constructs such as PSOC have multiple determining factors, it is likely that PSOC is influenced by an array of interactions among personal variables, such as ethnic background and personality, and environmental variables, including racial climate. Nonetheless, administrators interested in enhancing PSOC are limited to environmental change. Ethnicity of individual students obviously is not alterable. Personality also is not easily changed. To the extent personality can be transformed—for example, with a student increasing in extraversion—it is probably aspects of the campus environment facilitating the change. Thus college administrators interested in enhancing PSOC should begin to explore whether or not their institutions' racial climate and other environmental factors facilitate sense of community.

As a final note, one interesting finding from our study was that student-athletes of color were less likely to experience PSOC. There also was a non-significant negative relationship between those variables for White students as well. The findings may appear counter-intuitive, given that athletes are visible representatives of a university and thus might be expected to feel a stronger sense of belonging to it. However, it is possible that student-athletes feel highly integrated in their teams but not at the overall university, perhaps because their athletic involvement is intensive (see Adler & Adler, 1988, on the "intense loyalty" of student-athletes). Another possibility is that athletes are the subject of negative stereotypes. For example, previous research demonstrates that other students view them as less capable academically (Engstrom & Sedlacek, 1991). This may lead to alienation of the type Allport (1954) described in his

classic work on the contact hypothesis. It also may result in athletes sensing the types of stereotype threat that Steele (1997) has described for people of color and women, whose academic performance at colleges falters after being reminded that those from their ethnic group or gender are not thought to be gifted in an academic area. A recent study found such an effect, with athletes reminded of their athletic identity performing worse on a math test than counterparts primed beforehand with their student identity (Yopyk & Prentice, 2005). If students are subject to such stereotypes, it is possible their sense of community could suffer. This adds complexity to the challenges that student athletes face (Howard-Hamilton & Sina, 2001) and to the desirability that student affairs administrators and personnel take proactive steps to support them (Hill, Burch-Ragan, & Yates, 2001). Such actions may be doubly needed for student athletes of color, as they may face stereotype threat stemming from their ethnicity, athlete status, or an interaction of the two.

This study had limitations. It took place at a single point in time at one university, limiting understanding of the influence of time as well as the ability to generalize findings. The sample of White students was randomly selected, but students of color were interviewed at organizational meetings or in public places, which may account for their having more active involvement in campus organizations than their White counterparts. Finally, it is likely that students of varying ethnic backgrounds have different experiences of PSOC and racial climate, but the low numbers of students of color in this study did not make analyses of such questions feasible. Future research could address many of these limitations with multi-site, longitudinal work.

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