Campus Climate and Diversity: Checking Differences

Steve Chatman, Ph.D.
Office of Student Research and Center for Studies in Higher Education
UC Berkeley

Abstract

The 2008 version of the Student Experience in the Research University (SERU) survey contained greatly expanded campus climate and student development content areas in the common core completed by all respondents. The survey core also included items by which students could indicate their political affiliation, religious beliefs, social class, gender, and sexual orientation. Race and ethnicity were available from university records. With an overall response rate of 40% to this census survey of the undergraduate population, there are about 63,000 opportunities to better understand the interrelationships among campus climate, student development, institutional characteristics, and student characteristics (e.g., major, geographic origin). This session is a first presentation of initial findings and recommends student characteristic clusters that should be considered when examining campus climate issues.

Introduction

While there is agreement that graduating students should be able to function effectively in an increasingly diverse society, there is reasonable difference of opinion regarding how that goal should be accomplished and how progress should be measured. It is a complex issue that has too often been oversimplified in research. This paper asserts that there have been two remarkable oversimplifications that bring much of extant research into question. The first perhaps fatal oversimplification has been to ignore academic program of study as if it either had no affect on student perception and development skills or was a randomly distributed variable. Believing that academic study had no differential effect on perception of campus climate or diversity skills would call into question the teaching learning process that is the core of our existence. Believing that academic program of study was randomly distributed over demographic groups and that there is no relationship between student interests and academic major is similarly untenable. Research would be expected to show that academic discipline is a remarkably important variable when measuring campus climate and growth in diversity skills, especially at large research universities. The SERU Project's 2008 UCUES administration presents an excellent opportunity to begin that examination.

On the one hand, there are several factors that have been examined for contribution to

diversity and have generally been found to be important. These factors include institutional or structural elements (e.g., urbanicity, public, size, degree level) (Hurtado, 1992; Pascarella et al., 1996), individual differences prior to enrollment (e.g., personal demographic, background characteristics), experiences while attending—informal diversity interactions (Chatman, 2008; Gurin, 1999; Hurtado, Dey, Gurin & Gurin, 2003) and experience with a special program offering (Gurin, Lehman, Lewis, & Dey, 2004).

On the other hand, the operational definition of perception of campus climate and self-assessment of diversity skills has been determinative. Especially when addressing the question whether diversity of enrollment and higher rates of informal interaction are associated with openness to diversity and positive perceptions of campus environment, results appear to reflect the instrument and methodology. CIRP's longitudinal studies show positive outcomes and cross-sectional NSSE studies show negative outcomes (Pike & Kuh, 2005, 2006).

Method

Clearly, what is needed to adequately examine an issue of this complexity is a research design sufficiently inclusive and comprehensive. The research data file from the 2008 administration of UCUES presents a unique opportunity to begin examination of this issue with fewer oversimplifications and none that are formed without an empirical base. The core components of UCUES include measures of interpersonal and diversity skills, campus climate, overall satisfaction and inclusion, and individual characteristics (political beliefs, religious beliefs, social class, family income, gender, race and ethnicity, sexual orientation). These are supplemented by operational variables (e.g., program of study) from university records. These data are available for over 60,000 respondents and will provide a powerful examination of these relationships at large public universities. From randomly assigned UCUES modules is additional data about frequency of interactions and occurrences of negative or stereotypic views about race or ethnicity, gender or sexual identity, political beliefs or affiliations, religion, sexual orientation, socio-economic status, immigrant background, and physical, psychological or learning disabilities. The modules were addressed to samples of students but should support even complex models on this scale (over 10,000). The eight large undergraduate campuses of the University of California will provide structural diversity variance, albeit among similarly selective institutions in a single state.

The conceptual model will follow that used by Chang (2001), Hu and Kuh (2003) and Pike and Kuh (2006). The model describes perceived campus environment as a direct result of diversity interactions, structural diversity, and institutional characteristics; and an indirect result of structural diversity and institutional characteristics through diversity interactions. The model will examine the various dimensions of diversity independently and collectively in recognition that diversity is measured by more than race and ethnicity.

In an unusual twist, the paper will offer no statistical results by student groupings. Instead, the paper will identify where differences exist among students in relationship to issues. For example, if family income were associated with ratings of respect for students, then

that would be identified as a factor that should be considered when studying respect for students. This paper will not take the usual next step and then present or try to establish mean differences in ratings of student respect by family income. Similarly, if students of different political affiliations do not rate respect for students differently, then it is a factor that can be ignored. The fundamental contribution of this paper is to encourage movement away from knee-jerk selective assumptions about diversity and campus climate with a focus on relative group scores and toward empirically-based analysis.

Analysis will occur in three sequential steps. The first step will establish a factor structure for the Student Development module of UCUES 2008 to reduce consideration of many items to fewer factor scores. These will be added to previously established factor scores for core items (Chatman, 2007a). The second step will use cluster analysis to establish groupings within demographic dimensions to reduce complexity based on the full array of factor scores resulting from the prior step. For example, if mathematics and computer science students respond similarly across the 20 factor scores, then mathematics and computer science students can be combined for the third step. In the third step, the relationship between clusters and individual factors will be examined to determine which student characteristics are associated with each factor score. For example, if field of study is unimportant when examining Campus Values, then field of study can be ignored when examining Campus Values. The three steps are designed to reduce item complexity through factor analysis, reduce the student characteristic variable set through cluster analysis, and reduce study design complexity when examining specific dimensions of campus climate and diversity. The reductions will be empirically based.

Step 1: Factor Analysis of the Student Development Module

The factor analysis strategy followed that used to establish factors for the UCUES 2006 Core data elements (Chatman, 2007a). It employed varimax rotation to establish orthogonal principal components followed by promax rotation within principal components to establish subfactor scores. Item placements were guided by loadings with a rarely used 0.4 cutoff. All analyses relied on responses by upper-division students evaluating majors who were randomly assigned to the Student Development module. For this module, many item scores were reversed prior to analysis to create a preferred positive scale.

The best principal component fit was a three-factor solution with reliability coefficients of 0.95, 0.92, and 0.85 for factors subsequently named Faculty and Staff Expressed Prejudice (DVF1), Campus Climate and Student Expressions of Prejudice (DVF2), and Interpersonal Skills and Sensitivities (DVF3).

<Table 1>

Faculty and Staff Expressed Prejudice (DVF1) was comprised of two item series asking the frequency with which student had heard teaching faculty or instructors and non-teaching staff or administrators express negative or stereotypical views about any of eight characteristics: race or ethnicity, gender or sexual identity, political beliefs or affiliations,

religion, sexual orientation, socio-economic status, immigrant background, or physical, psychological, or learning disabilities. Items about non-teaching staff or administrators were the first subfactor. Items about teaching faculty or instructions were the second subfactor with one exception. Negative political or stereotypical political view expressions stood alone as a third factor.

<Table 2>

The second principal component of the Student Development Module was Campus Climate and Student Expressions of Prejudice. This factor was comprised of frequency of student expressions of negative or stereotypical views, agreement with statements about students being treated with respect, campus climate ratings along a series of continuums, and general campus ratings. These four item sets fell into four subfactors with one exception. The less affective continuum rating of nonintellectual to intellectual fell with the general campus ratings. The more emotive rating continuums remained clustered.

<Table 3>

The third principal component was Interpersonal Skills and Sensitivities. This factor was comprised of student self ratings of awareness and understanding of personal development issues (current rating and growth), and student interactions with differing students. There were three subfactors. Student interactions were together as were current ratings of skills, and growth of skills.

<Table 4>

Factor scores were computed by standardizing all items, creating a mean score by subfactor and principal factor, standardizing the mean scores on a scale with a mean of 5 and a standard deviation of 2. All scale scores were limited to the range from 0.1 to 9.9.

Step 2: Clustering Students

The thirteen Student Development factors and subfactors were combined with Factor 6 and its subfactors from the Core Component of the UCUES 2008 instrument (Campus Climate for Diversity) and Core subfactors 1b, Sense of Belonging and Satisfaction, 2b, Cultural Appreciation and Social Awareness, and 4b, Gains in Cultural Appreciation and Social Awareness. The various demographic variables were then clustered based on these 20 student scores, replicating the process described in Chatman (2007b). The process computed mean factor scores by variable for groups with 100 or more responding students, then subjected the means to cluster analysis using an agglomerative hierarchical clustering based on centroid distance

Race/Ethnicity
One of the most evocative and frequently asserted dimensions along which students can be sorted is race/ethnicity. When clustered by responses to these diversity and climate factors, there were four race/ethnicity groups. The most distinct cluster of one was

Black/African Americans. The second was comprised of other underrepresented minorities and Filipino (i.e., Chicano/Mexican American, Latino and Filipino). The third cluster was Asian students from ethnicities with high proportions of recent immigrants: Chinese, Vietnamese, and Korean. The fourth cluster was all other students: Japanese, Indian/Pakistani, Thai, White and the "decline to state" and "other" students. (This last cluster tends to confirm that students marking "decline to state" or "other" are not underrepresented minority students.)

<Figure 1>

Gender
Only the male and female responses were numerically able to support the analysis. The two groups differed at about a 1.4 centroid distance.

<Figure 2>

Family Income
The clustering of family income was especially noteworthy. First, with one minor exception, students were arrayed by family income from low to high. The second was the clear presence of two clusters separated at the $65,000 income level. Those students from families with incomes of $65,000 or higher were one group and those from families with lower incomes formed a second group.

<Figure 3>

Sexual Orientation
While the clustering suggested some very interesting structures, especially combining questioning/unsure with bisexual and placing "decline to state" with non-heterosexuals, the clearest distinction was between heterosexual students and other groups.

<Figure 4>

Academic Discipline
Clustering students by area of academic major produced three primary groups. The group of area and ethnic studies students responded in a uniquely identifiable way. The second cluster was science, engineering, math, computer sciences, biological sciences, business/management and agriculture and natural resources. This is close to a SEMs cluster. Humanities, social sciences, public administration, and communications and journalism were a third cluster.

<Figure 5>

Religions Affiliation
Figures 6 and 7 display the results of cluster analysis by religious affiliation. Figure 6 used full detail and Figure 7 was based on religion classified into general areas: Eastern, Christian, Muslim, Jewish, spiritual unaffiliated and not spiritual. The solution for

detailed religious affiliations was not helpful because only "other religion" was clearly separated and it is by definition, not clearly defined. The Figure 7 fit of sorted religions was similarly unhelpful because the pattern was one of long branches without hierocracy. Moreover, the pattern did not reflect "religiousness." Clear separation and organization was missing. Therefore, religion was dropped from further consideration.

<Figures 6 and 7>

Political Affiliation

It was tempting to break respondents into three clusters: conservative, liberal or very liberal, and centrists, but the more clear distinction was between conservative students and all others. As was the case for family income, clustering did follow the array of very liberal to conservative students. Because of small numbers, very conservative students were combined with conservative students prior to clustering.

<Figure 8>

Step 3: Identifying Real Differences

The clusters from step 2 were treated as class levels for analysis of variance applied to each principal factor and subfactor. Type III sum of squares tests were assessed to measure the unique contribution of the class variables. These results are presented in Table 5 with three significance levels flagged (0.001, $1x10^{-8}$, and $1x10^{-30}$). Critical F values were directly computed for 0.001 $1x10^{-8}$ and imputed for $1x10^{-30}$. While this is an unusual use of F-statistics, it is helpful in identifying relative strength and considers different numerator degrees of freedom.

<Table 5>

The race/ethnicity outcomes will be described to illustrate how the table can be used. This was a frequently important factor when assessing climate and diversity. There were two instances when race/ethnicity exceeded the highest standard, $1x10^{-30}$: Sense of Belonging and Satisfaction and Cultural Appreciation and Social Awareness. Both of these are Core segment subfactor scores. When examining those two Core subfactors, it is important to examine those responses by race/ethnicity. At the next level of importance, $1x10^{-8}$, there were eight instances where race/ethnicity should be part of the analysis. These ranged from Interpersonal Skills and Sensitivities to Climate of Respect for Personal Beliefs. The third level of result was exceeded in seven cases. It is less critical to include race/ethnicity when examining these factors. And last, there were three subfactors where race/ethnicity was not important by these standards: Freedom to Express Beliefs, Campus Values, and Campus Climate.

Table 5 can also be used to identify student characteristics that should be considered when studying student development and campus climate factors by following the campus rows. Using DVF3 Interpersonal Skills and Sensitivities for example finds that there are three characteristics that should be considered. In declining importance, the student

characteristics that should be considered are area of academic major, race/ethnicity, and political orientation. It is essential that area of academic major be a part of the study.

Discussion

The reader will note that there have been no statistical facts presented by demographic groupings. The results may well be obvious in some instances but they are left to other analysts to compute and report. For example, the measurement of Campus Climate and Student Expressions of Prejudice varied most clearly by Sexual Orientation. It is reasonable to assume that heterosexual students observed fewer problematic instances but it was not the purpose of this paper to call attention to relative "problem areas." The dual purposes of this study were to dramatically reduce complexity on one hand and call attention to measures that require greater complexity than is typically applied on the other hand. Complexity was reduced by finding factor structures in the Student Development module and by reducing the number of statistically distinguishable groupings within the demographic variables. In other words, item results can be combined into a smaller number of factors scores and many individual differences within demographic variable groups can similarly be combined into fewer distinguishable clusters. These reductions produce greater statistical power and should be helpful to campus researchers. Perhaps more important than *reducing* variable complexity is the paper's contribution to *increasing* analytical complexity for issues that have often been oversimplified. For example, Academic Discipline of major was only exceeded by Sexual Orientation as a variable that should be considered when assessing campus climate for diversity and inclusion, but academic discipline has seldom been part of campus climate evaluations. (Recall that this is based on unique contribution after all other primary factors were statistically considered.)

A remarkably difficult problem has not been addressed in this paper. Measuring campus climate for diversity and inclusion is remarkably difficult because the outcomes reflect student perception and perception varies. The fact that academic area of major was often an important factor to consider exemplifies this underlying fact and mirrors prior research findings showing the frequently ignored importance of academic field of study on the student experience (Chatman, 2008). Universities are in the business of education and education can change perception. An example from Clery Act reporting at the University of California, Davis is useful. UC Davis's reported number of forcible sex offenses more than doubled from 2004 to 2006 (from 33 to 68). Speaking about the increase to 50 in 2005, UC Davis Chancellor Vanderhoef's reaction to the increase was that, "the statistical increase does not necessarily mean that more sexual assaults are occurring, but that sexual assault is becoming less of a 'silent epidemic' and victims are feeling more comfortable coming forward to report the crime" (Jones, 2006). His explanation was reasonable given that UC Davis had been awarded a $2 million dollar grant to fight sexual assault and encourage reporting. Vanderhoef went on to say, "we consider that to be a very important measure of the success of these programs"(Jones, 2006). When the rate subsequently increased to 68 for the following year, can it be assumed that the increase was similarly a measure of success? Perceiving that you were the victim of prejudicial statements by fellow students is not as horrific as being sexually assaulted but

reported incidence rates and explanations for annual change share difficulties. In both cases, success as a quantified outcome can be counterintuitive.

Returning to the results at hand, two students hearing the same statement by a third student might judge that expression to be racist or not and their judgment will reflect sensitivity and perception. In turn, student sensitivity and perception has many roots and academic instruction can be the most salient. Because perception and attribution differ, higher education should be careful about establishing campus climate outcome scores in isolation. The fundamental problem is that an objective, absolute measure of campus climate for diversity is probably unachievable and therefore it is unclear whether an "improved" undergraduate experience would raise or lower climate scores. Should higher education seek to increase awareness and perceptual sensitivity and then likely receive "worse" scores from student evaluations?

If instruction creates greater sensitivity and thereby more reported incidents of lower perceived acceptance, then instruction will lead to lower, more negative ratings. To illustrate this more clearly, one set of measures will be provided. Students in area and ethnic studies should have learned to recognize prejudicial communication and should be more sensitive to communication that might be prejudicial. Upper-division area and ethnic studies students rated Climate of Respect for Personal Beliefs (Core Factor 6c) at 4.16. Humanities and social science students gave it a substantially higher 4.80 and science, engineering, math, and business students rated it even higher at 5.05. Obviously, field of study affected scores. Should the Office of the President marshal resources to improve the situation in area and ethnic studies based on the much lower score in that area? Are area and ethnic studies majors the most sensitive and accurately calibrated indicators or are they seeing through warped lenses that distort observation? More telling and of more value is the fact that campus values for area and ethnic studies majors ranged from 3.7 to 5.3 (mean=5, sd=2). There was much campus variation. Therefore, the low score given Climate of Respect for Personal Beliefs by area and ethnic studies majors reflects instruction but also something more than instruction. What should be clear from this example is that campus climate and diversity are areas where more comprehensive and complex analyses are demanded. Simple, clear statements of results are unlikely to be accurate and are therefore unlikely to be helpful. It is hoped that the results of this study can help make those necessarily complex analyses a bit simpler.

References

Chang, M.J. (2001). The positive educational effects of racial diversity on campus. In G. Orfield & M. Kurlaender (Eds.), *Diversity challenged: Evidence on the impact of affirmative action* (p. 175-186). Cambridge, MA: Harvard Educational Publishing Group.

Chatman, S.P. (2007a). A common factor solution to UCUES 2006 upper-division core items. JAD 5.1.07, CSHE, UC Berkeley.

Chatman, S.P. (2007b). Institutional Versus Academic Discipline Measures of Student

Experience: A Matter of Relative Validity. Research and Occasional Paper Series, CSHE 8.07, UC Berkeley.

Chatman, S.P. (2008). Does diversity matter in the education process? An exploration of student interactions by wealth, religion, politics, race, ethnicity and immigrant status at the University of California. Research and Occasional Paper Series, CSHE 5.08, UC Berkeley.

Gurin, P. (1999). *Expert report of Patricia Gurin*, Gratz et al. v. Bollinger et al., No. 97-75321, Grutter et al. v. Bollinger et al.

Gurin, P., Lehman, J.S., Lewis, E. & Dey, E.L. (2004). *Defending Diversity: Affirmative Action at the University of Michigan*, University of Michigan Press: Ann Arbor.

Hu, S., & Kuh, G.D. (2003). Diversity experiences and college student learning and personal development. *Journal of College Student Development*, 44, 320-334.

Hurtado, S., Dey, E.L., Gurin, P.Y., & Gurin, G. (2003). College environments, diversity, and student learning. In J.C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. *18*, pp. 145-189). Dordrecht, Netherlands: Kluwer.

Hurtado, S. (1992). The campus racial climate: Contexts for conflict. *Journal of Higher Education, 63*, 539-569.

Pascarella, E.T., Edison, M., Nora, A., Hagedorn, L.S., & Terenzini, P.T. (1996). Influences on students' openness to diversity and challenge in the first ear of college. *Journal of higher Education, 67*, 174-195.

Pike, G.R., & Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 46, 185-210.

Pike, G.R., & Kuh, G. D. (2006). Relationships among structural diversity, informal peer interactions and perceptions of campus environment. *The Review of Higher Education, 29*, 425-450.

Jones, D. (2006). Enrollment, diversity, crime, pay highlight talk. *Dateline UCDavis*, Oct. 27, 2006.

Table 1: Internal Consistency of Factors and Subfactors (Cronbach Alpha)

	Cronbach's Coefficient Alpha 2008	
DVF1: Faculty and staff expressed prejudice	0.96	
DVF1a: Staff expressed prejudice		0.96
DVF1b: Faculty and instructor expressed prejudice		0.93
DVF1c: Faculty and instructor political prejudice		Only 1 Item
DVF2: Campus climate and student expressions of prejudice	0.92	
DVF2a: Student expressions of prejudice		0.93
DVF2b: Campus respect for students		0.92
DVF2c: Campus values		0.81
DVF2d: Campus climate		0.73
DVF3: Interpersonal skills and sensitivities	0.85	
DVF3a: Understanding other perspectives		0.87
DVF3b: Current level of development		0.86
DVF3c: Growth in development		0.81

Table 2: Student Development Module: Factor 1

| | UCUES 2008 Code | Principal | Subfactors (Promax) | | |
			DVF1a	DVF1b	DVF1c
5. In this academic year, I have heard <u>teaching faculty or instructors</u> express negative or stereotypical views about:					
Race or ethnicity	dvuc08_fac_race	**0.75**		0.83	
Gender or sexual identity	dvuc08_fac_gender	**0.77**		0.87	
Political beliefs or affiliations	dvuc08_fac_poli	**0.48**			0.92
Religion	dvuc08_fac_relig	**0.64**		0.61	
Sexual orientation	dvuc08_fac_sex	**0.81**		0.90	
Socio-economic status	dvuc08_fac_ses	**0.77**		0.83	
Immigrant background	dvuc08_fac_immgnt	**0.80**		0.87	
Physical, psychological, or learning disabilities	dvuc08_fac_disable	**0.78**		0.82	
6. In this academic year, I have heard <u>nonteaching staff or administrators</u> express negative or stereotypical views about:					
Race or ethnicity	dvuc08_staff_race	**0.84**	0.91		
Gender or sexual identity	dvuc08_staff_gender	**0.86**	0.92		
Political beliefs or affiliations	dvuc08_staff_poli	**0.75**	0.80		
Religion	dvuc08_staff_relig	**0.84**	0.88		
Sexual orientation	dvuc08_staff_sex	**0.87**	0.93		
Socio-economic status	dvuc08_staff_ses	**0.87**	0.91		
Immigrant background	dvuc08_staff_immgnt	**0.86**	0.91		
Physical, psychological, or learning disabilities	dvuc08_staff_disable	**0.86**	0.87		

Structure

DVF1: Faculty and staff expressed prejudice
    DVF1a: Staff expressed prejudice
    DVF1b: Faculty and instructor expressed prejudice
    DVF1c: Faculty and instructor political prejudice

Table 3: Student Development Module: Factor 2

	UCUES 2008 Code	Principal	Subfactors (Promax)			
			DVF2a	DVF2b	DVF2c	DVF2d
2. Based on your experience and observation, rate the general climate for students of your UC campus along the following dimensions: Campus climate is ….						
Hostile to friendly	dvuc08_friendnot_	0.58				0.83
Impersonal to caring	dvuc08_carenot_	0.56				0.81
Not intellectual to intellectual	dvuc08_intellnot_	0.48			0.54	
Intolerant to tolerant of diversity	dvuc08_tolernnot_	0.60				0.68
Dangerous to safe	dvuc08_safenot_	0.37				0.61
4. Please indicate the extent to which you agree with the following statements.						
Students of my race/ethnicity are respected on this campus	dvuc08_rspct_race_	0.56		0.83		
Students of my socio-economic status are respected on this campus	dvuc08_rspct_socio_	0.57		0.82		
Students of my gender/sexual identity are respected on this campus	dvuc08_rspct_gndr_	0.48		0.83		
Students of my religious beliefs are respected on this campus	dvuc08_rspct_relgn_	0.54		0.75		
Students of my political beliefs are respected on this campus	dvuc08_rspct_poli_	0.53		0.72		
Students of my sexual orientation are respected on this campus	dvuc08_rspct_sexor_	0.43		0.81		
Students of my immigration background are respected on this campus	dvuc08_rspct_immgnt_	0.52		0.84		
Students with a physical, psychological, or learning disability like mine are respected on this campus	dvuc08_rspct_disabl_	0.55		0.76		
7. In this academic year, I have heard <u>students</u> express negative or stereotypical views						
Race or ethnicity	dvuc08_stdnt_race	0.59	0.85			
Gender or sexual identity	dvuc08_stdnt_gender	0.57	0.88			
Political beliefs or affiliations	dvuc08_stdnt_poli	0.49	0.76			
Religion	dvuc08_stdnt_relig	0.53	0.81			
Sexual orientation	dvuc08_stdnt_sex	0.56	0.87			
Socio-economic status	dvuc08_stdnt_ses	0.55	0.85			
Immigrant background	dvuc08_stdnt_immgnt	0.54	0.84			
Physical, psychological, or learning disabilities	dvuc08_stdnt_disable	0.49	0.79			
9. What is your level of agreement or disagreement with the following:						
I feel valued as an individual on this campus	dvuc08_valued	0.57			0.71	
There is a clear sense of appropriate and inappropriate behavior on this campus	dvuc08_clrbhvr	0.51			0.57	
I am proud to be a student at this campus	dvuc08_improud	0.55			0.83	
Most students are proud to attend this school	dvuc08_stndproud	0.50			0.79	
This institution values students' opinions	dvuc08_stndopnn	0.59			0.77	
Diversity is important on this campus	dvuc08_dvrsimprtcmps	0.42			0.54	

Structure

DVF2: Campus climate and student expressions of prejudice
    DVF2a: Student expressions of prejudice
    DVF2b: Campus respect for students
    DVF2c: Campus values
    DVF2d: Campus climate

Table 4: Student Development Module: Factor 3

			Subfactors (Promax)		
	UCUES 2008 Code	Principal	DVF3a	DVF3b	DVF3c

3. How often have you gained a deeper understanding of other perspectives through conversations with fellow students because they differed from you in the following ways?

	UCUES 2008 Code	Principal	DVF3a	DVF3b	DVF3c
Their religious beliefs were very different than yours	dvuc08_diff_religion	0.52	0.77		
Their political opinions were very different from yours	dvuc08_diff_politics	0.53	0.75		
They were of a different nationality than your own	dvuc08_diff_nationality	0.56	0.84		
They were of a different race or ethnicity than your own	dvuc08_diff_race	0.58	0.85		
Their sexual orientation was different	dvuc08_diff_sexorient	0.53	0.70		
They were from a different social class	dvuc08_diff_ses	0.56	0.76		

8. Please rate your awareness and understanding of the following issues when you started at this campus and now.

	UCUES 2008 Code	Principal	DVF3a	DVF3b	DVF3c
My own racial and ethnic identity (growth)	dvuc08_ownrace_g	0.37			0.68
My own racial and ethnic identity (now)	dvuc08_ownrace_now_	0.39		0.72	
Social class and economic differences/issues (growth)	dvuc08_classdiff_g	0.43			0.76
Social class and economic differences/issues (now)	dvuc08_classdiff_now_	0.48		0.80	
Racial and ethnic differences/issues (growth)	dvuc08_racediff_g	0.45			0.80
Racial and ethnic differences/issues (now)	dvuc08_racediff_now_	0.51		0.82	
Gender and sexual orientation differences/issues (growth)	dvuc08_sexdiff_g	0.45			0.74
Gender and sexual orientation differences/issues (now)	dvuc08_sexdiff_now_	0.48		0.79	
Physical disabilities issues (growth)	dvuc08_phsdisable_g	0.39			0.63
Physical disabilities issues (now)	dvuc08_phsdisable_now_	0.35		0.75	
Emotional disabilities issue (growth)	dvuc08_emodisable_g	0.42			0.63
Emotional disabilities issues(now)	dvuc08_emodisable_now_	0.40		0.72	

9. What is your level of agreement or disagreement with the following:

	UCUES 2008 Code	Principal	DVF3a	DVF3b	DVF3c
Diversity is important to me*	dvuc08_dvrsimprtme	0.44			

Structure

DVF3: Interpersonal skills and sensitivities
    DVF3a: Understanding other perspectives
    DVF3b: Current level of development
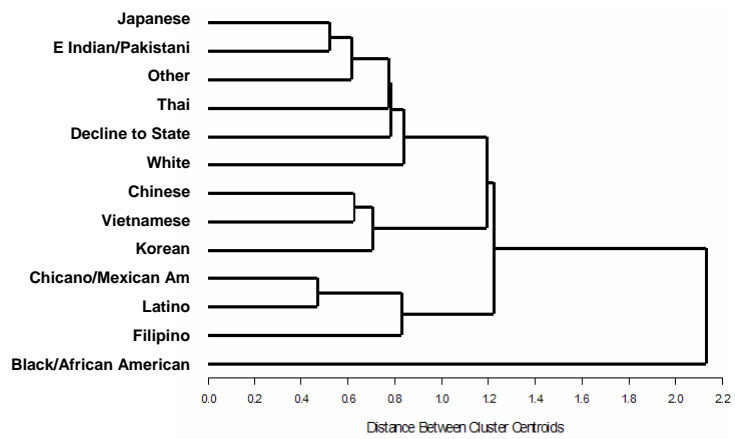   DVF3c: Growth in development

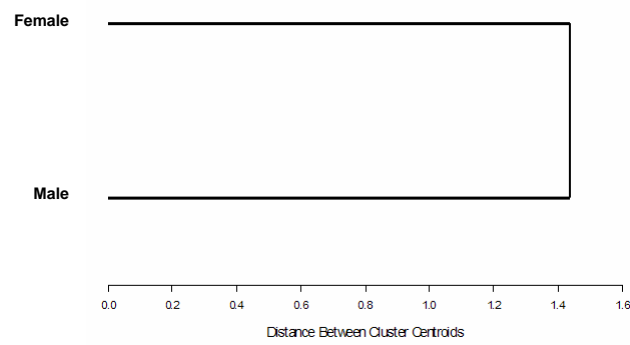# Figure 1: Race/Ethnicity

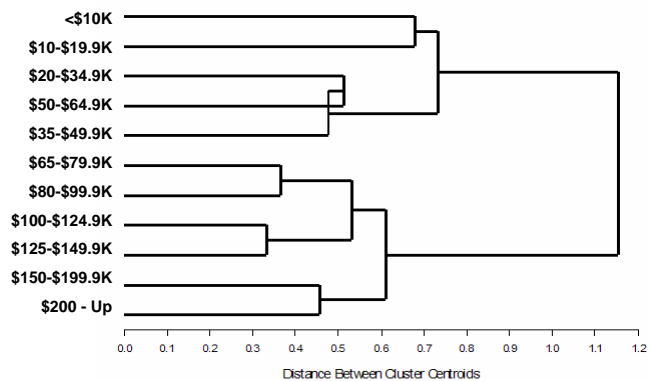# Figure 2: Gender Identification

Figure 3: Family Income
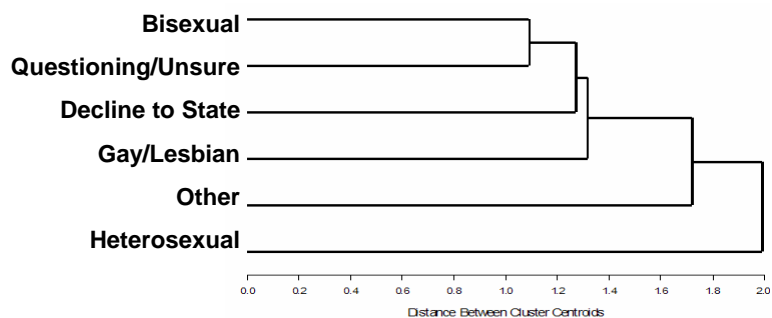

Figure 4: Sexual Orientation

Figure 5: Academic Disciplinary Code

Figure 6: Religious Affiliation (Detail)

Figure 7: Religious Affiliation (Grouped)

Christian

Spiritual, Not Affiliated

Muslim

Eastern Religions

Not Religious

Jewish

0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6

Distance Between Cluster Centroids

Figure 8: Political Orientation

Very Liberal

Liberal

Slightly Liberal

Moderate

Slightly Conservative

Conservative & Very
Conservative

0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6

Distance Between Cluster Centroids
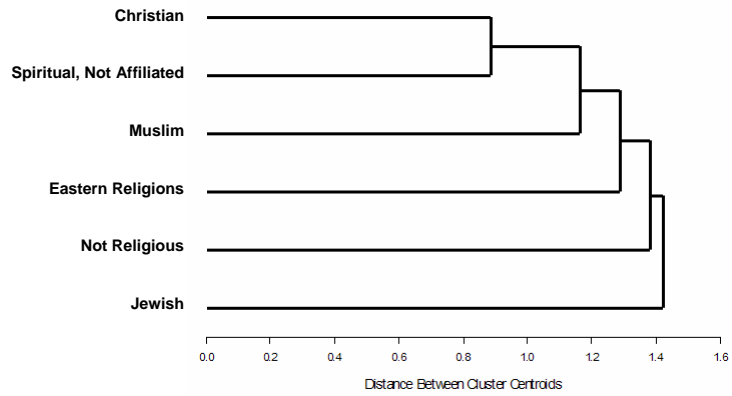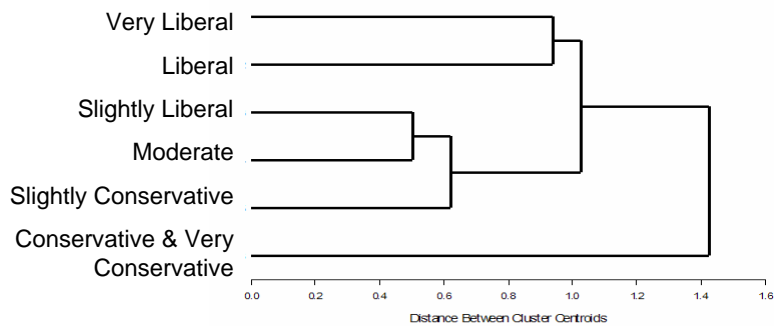
Table 5: Independent Effect of Main Effects as F Statistics -- Core Diversity and Climate Plus Student Development Module Factors

	Critical F Values				
At 1x e -30 (Interpolated)	129	72	48	48	48
At .000000001	37	21	15	15	15
At .001	11	7	5	5	5
	Race/ Ethnicity	Academic Discipline	Family Income	Sexual Orientation	Political Orientation
Numerator Degrees of Freedom	3	2	1	1	1
Core Factors					
Subfactor 1b: Sense of Belonging and Satisfaction	130	79	162	64	24
Subfactor 2b: Cultural Appreciation and Social Awareness	265	495	35	14	28
Subfactor 4b: Gains in Cultural Appreciation and Social Awareness	76	88	2	7	8
Factor 6: Campus Climate for Diversity	35	52	14	243	0
Subfactor 6a: Climate for Personal Characteristics	84	75	16	320	82
Subfactor 6b: Freedom to Express Beliefs	6	6	39	26	198
Subfactor 6c: Climate of Respect for Personal Beliefs	44	75	2	178	14
Development Module Factors					
DVF1: Faculty and staff expressed prejudice	26	11	24	40	17
DVF1a: Staff expressed prejudice	38	1	29	31	4
DVF1b: Faculty and instructor expressed prejudice	17	18	21	51	15
DVF1c: Faculty and instructor political prejudice	17	69	16	0	165
DVF2: Campus climate and student expressions of prejudice	29	14	10	125	1
DVF2a: Student expressions of prejudice	17	23	20	31	0
DVF2b: Campus respect for students	80	6	192	207	25
DVF2c: Campus values	9	5	1	48	1
DVF2d: Campus climate	8	13	7	40	0
DVF3: Interpersonal skills and sensitivities	88	185	2	0	12
DVF3a: Understanding other perspectives	36	33	2	1	1
DVF3b: Current level of development	81	87	3	16	0
DVF3c: Growth in development	51	158	2	2	13
Reds	2	8	2	9	3
Blues	8	4	8	5	5
Greens	7	4	1	1	4
Sum	17	16	11	15	12