

Growing during troubled times: Latina/o student experiences with multiple dimensions of the
campus climate

Adriana Ruiz Alvarado and Sylvia Hurtado

University of California, Los Angeles

Paper presented at the Annual Meeting of the American Educational Research Association
April 2013, San Francisco, CA

This research was supported by a grant from The Ford Foundation. The authors also acknowledge the Diverse Learning Environments research team for their contributions to the project and survey development, which serves as the foundation for this article. Correspondence concerning this article should be addressed to Adriana Ruiz Alvarado, UCLA, Higher Education Research Institute, 3005 Moore Hall, Los Angeles, CA 90095-1521. Email: aruiz711@ucla.edu

Abstract

This study focuses on the contemporary campus climate for Latina/o college students who have been affected by recent economic and political changes. Previous studies have been conducted on earlier eras and more traditional populations of Latina/os in college, whereas this study examines the climate in more diverse, broad access institutions as well as institutions where Latina/os are a clear minority to reveal unique campus climate experiences. Results show that Latina/os continue to experience hostile climates in more diverse institutions but at significantly lower rates than at campuses that have low diversity. Implications for enhancing Latina/o college student success are discussed.

Growing during troubled times: Latina/o student experiences with multiple dimensions of the campus climate

In the single year between 2009 and 2010, Latina/o enrollment in higher education increased by 24% and reached a record-high proportion of all college students in the nation (Fry, 2011). Although more than half of this enrollment is at community colleges, the number of Latina/o students at all types of higher education institutions is growing. Nonetheless, Latina/o students continue to experience acts of discrimination and bias even at highly diverse institutions, often at higher rates than other underrepresented minority student populations (Hurtado & Ruiz, 2012). For instance, a recent study from the Higher Education Research Institute (HERI) found that close to half (47.9%) of Latina/o students reported experiencing derogatory verbal comments at institutions where underrepresented students comprise more than one-third of the student body, compared to 37.5% of African-American students (Hurtado & Ruiz, 2012). Examples of discrimination towards Latina/o students, often in the form of microaggressions, have been documented by scholars and have been linked to high levels of race-related stress and other detrimental outcomes (Solorzano, Allen, & Carroll, 2002; Yosso, Smith, Ceja, & Solorzano, 2009). In contrast, positive experiences with the campus climate have been linked with Latina/o students' degree completion (Museus, Nichols, & Lambert, 2008) and sense of belonging (Hurtado & Carter, 1997).

To fully understand the climate of a campus, the broader context in which it is situated must be taken into consideration. Over the last several years, the country experienced an economic crisis coined as the “Great Recession”—one of the longest and deepest recessions since World War II (Goodman & Mance, 2011). Specific to higher education, the troubled economy led to dwindling state resources that have increased tuition costs and limited

availability of classes as student demand has simultaneously increased due to the stark job market (Ahorlu-Johnson, Alvarez, & Hurtado, 2011). During this same period, and largely a result of the economic crisis, immigration has resurfaced as a highly contentious topic across the nation. At the federal level, a Dream Act allowing for financial aid and a path to citizenship for undocumented college students has been introduced to congress but has failed to pass on multiple occasions. At the state level, a variety of legislations pertaining to undocumented students have been enacted, ranging from those that grant undocumented students in-state tuition to those that ban their admissions altogether (NCSL, 2011). Whether to allow undocumented students to enroll at an institution and at what cost continues to be one of the top ten higher education state policy issues (AASCU, 2012).

The passage of strict anti-immigrant state laws has also contributed to the tense climate surrounding immigration. Arizona, for instance, signed the “nation’s toughest bill on illegal immigration” in 2010 (Archibold, 2010), aiming to identify and deport undocumented individuals. Moreover, a report by the National Institute of Justice (2011) suggests that anti-Latina/o hate crimes in the country have risen disproportionately as the immigration debate has intensified over the last decade. Given this context, it is possible that the contention experienced at a macro-level throughout the country is also felt at a micro-level on campuses. Although Latina/os are not the only, or even the largest, immigrant student population (Staklis & Horn, 2012), they are often misconstrued to be the only group. Due to these misconceptions, Latino/a students might face challenges regardless of their own immigration status.

Though prior studies focused on the topic, Latina/o students’ experiences with the campus climate warrants re-examination in light of this troubled economic and political context. The purpose of this study is to expand previous research (Hurtado, 1994; Hurtado & Ponjuan,

2005; Yosso, et al., 2009) on factors that are related to Latina/o students' perceptions of and behaviors experienced as part of the campus climate for diversity. Past studies have narrowed in on high-achieving, or "talented," Latina/o students, on traditional college-going samples, or on a limited number of selective institutions. The current study will utilize a more inclusive sample, including both nontraditional students and broad access institutions where Latina/o college students are concentrated (Fry, 2011). It will also broaden campus climate research to include experiences based on other social identities outside of race/ethnicity, including gender, class, and sexual orientation.

Review of the Literature

Scholars have well-documented evidence that students of color experience a more hostile campus climate at higher education institutions than White students (Ancis, Sedlacek, & Mohr, 2000; Cabrera & Nora, 1994; Fischer, 2007; Hurtado, 1992; Locks, Hurtado, Bowman, & Oseguera, 2008; Museus, Nichols, & Lambert, 2008; Nora & Cabrera, 1996; Pewewardy & Frey, 2002; Rankin & Reason, 2005). Prior studies have also demonstrated that experiencing a hostile climate has different effects on students from different racial groups (Fischer, 2007; Museus et al., 2008).

For Latina/o students in particular, perceptions of discrimination or racial tension contribute to greater difficulty adjusting to college. Hurtado, Carter, and Spuler (1996) found that Latina/o students in the second year of college who reported perceptions of racial tension had significantly lower scores on scales measuring academic, social, and personal emotional levels of adjustment to college. Other research found that Latina/os who perceive greater levels of discrimination and hostility have lower levels of academic and intellectual development (Nora & Cabrera, 1996), as well as a lower sense of belonging to their institutions (Hurtado & Carter,

1997; Hurtado et al., 1996; Hurtado & Ponjuan, 2005; Levin, Van Laar, & Foote, 2006; Locks et al., 2008; Nuñez, 2009). In contrast, satisfaction with the campus racial climate has positive indirect effects on both grade point average and degree completion for Latina/o students (Museus et al., 2008; Nora & Cabrera, 1996). In their examination of the effect of the campus racial climate on the persistence and degree completion of Latina/o, Asian, Black, and White students, Museus et al. (2008) found that the climate affected the outcomes differently for each group, lending support to the importance of conducting separate group analyses when possible.

One contradictory finding in the literature on the campus climate for Latina/o students involves social integration. Some of the earlier studies on Latina/o climate have shown that perceptions of discrimination lead to lower levels of social involvement on campus (Hurtado et al., 1996; Nora & Cabrera, 1996), while some of the more recent work demonstrates the opposite—that greater satisfaction with the climate for diversity is associated with lower levels of student involvement with on-campus activities (Mayhew, Grunwald, & Dey, 2005; Museus et al., 2008). This relationship deserves further investigation.

Although the outcomes associated with experiencing racial tension and discrimination on campus for Latina/o students are unfavorable, limited research has examined the individual and institutional characteristics that shape the perceptions of those experiences (Gonzalez, 2002; Hurtado, 1994; Hurtado & Ponjuan, 2005; Nuñez, 2009). Perceptions of the climate are usually included in studies as environmental contexts that students experience rather than as outcomes in and of themselves. The few studies that have explored this area for Latina/os have found only two student background characteristics to be associated with perceiving greater racial tension: being a non-Native English speaker or speaking Spanish on campus, and being the first generation born in the United States (Gonzalez, 2002; Hurtado, 1994; Hurtado & Ponjuan, 2005;

Nuñez, 2009). In a study of “talented Latina/o students” who were the top scorers on the PSAT, Hurtado (1994) found that one-quarter of all students reported a lot of campus racial conflict as college sophomores and juniors. Students with higher self-rated academic ability, however, perceived less racial tension on campus, while those who discussed racial issues with peers reported both greater racial tension and higher levels of discrimination.

Other studies have found that both positive cross-racial interactions and participation in co-curricular diversity programming lead to perceptions of a more hostile climate for diversity (Hurtado & Ponjuan, 2005; Nuñez, 2009). That is, the more that students interact with diverse peers and engage in diversity programming, the more negatively they perceive the climate. Though these relationships may appear counterintuitive, scholars have suggested that more familiarity with diversity might allow students to recognize and be critical of treatment that is based on group identities (Hurtado & Ponjuan, 2005; Mayhew et al., 2005). Likewise, membership in Latina/o student organizations has been associated with higher perceived levels of racial tension (Hurtado, 1994), which might accurately reflect greater levels of prejudice on the part of majority group members. It is likely that students experiencing significant racial isolation are more likely to join such organizations for comfort and/or to combat racism on campus. Furthermore, White students are more likely to negatively judge Latina/o students who they perceive as having high ethnic identification as determined by membership in Latin American student associations or who phenotypically look more Latina/o than Latina/o students who signal less ethnic identification (Kaiser & Pratt-Hyatt, 2009; Kaiser & Wilkins, 2010). These findings suggest that strongly identified minorities might indeed experience more prejudice and discrimination.

At the institutional level, increased Latina/o representation in the student body has been associated with students feeling less racial tension and experiencing less discrimination (Hurtado, 1994). On the other hand, lower Latina/o undergraduate enrollment has been associated with increased marginalization and alienation (Gonzalez, 2002). Similarly, students at more selective campuses also perceive greater racial tension (Hurtado, 1992, 1994), which makes sense given that more selective institutions are typically less structurally diverse. Two additional factors that can be within an institution's control, curricular diversity and faculty concern for students, have been previously tied to perceptions of a positive climate for diversity. Though not specific to Latina/o students, Mayhew et al. (2005) found that students of color who perceive the curriculum to be diverse had more positive perceptions of the climate than White students who perceived the curriculum to be diverse. Gonzalez (2002) also found that cultural representation in courses made Latina/o students feel less marginalized. Students who felt that faculty cared about them and were accessible outside of class also perceived less racial tension and fewer experiences of discrimination (Hurtado, 1992, 1994), demonstrating the capacity for faculty and other institutional agents to shape the climate on campus.

With a few exceptions (Mayhew et al., 2005; Rankin & Reason, 2005), the campus climate for Latina/o students has typically been defined as one experienced through a racial lens. That is, the measures used to represent the climate have included items such as: There is a lot of racial tension on the university campus, I have heard faculty express stereotypes about racial/ethnic groups in class, most students here know very little about Hispanic culture, and I have encountered racism while attending this institution, (Hurtado, 1994; Hurtado & Ponjuan, 2005; Nora & Cabrera, 1996; Nuñez, 2009). The present study broadens the study of the campus climate for diversity to include hostile experiences and perceptions related to a range of social

identities among Latina/o students. It examines the effect of ethnicity and of the intersection of race with other targeted social identities in shaping students' perceptions and experiences. This is important as Latina/os are a heterogeneous group but only a few studies have examined the effect of ethnic subgroup on reported experiences (Hurtado, 1994) and no Latina/o climate studies to date have included other identities such as sexual orientation in their models. In order to make strides in improving the climate for the growing number of Latina/o college students, it is essential to understand the within-group variability of social identities shaping their unique experiences.

Conceptual Framework

The Multicontextual Model for Diverse Learning Environments (MMDLE) (Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012) provides a framework for understanding the various contexts in which diverse students learn and how these varying contexts are linked to educational practices and student outcomes. The model situates diverse students and their multiple social identities at the center of interacting socio-historical, community, policy, and institutional contexts, while acknowledging that the macrosystem exerts influence over all. Along with student identity, within the core of the institutional context are curricular and a co-curricular spheres that demonstrate the parallel role of instructors and staff in advancing student outcomes through content, pedagogy, programming, and practices. These spheres highlight the importance of intentional educational practices that are often neglected in assessments that focus on students and their individual actions (Outcalt & Skewes-Cox, 2002). Permeating the institutional context are the five dimensions (historical, organizational, compositional, psychological, and behavioral) of the campus climate for diversity previously established by research (Hurtado, Milem, Clayton-Pederson, & Allen, 1998, 1999; Milem, Chang, & Antonio,

2005). For the purposes of this study, we determine how Latina/o students experience different components of the model in relation to the psychological, behavioral, and organizational dimensions of the campus climate for diversity.

Methods

Data Source and Sample

The data for this study was derived from a combination of the 2010 pilot administration and the 2011 national administration of the Diverse Learning Environments (DLE) survey conducted by the Higher Education Research Institute at UCLA. The timing of these administrations coincides with the escalating national tensions surrounding immigration reform and allow for the examination of students' perceptions and experiences within this context. The DLE measures institutional practices, the campus climate, student outcomes, and also assesses student experiences across multiple social identities. The DLE was administered at 34 campuses that include broad access and structurally diverse selective institutions, community colleges and four-year schools, and public and private universities. The final sample size for this study was 4,200 Latina/o students, and was comprised of 16.3% freshmen, 27.1% sophomores, 30.9% juniors, and 25.7% seniors. The ethnic composition of the final sample was 61.1% Mexican-American/Chicano, 2.9% Puerto Rican, 8.9% Central American, and 27.1% Other Latina/o. More than two-thirds of the sample was female (67.4%) and almost one half (46.1%) of the sample was comprised of first-generation college students. Over one-fourth of the students in the study entered their institutions as transfer students and 16% of the sample was older than 24-years-old.

Analysis

To begin, we ran frequencies on all variables of interest to examine missing data. Since all of our variables had a small proportion of missing values (less than 5%), the expectation maximization (EM) algorithm was used to impute values for missing cases on all continuous variables with the exception of the dependent variables. EM uses maximum likelihood techniques to provide a more robust method than other missing value techniques such as listwise deletion or mean replacement (McLachlan & Krishnan, 1997). For our primary analysis, we conducted a series of hierarchical linear models (HLM) to examine the individual and institutional characteristics related to our three outcomes representing the psychological, behavioral, and organizational dimensions of the campus climate for diversity. HLM is appropriate when data have a nested structure, as in this case where students were nested within institutions. By accounting for the nested structure of the data and the homogeneity of errors within groups, HLM helps to avoid Type-I statistical error, which occurs when a parameter estimate is incorrectly concluded to be significant. HLM also simultaneously estimates equations for both the individual and the institutional effects, allowing the variance to be partitioned at each level of the data (Raudenbush & Bryk, 2002).

Our model building took place in several steps. First, to justify the use of HLM, a fully unconditional model without any predictors was run for each of the outcomes to assess whether they significantly varied across the institutions in our sample. The intraclass correlation coefficient (ICC) calculated through the estimates produced by the unconditional model represents the amount of variation in the dependent variable attributable to differences between level-2 units. The ICCs for our three outcomes are: 1% for harassment, 6% for discrimination and bias, and 10.1% for institutional commitment to diversity, suggesting that there is enough within-institution homogeneity to warrant multi-level modeling. Guided by our conceptual

model and prior research, we proceeded to build a level-1 model that included three blocks of variables representing student background, formal college experiences, and informal college experiences. The final step involved building the level-two model by adding institutional characteristics. The same analytical model was used to examine all three outcomes.

Outcomes

Table 1 provides a list of the items comprising all of the factors in our model, including the three that serve as our dependent variables. Each factor score has been rescaled to have a mean of 50 and standard deviation of 10. Discrimination and bias ($\alpha = 0.89$), a factor measuring the frequency of students' experiences with more subtle forms of discrimination, represents the psychological dimension of the campus climate. Harassment ($\alpha = 0.92$), a factor measuring the frequency that students experience threats or harassment, represents the behavioral dimension of the campus climate. Institutional commitment to diversity ($\alpha = 0.86$) a factor measuring students' perceptions of their campus' commitment to diversity, represents students' perceptions of the organizational dimension of the climate. The compositional dimension was included in each model as an independent measure of the percent of Latina/os on each campus, as high or low numbers shape the other dimensions of the climate. The only climate dimension that was not captured was the historical dimension as this typically requires qualitative data to assess each institution's origins regarding a commitment to diversity. It is important to note that these climate outcomes are broadly stated and do not focus solely on experiences based on race or any specific social identity, allowing us to determine if any specific social identity among Latina/o students is more strongly related to the climate.

--Insert Table 1--

Independent Variables

Prior studies have demonstrated a connection between experiencing a hostile campus climate and multiple aspects of a student's social identity, including gender (Kelly & Torres, 2006), sexual orientation (Evans & Broido, 2002; Rankin, 2004), and socioeconomic class (Langhout, Rosselli, & Feinstein, 2007). To control for the heterogeneity of our population, this study incorporates all three identities in the model. In addition, to control for how close students are connected to the immigrant experience given the national focus on immigration, a measure of their generation in the United States is included. Other measures of student background that capture the diversity of the sample include pathways into the institution (freshman or transfer) and class standing. Other student characteristics that differentiate concerns, self-concept, and commitment among students and serve as important controls are level of concern about ability to pay for college measured on a three-point scale (1=None to 3=Major), self-rated academic ability measured on a five-point scale (1=Lowest 10% to 5=Highest 10%), and importance placed on the goal of helping to promote racial understanding measured on a four-point scale (1=Not Important to 4=Essential).

Formal college experiences include participation in academic support services, and factors capturing the amount of exposure to campus-facilitated, co-curricular diversity activities ($\alpha = 0.89$) and a curriculum of inclusion ($\alpha = 0.90$). Informal college experiences include participation in racial, political, and religious student organizations, hours per week working on and off campus, and amount of positive cross-racial interactions ($\alpha = 0.88$). To capture the role of faculty within the curricular sphere of the MMDLE model, a factor measuring amount of academic validation students receive in the classroom ($\alpha = 0.90$) is also included. Validation is defined as enabling processes that foster student development (Rendon, 1994) and has been previously tied to student success (Barnett, 2011; Rendon, 2002). At the institutional level, we

include selectivity as measured by the mean SAT score of the student body, aggregated peer level of participation in a curriculum of inclusion, and percent of the full-time equivalent undergraduate study body that is Latina/o.

Limitations

An important limitation in this study lies in its inability to make causal inferences due to the cross-sectional nature of the data. Since our independent and dependent variables are measured at the same time point, caution must be exercised when interpreting the results. We do, however, include background characteristics in our model as important controls and use more advanced statistical techniques than those utilized in prior Latina/o climate studies. A second limitation is the use of the Institutional Commitment to Diversity outcome to represent the organizational dimension of the climate. It should be acknowledge that, though this construct is composed of items about institutional efforts, it is still based on students' perceptions of them rather than objective measures gathered at the campus level. The latter are not uniformly captured on a campus website or campus documents.

Results

Table 2 shows the results of the three HLM models. Confirming the importance of considering multiple aspects of students' identities in understanding how they experience the campus climate, we find that ethnicity, gender, sexual orientation, parental income, and generation status are each significant in at least one of the models. Compared to Mexican-Americans, Puerto Ricans are more likely to perceive discrimination and bias ($b=2.14, p<.05$), while Central Americans are less likely ($b=-1.09, p<.05$) and Other Latina/os are more likely ($b=1.02, p<.01$) to believe their institutions are committed to diversity. Compared to males, females are both less likely to perceive discrimination and bias ($b=-1.00, p<.01$) and less likely

to experience harassment ($b=-1.33, p<.001$). Students who identify as homosexual, bisexual, or other sexual orientation compared to heterosexual are more likely to perceive discrimination and bias ($b=1.67, p<.01$), and less likely to believe that their institutions are committed to diversity ($b=-1.98, p<.001$). Students with reported parental incomes in the lowest quartile (below \$30,000) are more likely than students in the highest quartile (over \$150,000) to experience harassment ($b=0.89, p<.05$), while students in the second income quartile (\$30,000 to \$74,999) perceive lower levels of institutional commitment to diversity ($b=-1.76, p<.05$). Though no significant differences were found between students who are first generation born in the United States and those whose families have been in the country for longer, students who were not born in the country perceive significantly lower levels of discrimination and bias ($b=-0.83, p<.05$) despite having a closer connection to the immigrant experience. The findings for all of the student background characteristics collectively demonstrate not just the heterogeneity of identities, but also the heterogeneity of experiences within the Latina/o student population.

—Insert Table 2—

Other student background characteristics that are significant are pathway into the institution, class standing, having concern about ability to pay for college, and placing importance on the goal of helping to promote racial understanding. Latina/o students who transferred into their college or university perceive less discrimination and bias than students who began there as freshmen ($b=-1.16, p<.015$), but as students advance in class standing they also perceive more discrimination and bias ($b=0.89, p<.001$) and less institutional commitment to diversity ($b= -1.14, p<.001$). Possibly reflecting the economic climate, the more concerned students are about their ability to pay for college, the more they perceive discrimination and bias ($b=1.50, p<.001$) and report experiencing harassment ($b=0.55, p<.05$). These same concerns

lead to more negative perceptions of institutional commitment to diversity ($b=-0.86$, $p<.001$).

Students who place greater importance on the goal of helping to promote racial understanding experience less harassment than students who place less importance on the goal ($b=-.85$, $p<.001$).

A number of informal college experiences are significantly related to the different climate dimensions. Students who are members of a Latina/o student organization experience less harassment ($b=-1.09$, $p<.05$) than students who are not members of such organizations, suggesting that perhaps these organizations help to shield students from hostile interactions. In contrast, students who are members of political student organizations perceive higher levels of discrimination and bias ($b=1.66$, $p<.05$) and experience more harassment ($b=1.34$, $p<.05$) than non members. Contradicting prior research (Hurtado & Ponjuan, 2005; Nuñez, 2009), higher levels of positive cross-racial interactions are not significantly related to perceptions of discrimination and bias or experiences with harassment, but they are related to students perceiving their institutions as being more committed to diversity ($b=0.19$, $p<.001$), indicating that perhaps the cross-racial interactions are being facilitated by institutional efforts.

Other findings highlight the critical role of staff and faculty in shaping perceptions of the climate. Higher levels of participation in campus-facilitated co-curricular diversity activities are significant in all three models and are associated with higher perceived levels of discrimination and bias ($b=0.37$, $p<.001$), more experiences of harassment ($b=0.36$, $p<.001$), and lower levels of belief that the institution is committed to diversity ($b=-0.12$, $p<.001$). These findings confirm previous research indicating that having an increased awareness of diversity issues allows students to be more critical of intergroup interactions (Hurtado & Ponjuan, 2005; Nuñez, 2009). On the other hand, students who take more courses that are part of a curriculum of inclusion report less experiences with harassment ($b=-0.06$, $p<.01$) despite perceiving higher levels of

more subtle forms of discrimination and bias ($b=0.03$, $p<.05$). This makes participation in a curriculum of inclusion the only finding that has opposite relationships with the behavioral and psychological dimensions of the climate. One of only three measures that are significant in all three models, higher levels of academic validation in the classroom are associated with lower levels of perceived discrimination and bias ($b=-0.19$, $p<.001$), fewer experiences with harassment ($b=-0.05$, $p<.05$), and higher levels of perceived institutional commitment to diversity ($b=0.37$, $p<.001$). Finally, students at institutions where there is a higher percentage of Latina/o undergraduates perceive their institutions to be more committed to diversity ($b=2.80$, $p<.01$) than students at institutions where Latina/os make up a smaller proportion of the student body.

Discussion

The national climate would suggest that Latina/os might be experiencing high levels of discrimination due to their race, as the population is frequently stereotyped as immigrants regardless of individual status, and immigrants tend to serve as scapegoats when there are worries about the state of the national economy (Citrin, Green, Muste, & Wong, 1997). This study, however, suggests that students' perceptions and experiences on campus are shaped by numerous other identities in addition to race. In contrast to previous Latina/o climate studies where ethnicity has not been found to be significant, our findings demonstrate that even controlling for all other experiences in our model, Puerto Ricans perceive higher levels of discrimination and bias, and Central Americans perceive lower levels of institutional commitment to diversity compared to Mexican Americans. It could be that this is a result of the numerical majority status of Mexican Americans within the Latina/o population, who might see their ethnic culture better reflected and understood on campus.

Prior research has actually found very few differences based on background characteristics (Hurtado & Ponjuan, 2005), but these studies have operationalized the campus climate as strictly one experienced through racial identity. Our study has expanded on this research to more broadly define the climate for diversity as one that can be perceived and experienced through the lens of other social identities, including gender, socioeconomic class and sexual orientation. The intersectionality lens suggests that no one social identity can be understood without examining how it interacts with the other social identities that an individual inhabits (Bowleg, 2008). Under that premise, it is the specific intersection of race and gender that may be contributing to Latino male students perceiving more discrimination and experiencing more harassment on campus than Latina women, since Latino males face unique challenges due to their underrepresentation in higher education (Saenz & Ponjuan, 2009).

The finding that students born outside of the United States perceive lower levels of discrimination and bias on campus lends support to the idea that acculturation leads to more critical perspectives. Research has demonstrated that for immigrant populations, increases in experiences of discrimination correlates with increases in time in the country, and that U.S-born Latina/os perceive more everyday discrimination than other Latina/o groups (Perez, Fortuna, & Alegria, 2008). This same concept can be applied to our finding that transfer students have more positive experiences with the psychological dimension of the climate—they have not had as much time as students who entered as freshman to lose their idealized view of the institution. Accordingly, the more advanced in class standing, the greater the amount of discrimination and bias perceived by students and the lower the amount of perceived discrimination.

In thinking about what institutions can do to create a more positive climate for diversity, the results suggest that receiving academic validation in the classroom is one of the few college

experiences that contribute to all three outcomes included in this study. Higher levels of validation from faculty are associated with more positive perceptions and experiences in the psychological, behavioral, and organizational dimensions of the campus climate. Unfortunately, research on validation has demonstrated that Students of Color tend to feel less validated than White students (Hurtado, Cuellar, & Guillermo-Wann, 2011). Moreover, in a longitudinal study of second year students at nine public universities, Hurtado and Ponjuan (2005) found that Latina/o students were more likely than White students to hear faculty express stereotypes, report being singled out because of their backgrounds, and generally sense discrimination in the classroom. If feelings of academic validation in the classroom can serve to curb perceptions of tension on campus for Latina/o students, as our findings indicate, it is critical that faculty members help to foster them.

The results also point to the role of staff in shaping the campus climate. Participation in co-curricular diversity activities is negatively associated with all three of the climate dimensions included in the study, lending support to previous findings suggesting that these types of activities help students develop a critical awareness (Hurtado & Ponjuan, 2005; Nuñez, 2009) and in many cases, co-curricular programming for diversity results after serious incidents become public on a campus. What is important to note is that, unlike student-initiated events, these activities are campus-facilitated and thus, the staff that lead them should help students process their developing awareness. This is not always possible in a one-time workshop but can be accomplished by creating opportunities for sustained conversations across difference. One model for this is intergroup dialogue, which brings students together for facilitated meetings between two or more social identity groups with a history of conflict to explore differences and build commonalities (Zuñiga, Nagda, Chesler, & Cytron-Walker, 2007). Because our results

indicate that Latina/o students are experiencing tension across multiple aspects of their identity, it might be important for staff to address both within-group and between-group perceptions.

A final key finding pertains to the compositional diversity of the institution. The results indicate that Latina/o students perceive institutions with a larger percentage of Latina/o undergraduates as having greater institutional commitment to diversity. This is the only significant institutional characteristic in our models, but the insignificance of the percent of Latina/os in the student body in relation to our other two outcomes is significant in and of itself as it lends support to previous work. Prior research suggests that higher compositional diversity provides more opportunity for experiencing the type of interactions that can foster a positive climate, but it is not on its own a sufficient condition for creating one (Chang, 2002; Gurin, Dey, Hurtado, Gurin, 2002). Though it helps to shape the image that students may have of the institution, compositional diversity alone does not help students have more positive experiences within the behavioral and psychological dimensions. As posited by the MMDLE model (Hurtado et al., 2012) and supported by our findings, students' identities need to be at the forefront of intentional institutional efforts. As the Latina/o population both as a whole and in higher education continues to grow, it is critical to understand how positive diverse learning environments can be fostered for enhancing Latina/o student success.

Future research on the campus climate should continue to delve further into the heterogeneity of specific ethnic groups in order to understand how to best address issues for specific populations. For example, students with high financial concern about their ability to pay for college are more likely to experience bias and discrimination and less likely to perceive that the institution is committed to diversity. This finding may be uniquely reflective of the recent economic downturn but nevertheless indicates that particular students are feeling more

vulnerable and unsupported on campus. This combination of stresses can lead students consider leaving the institution. Affirming a commitment to diversity means educators must also provide sufficient support (financial and otherwise) for Latina/os students to enable their success.

Conducting regular climate assessments on campus provides information about these vulnerabilities, can benchmark diversity efforts, and guide institutional responses.

Table 1. Factors Used in Model.

Factor	Reliability and Factor Loading
<u>Dependent Variables</u>	
<i>Discrimination and Bias</i>	$\alpha = .889$
Verbal comments	.792
Written comments (e.g. emails, texts, writing on walls, etc.)	.762
Witnessed discrimination	.750
Exclusion (e.g. from gatherings, events, etc.)	.746
Offensive visual images or items	.733
Heard insensitive or disparaging racial remarks from faculty	.677
Heard insensitive or disparaging racial remarks from staff	.664
Heard insensitive or disparaging racial remarks from students	.644
<i>Harassment</i>	$\alpha = .917$
Physical assaults or injuries	.935
Threats of physical violence	.912
Anonymous phone calls	.844
Damage to personal property	.794
Reported an incident of discrimination to a campus authority	.685
<i>Institutional Commitment to Diversity</i>	$\alpha = .857$
Has campus administrators who regularly speak about the value of diversity	.724
Appreciates differences in sexual orientation	.711
Promotes the appreciation of cultural difference	.698
Rewards staff and faculty for their participation in diversity efforts	.666
Promotes the understanding of gender differences	.665
Has a long standing commitment to diversity	.651
Accurately reflects the diversity of the student body in publications (e.g. brochures, website, etc.)	.631
<u>Independent Variables</u>	
<i>Co-Curricular Diversity Activities</i>	$\alpha = .903$
Participated in ongoing campus-organized discussions on racial/ethnic issues (e.g. intergroup dialogue)	.866
Participated in the Ethnic or Cultural Center activities	.848
Attended debates or panels about diversity issues	.810
Participated in the Women's/Men's Center activities	.782
Participated in the LGBT Center Activities	.729
Attended presentations, performances, and art exhibits on diversity	.649
<i>Curriculum of Inclusion</i>	$\alpha = .854$
Material/readings on race and ethnicity issues	.824
Materials/readings on gender issues	.715
Materials/readings on issues of privilege	.705
Opportunities for intensive dialogue between students with different backgrounds and beliefs	.635
Serving communities in need (e.g. service learning)	.578

Factor	Reliability and Factor Loading
<i>Academic Validation in the Classroom</i>	$\alpha = .863$
Instructors provided me with feedback that helped me judge my progress	.842
I feel like my contributions were valued in class	.811
Instructors were able to determine my level of understanding of course material	.776
Instructors encouraged me to ask questions and participate in discussions	.673

Table 2. Results of Final Models.

	<u>Discrimination and Bias</u>			<u>Harassment</u>			<u>Institutional Commitment</u>		
	Coeff.	S.E.	Sig.	Coeff.	S.E.	Sig.	Coeff.	S.E.	Sig.
<i>Institutional Variables</i>									
Selectivity	0.23	0.17		0.00	0.14		-0.71	0.44	
Ave. Participation in Curriculum of Inclusion	-0.15	0.15		-0.17	0.12		0.24	0.26	
Percent Latina/o	-0.39	0.60		0.60	0.39		2.80	0.94 **	
<i>Student Variables</i>									
Sex: Female	-1.00	0.31 **		-1.33	0.35 ***		-0.76	0.39	
Central American	-0.23	0.40		-0.25	0.40		-1.09	0.42 *	
Puerto Rican	2.14	1.01 *		2.07	1.13		-0.55	1.06	
Other Latina/o	0.08	0.24		0.40	0.38		1.02	0.29 **	
LGBT	1.67	0.47 **		0.90	0.54		-1.98	0.53 ***	
Income Q1 (Less than \$30,000)	0.01	0.41		0.89	0.41 *		-1.30	0.75	
Income Q2 (\$30,000 to \$74,999)	-0.08	0.54		0.55	0.50		-1.76	0.88 *	
Income Q3 (\$75,000 to \$149,999)	0.00	0.57		0.30	0.38		-1.49	0.82	
Not Born in US	-0.83	0.32 *		-0.61	0.43		0.09	0.43	
First Generation Born in US	-0.33	0.21		-0.31	0.27		-0.10	0.22	
Transfer Student	-1.16	0.55 *		-0.38	0.35		0.18	0.36	
Class Standing	0.89	0.19 ***		0.07	0.16		-1.14	0.18 ***	
Financial Concern	1.50	0.20 ***		0.55	0.25 *		-0.86	0.22 ***	
Self-Rating: Academic Ability	0.34	0.21		0.01	0.14		0.12	0.17	
Goal: Promote Racial Understanding	0.24	0.14		-0.85	0.13 ***		0.20	0.30	
Academic Support Services	0.46	0.29		0.30	0.33		-0.14	0.33	
Co-Curricular Diversity Activities	0.37	0.03 ***		0.36	0.03 ***		-0.12	0.02 ***	
Curriculum of Inclusion	0.03	0.01 *		-0.06	0.02 **		0.00	0.02	
Latino Organization	0.94	0.57		-1.09	0.45 *		-0.90	0.68	
Political Organization	1.66	0.72 *		1.34	0.68 *		-0.95	0.61	
Religious Organization	0.81	0.53		0.77	0.54		0.39	0.53	
Positive Cross-Racial Interaction	0.01	0.02		-0.01	0.02		0.19	0.03 ***	
Academic Validation	-0.19	0.02 ***		-0.05	0.02 *		0.37	0.02 ***	
Hours per week: Work On Campus	0.23	0.16		0.02	0.06		-0.19	0.10	
Hours per week: Work Off Campus	-0.06	0.05		0.05	0.08		0.03	0.07	

* < .05, ** < .01, *** < .001

References

- Ahorlu-Johnson, R.N., Alvarez, C.L., & Hurtado, S. (2011). Undermining the Master Plan: Divestment in higher education & student degree progress. Paper presented at the annual meeting of the Association for the Study of Higher Education, Charlotte, North Carolina.
- American Association of State Colleges and Universities (AASCU) (2012). Top 10 state higher education policy issues for 2012. *Policy Matters: A Higher Education Policy Brief*. Washington, D.C.: AASCU.
- Chang, M.J. (2002). Preservation or transformation: Where is the real discourse on diversity? *Review of Higher Education*, 25(2), 125-140.
- Citrin, J., Green, D. P., Muste, C., & Wong, C. (1997). Public opinion toward immigration reform: The role of economic motivations. *Journal of Politics*, 59, 858-881.
- Evans, N. J., & Broido, E. M. (2002). The experiences of lesbian and bisexual women in college residence halls: Implications for addressing homophobia and heterosexism. In E. P. Cramer (Ed.), *Addressing homophobia and heterosexism on college campuses*. Binghamton: Harrington Park Press.
- Fry, R. (2011). *Hispanic college enrollment spikes, narrowing gaps with other groups*. Washington, D.C.: The Pew Hispanic Center.
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330–366.
- Humes, K.R., Jones, N.A., & Ramirez, R.R. (2011). *Overview of Race and Hispanic Origin: 2010 (C2010BR-02)*. Retrieved 9 October 2011, from <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>
- Hurtado, S. (1994). The institutional climate for talented Latino students. *Research in Higher Education*, 35(1), 21-41.
- Hurtado, S., Alvarez, C. L., Guillermo-Wann, C, Cuellar, M., & Arellano, L. (2012). A model for diverse learning environments: The scholarship on creating and assessing conditions for student success. In J.C. Smart, & M.B. Paulsen (Eds.) *Higher Education: Handbook of Theory and Research*, 27. New York: Springer.
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of campus climate on Latino college students' sense of belonging. *Sociology of Education*, 70, 324–245.
- Hurtado, S., Milem, J. F., Clayton-Pedersen, A., & Allen, W. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21(3), 279–302.

- Hurtado, S., Milem, J. F., Clayton-Pedersen, A., & Allen, W. (1999). *Enacting diverse learning environments: Improving the climate for racial/ethnic diversity in higher education institutions*. Washington: ASHE-ERIC Higher Education Report Series: George Washington University Graduate School of Education.
- Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education*, 4(3), 235–251.
- Hurtado, S., & Ruiz, A. (2012). *The climate for underrepresented groups and diversity on campus*. Los Angeles, CA: Higher Education Research Institute.
- Kelly, B. T., & Torres, A. (2006). Campus safety: Perceptions and experiences of woman students. *Journal of College Student Development*, 47(1), 20–36.
- Langhout, R. D., Rosselli, F., & Feinstein, J. (2007). Assessing classism in academic settings. *Review of Higher Education*, 30(2), 145–184.
- Milem, J. F., Chang, M. J., & Antonio, A. L. (2005). *Making diversity work on campus: A research based perspective*. Washington: American Association of Colleges and Universities.
- Museus, S. D., Nichols, A. H., & Lambert, A. D. (2008). Racial differences in the effects of campus racial climate on degree completion: A structural equation model. *Review of Higher Education*, 32(1), 107–134.
- National Conference of State Legislatures (NCSL) (2011). *Undocumented student tuition: State action*. Retrieved 18 July, 2012 from <http://www.ncsl.org/issues-research/educ/undocumented-student-tuition-state-action.aspx>.
- National Institute of Justice (2011). *Research briefing: Understanding trends in hate crimes against immigrants and Hispanic-Americans*. Retrieved 18 July, 2012 from <http://www.nij.gov/topics/crime/hate-crime/immigrants-hispanics.htm>.
- Outcalt, C. L., & Skewes-Cox, T. E. (2002). Involvement, interaction, and satisfaction: The human environment at HBCUs. *Review of Higher Education*, 25(3), 331–347.
- Pérez, D. J., Fortuna, L., & Alegria, M. (2008). Prevalence and correlates of everyday discrimination among US Latinos. *Journal of community psychology*, 36(4), 421–433.
- Rankin, S. R. (2004). Campus climate for lesbian, gay, bisexual, and transgender people. *The Diversity Factor*, 12(1), 18–23.
- Staklis, S., & Horn, L. (2012). *New Americans in postsecondary education: A profile of immigrant and second-generation American undergraduates*. Washington, D.C.: National Center for Education Statistics.

Yosso, T. J., Smith, W. A., Ceja, M., & Solórzano, D. G. (2009). Critical race theory, racial microaggressions, and campus racial climate for Latina/o undergraduates. *Harvard Educational Review*, 79(4), 659–690.