Diversity Experiences and Perceptions of Climate Among Australian University Students

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In the past two decades, the proportion of students of color at American colleges and universities has increased substantially, and similar trends toward diversification are also occurring in other nations (McInnis, 2003). In the context of this burgeoning campus heterogeneity, promoting a positive climate for diversity has become increasingly important. Institutions that have sought to promote racial/ethnic diversity have generally started by increasing the representation of students of color, but many have not been sufficiently prepared to support a more diverse student population (Hurtado, Milem, Clayton-Pedersen, & Allen, 1999). Such a lack of support can be quite problematic because perceptions of a hostile campus racial climate are associated with lower college adjustment, sense of belonging, institutional commitment, satisfaction, grades, and persistence for both minority and majority students (e.g., Fischer, 2007; Locks, Hurtado, Bowman, & Oseguera, 2008; Nora & Cabrera, 1996). This evidence suggests that improving campus climate is important for any institution that seeks to improve student success and flourishing. The current study explores the relationship between Australian students' college diversity experiences and perceived climate.

LITERATURE REVIEW

In their framework of the campus climate for racial/ethnic diversity, Hurtado et al. (1999) proposed that psychological climate (i.e., perceptions of racial/ethnic tension, prejudice, and discrimination) is directly influenced by three factors: the historical legacy of inclusion/exclusion; the representation of diverse students, faculty, and staff; and the "behavioral dimension" of interracial interactions, classroom diversity, and campus diversity involvement. The existing research largely focuses on the potential impact of the first two dimensions, along with negative interactions across difference. Indeed, a legacy of exclusion and negative diversity interactions are associated with perceptions of a more hostile campus climate (e.g., Harper & Hurtado, 2007; Solórzano, Ceja, & Yosso, 2000), whereas the beneficial impact of structural diversity depends on the extent to which the institution successfully promotes meaningful engagement with and incorporation of diversity (e.g., Chang, 1996; Hurtado, 1992). In addition, Allport's (1954) contact theory emphasizes the importance of quality *and* quantity of interaction to improve intergroup attitudes and reduce prejudice (also see Pettigrew, 1998). Thus,

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it is reasonable to assume that students' direct engagement with diversity and the quality of that engagement—whether this occurs through interpersonal interactions, the curriculum, or the cocurriculum—should also play an important role in shaping perceptions of the campus climate.

However, from a conceptual standpoint, the relationship between college diversity interactions and perceived climate for diversity is not clear. Students who have many positive diversity interactions might reflect on these experiences and view the campus as having a more favorable climate. On the other hand, these same students may also be more likely to hear about instances of prejudice and discrimination on campus and/or to become more sensitive to intergroup bias, which would lead to perceptions of a more hostile climate. The few studies that have examined this issue provide mixed results. Latino students' positive interracial interactions were associated with a more hostile climate in one study (Nuñez, 2009), but no such effect was observed for students of color or White students in another study (Locks et al., 2008), and Asian students who had roommates from a different race were actually more satisfied with campus diversity (Park, 2009). Neither the overall frequency of interracial interactions nor taking an ethnic studies course was significantly related to perceived campus climate (Hurtado, 1994; Locks et al., 2008; Mayhew, Grunwald, & Dey, 2005; Park, 2009). In contrast, diversity course work (more broadly defined), attending a racial/cultural workshop, and participation in racial/ethnic student organizations were often—but not always—associated with more negative climate perceptions (Hurtado, 1994; Mayhew et al., 2005; Nuñez, 2009; Park, 2009).

The existing research has some important limitations. First, no study has used a pretest for campus climate, so it is unclear whether any

link between diversity experiences and climate reflects *changes* in perceived climate over time. Some people are generally predisposed toward perceiving prejudice and discrimination (e.g., they are more attuned to inequities; see Major, Quinton, & McCoy, 2002), so the use of a climate pretest variable would account for this tendency. In addition, students of color who perceive a hostile campus climate may form ethnic enclaves and be less likely to interact across difference (Solórzano et al., 2000), so the link between diversity experiences and climate may be bidirectional. Second, some studies have used several constructs related to campus climate and diversity as additional independent variables (e.g., perceived institutional commitment to diversity, commitment to promoting racial understanding). Because diversity experiences contribute directly to some of these attitudes, and because the inclusion of such intercorrelated variables can also result in suppressor effects (Cohen, Cohen, West, & Aiken, 2003), it is unclear how these findings should be interpreted. Third, the studies discussed above each used a different measure of campus climate, so the results may not be directly comparable to one another.

PRESENT STUDY

The present study sought to build on this research by exploring the relationship between several college diversity experiences and the perceived climate for racial/cultural diversity. This study assessed climate using a pretest and a posttest survey so that changes over time could be examined. Moreover, several different climate measures were used, allowing us to determine the consistency of these effects. The sample in this study was composed of students at an Australian university. Research on college diversity issues in Australian contexts is quite limited (see Bowman & Denson,

2011; Denson & Bowman, 2013; Denson & Zhang, 2010), but Australia has a diverse population of residents and college students (Australian Bureau of Statistics, 2007, 2008), and Australia and the United States both have a history of British colonization, subjugation of native groups, and modern-day presence of non-European racial/ethnic minority groups.

There are also some important ways in which Australian higher education differs from American higher education. More than one-fourth of college students are from overseas, so international students constitute a notable source of diversity. Of importance, the higher education system itself is somewhat different from that of the United States. For example, graduating high school students apply to a particular major or course of study within a university. Admissions decisions are almost exclusively based on a standardized measure of high school academic achievement, which is sometimes adjusted for various factors (e.g., long-term educational disadvantage). The bachelor's degree is typically completed in 3 years, with only the top-performing students advancing to a 4th-year honors degree, which consists of a year of research.

METHOD
Participants

The participants were students at a large, public Australian university. In 2010, all introductory psychology students were asked to voluntarily complete an online survey toward the beginning and end of the fall term. This course is required for psychology majors, and it is a general education elective for students in other majors. Of the 931 enrolled students eligible to complete the survey, 607 students responded to both surveys, representing a 65% response rate. The sample consisted of 62% women, 31% non-native English speakers, and 9% international

students; these students were racially/culturally diverse (38% Asian, 34% Anglo-Celtic, and 28% other groups), and the mean age during the pretest was 19.7 years old. This sample is more female and less international than the university population (47% female and 26% international; University of New South Wales, 2010) and the population of all Australian undergraduates (56% female and 26% international; Australian Government, Department of Education, Employment, and Workplace Relations, 2011). No comparative data on race/ethnicity and native language were available.

Measures

Dependent Variables. Three climate measures were examined (for more detailed information, see Bodkin-Andrews, Denson, & Bansel, 2013; Bodkin-Andrews, O'Rourke, Grant, Denson, & Craven, 2010). Multiculturation (six items; Cronbach's α = .75) constitutes a positive form of climate that is characterized by others' acceptance of and respect for one's ethnic/cultural identity (e.g., "People I meet respect my cultural identity"). Institutional discrimination (six items; α = .91) indicates perceptions of instructors' mistrust, hostility, and discrimination toward people from one's ethnic/cultural identity (e.g., "Some lecturers/tutors don't seem to trust people from my culture"). National discrimination (six items; α = .85) assesses the extent to which most Australians exhibit a sense of superiority, misunderstandings, and a lack of knowledge about people from one's ethnic/cultural identity (e.g., "Most other Australians see their cultural values as superior to the values of my culture").

Independent Variables. Positive diversity interactions (seven items; α = .83) assessed the frequency of meaningful interpersonal interactions with students from a different racial/ethnic/cultural group. Negative diversity

TABLE 1.
Correlations and Descriptive Statistics for All Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Female	—														
2. Anglo	-.10*	—													
3. International Student	.01	-.17*	—												
4. Nonnative English Speaker	.12*	-.46*	.28*	—											
5. Cultural Difference HS vs. College	.06	-.01	.05	-.11*	—										
6. Medium Curricular/Cocurricular Diversity	.00	-.03	-.02	-.02	-.07	—									
7. High Curricular/Cocurricular Diversity	.08*	-.07	.14*	.14*	.08*	-.47*	—								
8. Positive Diversity Interactions	.00	-.09*	-.07	-.04	.17*	-.08*	.20*	—							
9. Negative Diversity Interactions	-.06	-.06	.11*	.07	.17*	-.07	.17*	.07	—						
10. Multiculturation (T1)	.05	.12*	-.09*	-.09*	-.10*	.01	-.07	.05	-.28*	—					
11. Multiculturation (T2)	.15*	-.02	-.02	.04	-.10*	.05	-.02	.05	-.21*	.34*	—				
12. Institutional Discrimination (T1)	-.04	-.23*	.17*	.26*	.06	-.05	.18*	-.01	.35*	-.39*	-.13*	—			
13. Institutional Discrimination (T2)	-.15*	-.15*	.20*	.19*	.10*	-.08*	.16*	.01	.38*	-.30*	-.23*	.46*	—		
14. National Discrimination (T1)	-.01	-.47*	.09*	.30*	.00	-.04	.12*	.02	.21*	-.32*	-.13*	.49*	.25*	—	
15. National Discrimination (T2)	-.08	-.39*	.13*	.28*	.06	-.07	.13*	.02	.26*	-.31*	-.09*	.41*	.63*	.56*	—
M	0.63	0.34	0.09	0.31	4.54	0.35	0.30	4.35	2.15	4.70	4.16	1.58	2.12	2.85	2.78
SD	0.48	0.47	0.31	0.46	1.66	0.48	0.46	1.06	0.95	0.80	0.89	0.82	1.07	1.14	1.12

*p < .05.

interactions (seven items; α = .86) measured the frequency of uncomfortable, insulting, or threatening interactions with students from a different racial/ethnic/cultural group. Curricular/cocurricular diversity involvement (four items; α = .70) assessed student engagement in diversity-related course work, racial/cultural awareness workshops, and events sponsored by another racial/ethnic group. Because this variable was very positively skewed, we recoded it into three approximately equal groups (i.e., high, medium, and none), with students who participated in no diversity activities during that semester as the referent group. Differences in cultural composition between high school and university (two items; α = .66) asked students the extent to which the race/culture of the student body and their friendship groups differed between their high school and the university.

We also used dichotomous variables to indicate gender, race/ethnicity (Anglo vs. non-Anglo), international student status, and native language (English vs. other). Pretests for multiculturation (α = .70), institutional discrimination (α = .89), and national discrimination (α = .81) were also included. Descriptive statistics and correlations for all variables are shown in Table 1. The dependent variables and continuous independent variables were subsequently standardized with a mean of 0 and a standard deviation of 1. As a result, the unstandardized regression coefficients for continuous predictors can be interpreted as standardized regression coefficients, and the coefficients for dichotomous predictors can be interpreted as adjusted standard deviation units (Cohen et al., 2003).

Analyses

Multiple regression analyses were conducted predicting each of the climate perceptions. The independent variables were gender, race/ethnicity, international status, native language,

differences in high school and university racial/cultural composition, curricular/cocurricular diversity, positive diversity interactions, negative diversity interactions, and the pretest. The variance inflation factors were less than 1.6 for all analyses, so multicollinearity was not a concern.

RESULTS AND DISCUSSION

Because the analyses controlled for perceived climate at the beginning of the semester, the findings reflect the link between diversity interactions and *changes* in climate perceptions. Negative diversity interactions are associated with reduced multiculturation and increased perceptions of institutional and national discrimination (see Table 2). Female students have higher multiculturation and lower perceptions of institutional and national discrimination than do male students. Besides the pretest, the only other significant predictors are a positive link between international student status and perceived institutional discrimination as well as lower national discrimination among Anglo students.

Overall, negative diversity interactions are associated with perceptions of a more hostile climate for diversity, whereas positive diversity interactions and curricular/cocurricular diversity are unrelated to perceived climate. These patterns are consistent regardless of whether the climate measure is framed positively or negatively and whether it includes perceptions of the broader society. The use of longitudinal methods in the current study may explain the divergence from previous research, which has often found that diversity course work and cocurricular experiences predicted a more negative climate for diversity (Hurtado, 1994; Mayhew et al., 2005; Nuñez, 2009; Park, 2009). The adverse effect of negative interpersonal interactions, along with the lack of effect for other experiences,

TABLE 2.

Unstandardized Regression Coefficients Predicting Campus Climate for Diversity

	Dependent Variable					
Independent Variable	Multiculturation		Institutional Discrimination		National Discrimination	
Female	.288**	(.089)	−.394***	(.093)	−.260**	(.094)
Anglo	−.120	(.101)	−.098	(.107)	−.439***	(.116)
International Student	.038	(.153)	.382*	(.160)	.118	(.162)
Non-Native English Speaker	.059	(.107)	.204	(.114)	.215	(.114)
Cultural Difference Between High School and College Environment	−.041	(.026)	.048	(.028)	.021	(.028)
Medium Curricular/Cocurricular Diversity	.075	(.101)	−.086	(.106)	−.206	(.107)
High Curricular/Cocurricular Diversity	.023	(.108)	.080	(.114)	−.026	(.115)
Positive Diversity Interactions	.061	(.042)	−.016	(.044)	−.024	(.044)
Negative Diversity Interactions	−.137**	(.048)	.336***	(.051)	.229***	(.050)
Pretest	.413***	(.055)	.512***	(.061)	.525***	(.046)
R^2	.156		.318		.380	

Note. Standard errors are in parentheses.

*p < .05.   **p < .01.   ***p < .001.

illustrates the challenge of promoting a positive campus climate for diversity. That is, students can have meaningful personal relationships across difference and engage in structured diversity experiences and courses, but these experiences cannot directly counteract the potential impact of any negative encounters that they might have.

In addition, female students had increased positive perceptions of the climate for diversity relative to male students. This finding is not the product of a ceiling effect because women actually had more positive climate perceptions than men on two of the three pretest measures. Research on American students has found no significant link between gender and perceived climate when controlling for other variables (Hurtado, 1994; Locks et al., 2008; Mayhew et al., 2005; Park, 2009), so the current finding may be the product of some unique aspect of the Australian context. Future research should explore this dynamic in more depth.

Some limitations to this study should be noted. First, the participants were from one university, so the results may not generalize to other institutions. Second, the questions for the dependent variables asked participants about climate for their own ethnic/cultural group (not for ethnic/cultural diversity in general), so these items have somewhat different meanings for students from minority and majority groups. However, preliminary analyses showed that the findings for diversity experiences and perceived climate were identical for Anglo and non-Anglo students, which suggests this issue was not problematic. Third, because diversity experiences were assessed only at Time 2, it was not possible to rigorously test for reciprocal effects of diversity climate and experiences (i.e., whether campus climate predicted *changes* in diversity experiences). To provide some tentative evidence, supplemental regression analyses (not shown here) showed that perceived discrimination at Time 1

was associated with more frequent negative diversity interactions and greater engagement in curricular/cocurricular diversity at Time 2; these results were very similar to the simple correlations presented in Table 1. Fourth, measuring the frequency of positive and negative diversity interactions does not fully capture the possibility that, for example, students may have had a single particularly troubling incident with someone who is different from themselves.

CONCLUSION

Institutions seeking to improve their campus climate for diversity must take a multifaceted approach. Students from all backgrounds recognize when a school's espoused diversity-related values are incongruent with its actions and policies (Harper & Hurtado, 2007), so this rhetoric must be accompanied by meaningful steps to achieve a welcoming and inclusive climate. Although the current study showed that students' own positive diversity interactions are not directly related to climate perceptions, campus racial segregation is viewed as a dimension—as well as a consequence—of a poor racial climate (Harper & Hurtado, 2007; Solórzano et al., 2000). Therefore, promoting meaningful interactions across difference can still improve the climate for diversity because students will notice the overall integration on campus. However, given that negative diversity interactions are consistently related to a more hostile campus climate, practitioners, faculty, and administrators must help foster interactions that occur under ideal conditions (Pettigrew, 1998). Only this sort of concerted effort can create a positive climate for diversity at colleges and universities in the United States, Australia, and beyond.

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