

A Comparison of Non-Traditional vs. Traditional Measures of Success for Underrepresented Minority Students

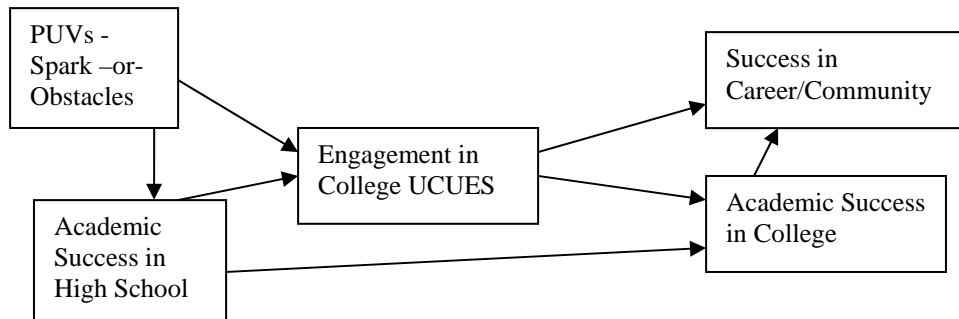
Samuel J. Agronow, Ph.D., Coordinator
Admissions Research and Evaluation, Student Affairs
University of California, Office of the President

This paper follows up on research conducted by Agronow, Freelon, and Levitan (2005) while at UC Berkeley and some additional work by Agronow (2005) using UC systemwide data. These two studies focused on a comparison of “traditional” academic outcomes (e.g., grades, persistence, graduation) versus non-traditional outcomes (e.g., leadership in college, academic engagement, civic engagement, career plans). While neither study specifically examined how ethnic groups fared on these measures, they did examine some proxies for ethnicity, specifically success of Eligibility in Local Context (ELC) students from low Academic Performance Index (API) high schools and success of students admitted to Berkeley via the “Augmented Review” process. The results of these analyses would lead one to believe that underrepresented ethnic minorities would fare well on some of the non-traditional measures while faring less well on traditional academic outcomes.

The research model in Agronow, Freelon, and Levitan (2005) encompassed a broad definition of success, examining more than traditional outcomes in a cohort of Berkeley students that first enrolled as freshmen in 1999-00. Most prediction studies focus on college GPA, persistence, and graduation rates. In defining success, this study also included grades in different academic disciplines, measures of student leadership in campus life, selected responses from student surveys, including academic engagement and other engagement measures from the University of California Undergraduate Experience Survey (UCUES), and data on employment and career plans from the campus’s Career Center exit survey.

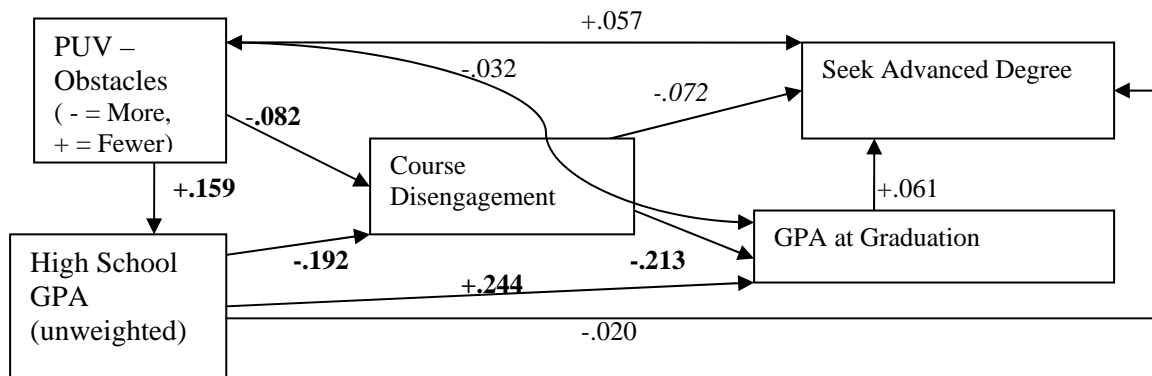
The 1999-00 Berkeley cohort study also included a wide variety of predictors. Traditional inputs used to predict college outcomes are typically tied directly to a student’s academic performance in high school. These measures include high school GPA, class rank in high school, and SAT scores. However, consistent with UC Berkeley’s “comprehensive review” of applications, other, less quantifiable, measures of student achievement considered in the admission process may also prove to be important predictors of success. In the comprehensive review process, admissions officers evaluate a student’s grades and test scores in the context of their school environment, home life, extra-curricular activities, work, and other key information gleaned from the student’s application. This study was able to employ such qualitative data about freshmen designated as *Previously Unrecorded Variables – PUVs*. PUVs were originally developed for a separate study evaluating equity in Berkeley’s admission process, conducted on a sample of Berkeley’s fall 2004-05 freshman applicants (Hout, 2005). The variables coded for both the 1999-00 and 2004-05 studies include participation and/or leadership in extra-curricular activities, the degree to which students have overcome obstacles to academic achievement, and summary judgments about whether the student made contributions to their school or community and/or is likely to make significant contributions to campus life (see Appendix A).

A model Agronow, et al. used to explain the relationships of PUVs to academics in high school, academic engagement in college, academics in college, and success in career/community was:



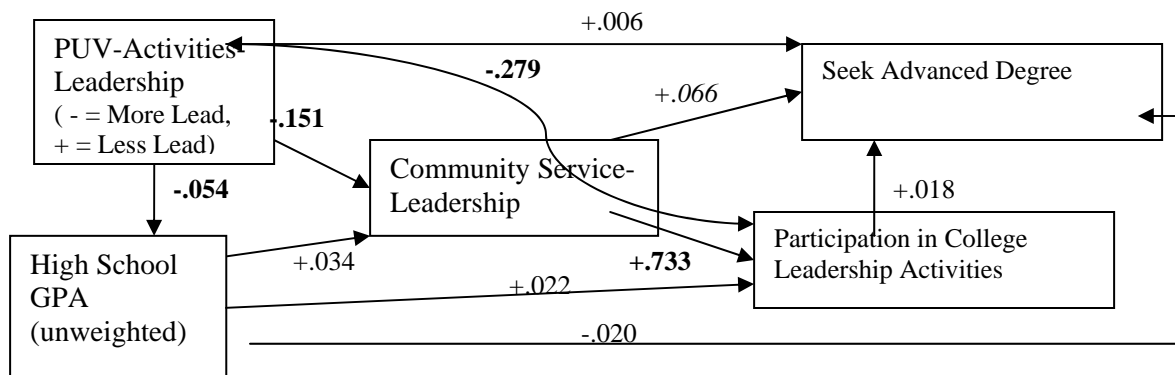
The researchers tested this model in a variety of ways. Two are shown in Figure 1 and Figure 2 below:

FIGURE 1
Path Coefficients Predicting GPA at Graduation and Seeking Advanced Degree from PUV Obstacles to Achievement Prior to Enrollment and High School GPA via Course Disengagement in College



Bolded coefficients are statistically significant at $p < .05$
Italicized coefficient is near significance at $p < .07$

FIGURE 2
Path Coefficients Participation in College Leadership and Seeking Advanced Degree from PUV High School Activities/Leadership and High School GPA via Community Service-Leadership in College



Bolded coefficients are statistically significant at $p < .05$
Italicized coefficient is near significance at $p < .10$

The researchers concluded that the previously unrecorded variables (PUVs) Berkeley uses in its admission process did add a little to the prediction of traditional outcomes (e.g., GPA at graduation), and some non-traditional outcomes (e.g., campus leadership). But they appear to play a bigger role in predicting measures of "engagement" or "disengagement" in college. These engagement factors, in turn, add to the prediction of both traditional outcomes (e.g., GPA) and non-traditional outcomes (e.g., campus leadership, seeking an advanced degree after college). This suggests that circumstances in high school (e.g., obstacles to achievement) that these PUVs measure do not preordain a particular outcome in college, but rather can affect that outcome through student choices made while in college. It is possible that both faculty and student affairs professionals could influence these relationships by focusing on the circumstances by which students engage or disengage in academic and co-curricular activities.

Not examined in these "path analyses" were results pertaining specifically for underrepresented minorities. However, in an addendum to Agronow, et al, reported by Flacks, Castillo, Agronow, and Brown (2005), students admitted to Berkeley via "augmented review" scored much higher on UCUES measures of engagement than students admitted through the regular process. "Augmented Review" admits, limited to about 6% of Berkeley's admit pool, are students who have a characteristics that would suggest they would be successful at Berkeley even if they score lower on high school academic indicators than regular campus admits. Underrepresented students comprise a higher than average percentage of Augmented Review admits.

Another relevant finding reported in Flacks, et al. using UC Santa Barbara data, students who scored high on faculty interaction tended to come from the lowest and highest quartiles of high school academic achievement. Again, ethnicity was not specifically examined in these analyses.

In a study using UC systemwide data, Agronow (2005), examined traditional measures (GPAs) vs. non-traditional measures of "success" (UCUES factors) for students admitted as Eligible in the Local Context (ELC) from Low vs. High API schools. Agronow found that ELCs from low API schools did not have as high UC GPAs as those who were NOT ELC but were from high API or private schools. But with respect to course disengagement, a measure of "academic diligence," students from low API high schools were more likely to disengage academically, but ELCs were less likely to disengage, regardless of API level. i.e., Academic diligence was high among ELCs, even those from low API schools. Since ELCs from low API schools will have a higher than average percentage of underrepresented minority students it would be useful to determine if similar findings would be observed for underrepresented students in general.

RESEARCH MODEL:

In this analysis data from the two sources described above, Berkeley and UCOP, are reanalyzed specifically focusing on a comparison of four ethnic groups: African Americans, Chicano-Latinos, Asian Americans, and Whites.¹ Moderator or control variables are used to refine the relationships between ethnic group and the non-traditional and traditional variables.

¹ Another underrepresented group, American Indian/Alaskan Native was not included in these comparisons due to numbers that were too small for analysis.

Berkeley 1999-00 Freshman Entrants Data Set:

The Berkeley data set employed in the current analysis was collected on a cohort of freshmen first enrolling at Berkeley in Fall term 1999 or Spring term 2000. This 1999-00 data file contains many more admission input and outcome measures than is usual for studies of this type. In addition to the typical demographic variables, grades in high school and test scores, the file contains a number of other variables used in the Berkeley admission process. e.g. Percentile Ranks within High School (statistics akin to “*class ranks*”) on SAT, high school GPA, and courses taken; AP Test scores; a school’s Academic Performance Index (API); and factor scores from “Previously Unrecorded Variables” (PUVs) - qualitative data on the UC Admission application that is not typically quantified, including information from the admission essay, academic honors and awards, and work experience (see Appendix A and Appendix B).

The outcome variables analyzed in the current analysis were UCB GPA after one year, UCB GPA at graduation (or last term attended), graduation in five years/retention in 6 years, percent of students failing at least one course, leadership - as measured by accepting responsibility for organizing campus student groups (from Berkeley’s Dean of Students data base), and a number of factor scores from the 2003 University of California Undergraduate Experience Survey (UCUES). The UCUES variables analyzed are factor scores measuring engagement in research/creative projects, academic/other skills developed in college, faculty engagement, course disengagement/academic diligence, community service/leadership, and career engagement/preparation, (see Appendix C for description of the UCUES items included in each of the factor scores). This cohort of freshmen completed UCUES in their fourth (senior) year.

UCUES 2003 Systemwide Data Set:

The UCUES data set employed in these analyses encompasses undergraduates enrolled on all UC campuses in Winter or Spring term 2003. Traditional admission input variables, demographic variables, Eligible in Local Context (ELC) status, grades in high school or community college, test scores, and high school characteristics are available for all students in this file regardless of whether they responded to UCUES.

UCUES was administered in Winter/Spring term 2003 to random samples of 2,000 students from each of the eight UC undergraduate campuses. Of this sample of 16,000, 6,658 or 42% participated. Individual campus response rates ranged from 32% to 54%. The UCUES variables employed in the analyses are, as in the Berkeley file, factor scores measuring engagement in research/creative projects, academic/other skills developed in college, faculty engagement, course disengagement/academic diligence, community service/leadership, and career engagement/preparation (see Appendix C).

UC GPA in UC college courses collected at the time of the survey administration is utilized as a “traditional” outcome measure. To be more comparable with the analyses reported from the Berkeley data set, analyses from this UCOP data set are restricted to those entering UC originally as *freshmen*.

RESULTS:

Table 1 shows results utilizing the UCUES 2003 systemwide data file, providing UC GPA and UCUES factor scores (multiplied by 100) by four ethnic groups for freshman entrants into the UC system. Table 2a and 2b provide similar information for the 1999-00 cohort of Berkeley freshman entrants. In addition, Tables 2a/b show additional outcomes regarding GPA, graduation, and leadership from Berkeley's Dean of Students data base, for all freshmen regardless of whether they responded to UCUES. Table 2b provides results only for those 1999-00 freshmen who completed UCUES in Spring term 2003. The academic characteristics of UCUES respondents are better than those of the total class shown in Table 2a partly because these students, completing UCUES, have survived into their senior year and perhaps, are a little more "engaged" in their education. Notably the "gap" between underrepresented minorities (African Americans and Chicano/Latinos) and Whites and Asians is reduced on the academic measures for those completing the survey.

The tables show, as expected, that underrepresented students score lower on traditional measures than whites or Asians. However, underrepresented students in both the UC and the Berkeley data sets score higher than whites or Asians on UCUES measures of academic/other skills development (including critical thinking, written, oral presentation, and interpersonal skills), and community service/leadership. Differences in "leadership" for African Americans are especially notable in the Berkeley data base, where according to Berkeley's Dean of Student records, a significantly higher percentage of African Americans accepted responsibility for organizing student groups. On the other hand, underrepresented students score consistently lower than whites and Asians on career engagement and preparation.

Table 1
UC GPA and UCUES Factor Scores by Ethnic Group
Winter/Spring 2003 Enrolled Systemwide (Freshman Entrants)

<u>UCUES MEAN Factor Scores x 100:</u> + = Above Average; 0 = Average; - = Below Average	<i>All UC Freshman Entrants</i>				
	<i>Ethnic Group</i>				<i>Stat. Sig.</i>
	<i>African American</i>	<i>Chicano-Latino</i>	<i>Asian</i>	<i>White</i>	
<i>Number of Freshman Entrants in Winter/Spring 2003</i>	298	1,426	4,089	4,002	
<i>Number in Responding to UCUES</i>	92	541	1,850	1,773	
<i>Response Rate</i>	30.9%	37.9%	45.2%	44.3%	
<i>Mean UC GPA in Winter-Spring Term 2003 (ALL)</i>	2.79	2.80	2.94	3.11	p < .001
<i>Mean UC GPA in Winter/Spring Term 2003 (UCUES Respondents ONLY)</i>	2.90	2.87	3.01	3.19	p < .001
<i>UCUES Factor: Mean Engagement in Research/Creative Projects</i>	13	1	6	-9	p < .001
<i>UCUES Factor: Mean Academic/Other Skills Developed in College</i>	19	19	-8	7	p < .001
<i>UCUES Factor: Mean Faculty Engagement</i>	5	-7	-25	8	p < .001
<i>UCUES Factor : Mean Course <u>Dis</u>engagement-Academic Diligence</i>	12	7	11	-3	p < .001
<i>UCUES Factor: Mean Community Service/Leadership</i>	38	15	0	-8	p < .001
<i>UCUES Factor: Mean Career Engagement/Preparation</i>	-6	-16	3	2	p < .001

Table 2a
UC Berkeley GPAs, Graduation, and Leadership by Ethnic Group
1999-00 Berkeley Freshman Entrants (All)

Factor	All UC Berkeley Freshman Entrants				
	Ethnic Group				
	African American	Chicano-Latino	Asian	White	Stat. Sig.
Number of Freshman Entrants in 1999-00 Cohort	141	406	2,038	1,379	
Mean UC GPA after 1 Year (ALL Freshmen)	2.79	2.91	3.12	3.24	p < .001
Mean UC GPA at Graduation or latest (ALL Freshmen)	2.89	3.08	3.21	3.33	p < .001
Percent Failing at Least One Berkeley Course (All)	66.7%	51.0%	34.4%	29.2%	p < .001
Percent Graduating in Five Years or Still Enrolled (All)	72.3%	75.6%	89.7%	86.2%	p < .001
Percent Accepting Responsibility for Organizing Student Groups - Dean of Student's Data Base (All)	37.6%	26.6%	26.9%	23.8%	p < .004

Table 2b
UC Berkeley GPAs, Graduation, Leadership, and UCUES Factor Scores by Ethnic Group
1999-00 Berkeley Freshman Entrants who Completed UCUES in 2003 (Senior Year)

UCUES MEAN Factor Scores x 100: + = Above Average; 0 = Average; - = Below Average	UC Berkeley Freshman Entrants Completing UCUES				
	Ethnic Group				
	African American	Chicano-Latino	Asian	White	Stat. Sig.
Number of Freshman Entrants in 1999-00 Cohort	141	406	2,038	1,379	
Number in Responding to UCUES in 2003	29	121	760	510	
Response Rate	20.6%	29.8%	37.3%	37.0%	
Mean UC GPA after 1 Year (UCUES Respondents)	2.82	3.02	3.18	3.28	p< .001
Mean UC GPA at Graduation or latest (UCUES Respondents)	2.98	3.15	3.28	3.39	p< .001
Percent Failing at Least One Berkeley Course (UCUES respondents)	69.0%	45.5%	28.3%	25.1%	p< .001
Percent Graduating in Five Years or Still Enrolled (UCUES Respondents)	96.6%	90.1%	96.6%	95.3%	p< .014
Percent Accepting Responsibility for Organizing Student Groups - Dean of Student's Data Base (UCUES Respondents)	51.7%	31.4%	29.3%	26.9%	p< .032
UCUES Factor: Mean Engagement in Research/Creative Projects	-42	10	-2	-2	Not Sig.
UCUES Factor: Mean Academic/Other Skills Developed in College	25	27	-10	6	p< .001
UCUES Factor: Mean Faculty Engagement	60	4	-19	19	p< .001
UCUES Factor : Mean Course <u>Dis</u> engagement-Academic Diligence	27	7	8	-10	p< .007
UCUES Factor: Mean Community Service/Leadership	79	-8	9	-14	p< .001
UCUES Factor: Mean Career Engagement/Preparation	-26	-24	14	-12	p< .001

There are some other ethnic differences in Tables 1 and 2a/b of interest. For example, Asians score lower than other groups on faculty engagement while African Americans score the highest. African Americans and Asians score highest on course disengagement (skipping class, not completing assignments, etc., see Appendix C), while whites score the lowest (i.e., report they are more likely to come to class or complete assignments).

It is possible that these findings might be explained by other variables, like academic success. Tables 3 and 4 examine the data by weighted/capped high school GPA in the 2003 systemwide data base. Students in the top third of high school GPA distribution also have the highest UC GPAs (Table 3). Moreover, the mean UC GPA for underrepresented students is closer to that of whites and Asians. Of special interest, however, are differences among ethnic groups in a UCUES factor not observed in Tables 1 and 2a/b. Specifically, engagement in research/creative projects is higher for underrepresented students than for Asians or whites.

Table 4 shows data for the lowest third of enrolled students on weighted/capped high school GPA. Underrepresented students have lower UC GPAs than whites and Asians, but still report higher scores on skills developed while in college and higher scores in leadership/community service than whites or Asians. Also differences among the four ethnic groups on course disengagement and career preparation are no longer statistically significant.

Table 3
UC GPA and UCUES Factor Scores by Ethnic Group
Winter/Spring 2003 Enrolled Systemwide (Freshman Entrants)
TOP Third of Enrolled Freshmen on Weighted/Capped High School GPA (3.91 or Higher)

UCUES MEAN Factor Scores x 100: + = Above Average; 0 = Average; - = Below Average	<i>All UC Freshman Entrants</i>				
	<i>Ethnic Group</i>				<i>Stat. Sig.</i>
	<i>African American</i>	<i>Chicano-Latino</i>	<i>Asian</i>	<i>White</i>	
<i>Number of Freshman Entrants in Winter/Spring 2003</i>	46	330	1,364	1,521	
<i>Number in Responding to UCUES</i>	16	135	691	754	
<i>Response Rate</i>	34.8%	40.9%	50.7%	49.6%	
<i>Mean UC GPA in Winter-Spring Term 2003 (ALL)</i>	3.10	3.02	3.20	3.30	p < .001
<i>Mean UC GPA in Winter/Spring Term 2003 (UCUES Respondents ONLY)</i>	3.23	3.07	3.23	3.35	p < .001
<i>UCUES Factor: Mean Engagement in Research/Creative Projects</i>	30	18	13	-5	p < .002
<i>UCUES Factor: Mean Academic/Other Skills Developed in College</i>	-7	16	-14	0	p < .002
<i>UCUES Factor: Mean Faculty Engagement</i>	15	-8	-33	3	p < .001
<i>UCUES Factor : Mean Course <u>Dis</u>engagement-Academic Diligence</i>	26	-5	-4	-18	p < .021
<i>UCUES Factor: Mean Community Service/Leadership</i>	107	22	10	-2	p < .016
<i>UCUES Factor: Mean Career Engagement/Preparation</i>	-8	-15	15	9	p < .001

Table 4
UC GPA and UCUES Factor Scores by Ethnic Group
Winter/Spring 2003 Enrolled Systemwide (Freshman Entrants)
BOTTOM Third of Enrolled Freshmen on Weighted/Capped High School GPA (3.54 or Less)

UCUES MEAN Factor Scores x 100: + = Above Average; 0 = Average; - = Below Average	All UC Freshman Entrants				
	Ethnic Group				Stat. Sig.
	African American	Chicano-Latino	Asian	White	
Number of Freshman Entrants in Winter/Spring 2003	298	1,426	4,089	4,002	
Number in Responding to UCUES	92	541	1,850	1,773	
Response Rate	30.9%	37.9%	45.2%	44.3%	
Mean UC GPA in Winter-Spring Term 2003 (ALL)	2.79	2.80	2.94	3.11	p < .001
Mean UC GPA in Winter/Spring Term 2003 (UCUES Respondents ONLY)	2.90	2.87	3.01	3.19	p < .001
UCUES Factor: Mean Engagement in Research/Creative Projects	13	1	6	-9	p < .012
UCUES Factor: Mean Academic/Other Skills Developed in College	19	19	-8	7	p < .002
UCUES Factor: Mean Faculty Engagement	5	-7	-25	8	p < .001
UCUES Factor : Mean Course <u>Dis</u> engagement-Academic Diligence	12	7	11	-3	Not Sig.
UCUES Factor: Mean Community Service/Leadership	38	15	0	-8	p < .001
UCUES Factor: Mean Career Engagement/Preparation	-6	-16	3	2	Not Sig.

One question that may be asked from the data reported above is why underrepresented groups report greater skill development and greater leadership than other groups? The Previously Unrecorded Variables (PUVs) in the Berkeley data set, collected from the undergraduate admission application, can be used to help answer this question. Table 5 shows that African Americans and Chicano/Latinos have higher scores on the PUV factor “obstacles” to success than Asians or whites. This finding is consistent with a greater percentage of these underrepresented groups coming from low income and/or first generation college families, and having lower high school GPAs and SAT scores. In contrast, African Americans and Chicano/Latinos are also rated higher than Asians and whites on the PUV factor of “spark, spark, passion, maturity, and likeliness to contribute to the campus community.” Surprisingly, underrepresented students have LOWER scores on participation/leadership in extracurricular activities compared to whites, and, especially, to Asians. This score, however, may reflect “participation” more than it does “leadership”. Those with “obstacles” may be less likely to have time or the interest to engage in a large number of activities while in high school.

Table 5

Factor Scores on Previously Unrecorded Variables (PUVs) and Other Measures on Collected on UC Application for Admission by Ethnic Group
1999-00 Berkeley Freshman Entrants (All)

PUV MEAN Factor Scores x 100: + = Above Average; 0 = Average; - = Below Average	UC Berkeley Freshman Entrants Completing UCUES				
	Ethnic Group				
	African American	Chicano-Latino	Asian	White	Stat. Sig.
Number of Freshman Entrants in 1999-00 Cohort	141	406	2,038	1,379	
PUV Factor: Spark, Spunk, Passion, Maturity, Likely to Contribute to Campus Life	17	12	-6	1	p< .001
PUV Factor: Participation or Leadership in Activities	-12	-12	5	-3	p< .003
PUV Factor : Have significant personal, social, family obstacles that can affect academic success	62	51	4	-23	p< .001
PUV Factor: Other academic achievements	-5	25	-7	-2	p< .001
Percent First Generation College Students	58.4%	37.2%	24.8%	13.5%	p < .001
Percent Under \$30,000 Parent Income	35.2%	40.9%	26.1%	10.6%	p < .001
Mean Weighted-Capped High School GPA	3.64	3.96	4.22	4.12	p < .001
Mean Unweighted High School GPA	3.34	3.59	3.77	3.70	p < .001
Mean SAT I Total Score	1066	1157	1323	1319	p< .001
Mean SAT II Writing Score	533	573	636	656	p< .001

Table 6 provides data that show which factors, including the PUVs, predict skills development in college by ethnic group. Due to small numbers, African Americans are combined with Chicano/Latinos in this analysis. Prediction of skills development is better for African American-Chicano/Latinos than for Asians or whites. Also the PUVs, especially achievement (other), are more important in the prediction, even after all of the standard academic and demographic factors are added into the regression model. It appears, for African Americans-Chicano/Latinos, that those with *fewer* academic honors/activities in high school report greater development of academic (writing, oral presentation, critical thinking) and interpersonal skills while enrolled at UC. This relationship is observed for whites to a much lesser extent, and not at all for Asians. Unweighted GPA and API are statistically significant positive predictors of skills development for African Americans-Chicano/Latinos, but not for Asians or whites. SAT II writing and SAT II math are positive predictors of skills development for Asians, while the SAT II writing and SAT II third tests are positive predictor for whites.

Table 7 shows which factors, including the PUVs, predict responsibility for organizing student groups. This is a measure taken from the records of Berkeley's Dean of Students Office, which can serve as a proxy for "leadership". As above, prediction of this outcome measure is better for African Americans-Chicano/Latinos than for Asians or for whites. Also, the PUVs add more to the prediction for African Americans-Chicano/Latinos than for Asians or whites, with the activities/leadership PUV predicting the best among the four PUVs. The PUV measuring spunk-spark-maturity also adds to the prediction in the positive direction for Asians and is near statistical significance for African Americans-Chicano/Latinos. Some academic measures, e.g., unweighted high school GPA, are positive predictors in the regression model for African Americans-Chicano/Latinos, but not for Asians nor for whites.

Table 6
 Regressions Predicting UCUES Factor: *Skill Development in College* by Ethnic Group
 1999-00 Berkeley Freshman Entrants Responding to UCUES

Ethnic Group	<u>Afr Amer. + Chicano/Latino</u>			<u>Asian</u>			<u>White</u>		
N	N=142			N=715			N=471		
	<u>Model</u>	<u>R</u>	<u>R-Sq</u>	<u>Model</u>	<u>R</u>	<u>R-Sq</u>	<u>Model</u>	<u>R</u>	<u>R-Sq</u>
MODEL SUMMARY	1	0.301	0.090	1	0.066	0.004	1	0.111	0.012
STATISTICS	2	0.492	0.242	2	0.288	0.083	2	0.340	0.116

Mod	Variables in Model	B	SE	Beta	p	B	SE	Beta	p	B	SE	Beta	p
1	Intercept	27.652	8.860		0.002	-9.484	3.577		0.008	5.938	5.223		0.256
	PUV: Spark, Spunk, Maturity	.052	.085	0.05	0.539	.030	.034	0.03	0.389	-.057	.048	-0.05	0.238
	PUV: Participation/Leadership	.059	.081	0.06	0.465	.047	.034	0.05	0.175	-.012	.049	-0.01	0.810
	PUV: Obstacles	.118	.073	0.14	0.107	.028	.036	0.03	0.438	-.020	.061	-0.01	0.749
	PUV: Achievements (Other)	-.260	.079	-0.27	0.001	.002	.037	0.00	0.947	-.093	.047	-0.09	0.045
2	Intercept	-180.155	132.130		0.175	45.914	81.519		0.573	18.396	105.526		0.862
	PUV: Spark, Spunk, Maturity	.065	.087	0.06	0.457	.049	.034	0.05	0.155	-.047	.048	-0.04	0.327
	PUV: Participation/Leadership	.058	.081	0.06	0.478	.021	.034	0.02	0.548	-.036	.049	-0.03	0.461
	PUV: Obstacles	.089	.086	0.10	0.305	.016	.041	0.02	0.705	-.046	.062	-0.03	0.463
	PUV: Achievements (Other)	-.206	.081	-0.21	0.012	.031	.036	0.03	0.390	-.051	.046	-0.05	0.264
	API Score (2000)	.210	.093	0.24	0.025	.030	.040	0.03	0.463	.063	.069	0.05	0.361
	Missing API? (1=Yes, 0=No)	-16.029	25.421	-0.06	0.529	-11.442	9.403	-0.05	0.224	-3.664	10.641	-0.02	0.731
	First Generation College?	25.774	17.940	0.12	0.153	7.449	8.698	0.03	0.392	-13.936	15.066	-0.04	0.355
	Low Parent Income (< \$30,000)?	-10.670	18.515	-0.05	0.565	-5.191	9.867	-0.02	0.599	13.272	19.286	0.03	0.492
	Unweighted High School GPA	66.899	25.380	0.25	0.009	5.005	17.608	0.01	0.776	9.017	19.904	0.02	0.651
	SAT I Total	-.155	.110	-0.27	0.159	-.045	.050	-0.07	0.375	-.144	.070	-0.16	0.040
	SAT II Writing Score	.103	.143	0.10	0.474	.152	.059	0.16	0.009	.310	.085	0.23	0.000
	SAT II Math Score	-.203	.156	-0.19	0.195	-.163	.066	-0.14	0.014	-.044	.089	-0.03	0.621
	Third SAT II Achievement Test	.036	.087	0.04	0.678	-.046	.053	-0.04	0.383	-.178	.082	-0.14	0.030
	Number of Semesters of A-F Courses	-.341	1.366	-0.02	0.803	-.504	.525	-0.04	0.338	.789	.646	0.06	0.223
	Number of Semesters of AP/Honors Courses	.787	1.225	0.06	0.522	.356	.553	0.03	0.520	-1.209	.709	-0.09	0.089
	Number of AP Test Scores of "5"	-9.816	12.755	-0.07	0.443	-.504	2.707	-0.01	0.852	3.552	3.593	0.06	0.323
	Is in College of Letters and Science?	59.294	29.490	0.20	0.047	37.497	12.642	0.17	0.003	31.627	16.119	0.13	0.050
	Is in College of Engineering?	52.038	47.608	0.11	0.276	-3.526	15.437	-0.01	0.819	-27.345	20.349	-0.09	0.180

Table 7

Logistic Regressions Predicting *Responsibility for Organizing Student Groups* (from Dean of Students Data Base) by Ethnic Group
1999-00 Berkeley Freshman Entrants (ALL)

Ethnic Group N	<u>Afr. Amer + Chicano/Latino</u> N=491			<u>Asian</u> N=1,917			<u>White</u> N=1,253		
	<u>Model</u>	<u>Nagelkerke R</u>	<u>R-Sq</u>	<u>Model</u>	<u>Nagelkerke R</u>	<u>R-Sq</u>	<u>Model</u>	<u>Nagelkerke R</u>	<u>R-Sq</u>
MODEL SUMMARY	1	0.258	0.067	1	0.185	0.034	1	0.133	0.018
STATISTICS	2	0.380	0.144	2	0.244	0.060	2	0.264	0.070

Mod	Variables in Model	B	SE	Beta	p	B	SE	Beta	p	B	SE	Beta	p
1	PUV: Spark, Spunk, Maturity	.002	.001	0.19	0.064	.001	.001	0.14	0.008	.001	.001	0.07	0.284
	PUV: Participation/Leadership	.004	.001	0.41	0.000	.003	.001	0.32	0.000	.001	.001	0.15	0.025
	PUV: Obstacles	.001	.001	0.13	0.205	.000	.001	-0.02	0.708	-.002	.001	-0.18	0.009
	PUV: Achievements (Other)	.000	.001	0.00	0.968	.000	.001	0.04	0.389	.001	.001	0.06	0.332
	Constant	-.894	.114			-1.021	.053			-1.231	.071		
2	PUV: Spark, Spunk, Maturity	.002	.001	0.20	0.064	.001	.001	0.12	0.023	.001	.001	0.06	0.396
	PUV: Participation/Leadership	.004	.001	0.36	0.001	.003	.001	0.30	0.000	.001	.001	0.10	0.134
	PUV: Obstacles	.000	.001	0.03	0.818	.001	.001	0.08	0.178	-.001	.001	-0.13	0.090
	PUV: Achievements (Other)	.001	.001	0.06	0.567	.001	.001	0.07	0.209	.000	.001	0.01	0.866
	API Score (2000)	.000	.001	0.02	0.874	.000	.001	0.02	0.731	.000	.001	0.04	0.622
	Missing API? (1=Yes, 0=No)	.152	.307	0.06	0.620	-.095	.140	-0.04	0.499	-.345	.157	-0.16	0.028
	First Generation College?	.110	.222	0.05	0.621	.012	.136	0.01	0.930	-.034	.218	-0.01	0.877
	Low Parent Income (< \$30,000)?	.312	.239	0.15	0.191	-.094	.148	-0.04	0.528	.372	.249	0.10	0.134
	Unweighted High School GPA	.707	.350	0.25	0.044	-.195	.248	-0.04	0.433	.157	.283	0.05	0.579
	SAT I Total	-.001	.001	-0.23	0.358	.001	.001	0.13	0.261	.001	.001	0.11	0.407
	SAT II Writing Score	.000	.002	-0.01	0.974	.001	.001	0.08	0.392	.002	.001	0.15	0.133
	SAT II Math Score	-.003	.002	-0.25	0.163	-.001	.001	-0.10	0.245	-.002	.001	-0.15	0.169
	Third SAT II Achievement Test	-.002	.001	-0.23	0.061	.000	.001	0.03	0.696	.002	.001	0.19	0.072
	Number of Semesters of A-F Courses	-.001	.014	-0.01	0.930	.015	.008	0.11	0.067	.007	.009	0.06	0.464
	Number of Semesters of AP/Honors Courses	.037	.016	0.29	0.020	.001	.008	0.01	0.894	.011	.010	0.09	0.264
	Number of AP Test Scores of "5"	.393	.148	0.31	0.008	.077	.040	0.12	0.055	.021	.052	0.03	0.685
	Is in College of Letters and Science?	.214	.352	0.08	0.543	.392	.194	0.17	0.043	.526	.266	0.21	0.048
	Is in College of Engineering?	-.510	.623	-0.12	0.413	-.026	.243	-0.01	0.916	.747	.326	0.23	0.022
	Constant	-.309	1.589			-2.508	1.153			-5.713	1.479		

Table 8
Regressions Predicting *UC Berkeley GPA at Graduation (or Latest Term)* by Ethnic Group
1999-00 Berkeley Freshman Entrants Responding to UCUES

Ethnic Group	<u>Afr Amer + Chicano/Latino</u>			<u>Asian</u>			<u>White</u>		
N	N=141			N=712			N=470		
	<u>Model</u>	<u>R</u>	<u>R-Sq</u>	<u>Model</u>	<u>R</u>	<u>R-Sq</u>	<u>Model</u>	<u>R</u>	<u>R-Sq</u>
MODEL	1	0.243	0.059	1	0.200	0.040	1	0.144	0.021
SUMMARY	2	0.365	0.133	2	0.297	0.088	2	0.395	0.156
STATISTICS	3	0.647	0.418	3	0.553	0.306	3	0.636	0.404

Mod	Variables in Model	B	SE	Beta	p	B	SE	Beta	p	B	SE	Beta	p
1	Intercept	3.135	.036		0.000	3.276	.015		0.000	3.378	.020		0.000
	PUV: Spark, Spunk, Maturity	.000	.000	0.08	0.328	.000	.000	0.12	0.001	.000	.000	0.00	0.936
	PUV: Participation/Leadership	.000	.000	0.07	0.430	.000	.000	0.08	0.040	.000	.000	0.04	0.436
	PUV: Obstacles	-.001	.000	-0.21	0.016	-.001	.000	-0.14	0.000	.000	.000	-0.05	0.321
	PUV: Achievements (Other)	.000	.000	-0.09	0.310	.000	.000	0.01	0.735	.000	.000	0.13	0.006
2	Intercept	3.148	.035		0.000	3.284	.015		0.000	3.363	.019		0.000
	PUV: Spark, Spunk, Maturity	.000	.000	0.07	0.427	.000	.000	0.12	0.001	.000	.000	0.00	0.994
	PUV: Participation/Leadership	.000	.000	0.07	0.362	.000	.000	0.09	0.011	.000	.000	0.03	0.536
	PUV: Obstacles	-.001	.000	-0.20	0.017	.000	.000	-0.11	0.002	.000	.000	-0.05	0.251
	PUV: Achievements (Other)	.000	.000	-0.09	0.259	.000	.000	0.02	0.620	.000	.000	0.10	0.015
	UCUES: Course Disengagement	-.001	.000	-0.27	0.001	-.001	.000	-0.22	0.000	-.001	.000	-0.37	0.000
3	Intercept	.622	.468		0.186	.720	.306		0.019	.631	.337		0.062
	PUV: Spark, Spunk, Maturity	.000	.000	0.06	0.389	.000	.000	0.07	0.033	.000	.000	0.03	0.404
	PUV: Participation/Leadership	.000	.000	0.05	0.485	.000	.000	0.05	0.115	.000	.000	-0.01	0.734
	PUV: Obstacles	.000	.000	0.05	0.550	.000	.000	0.04	0.333	.000	.000	0.04	0.301
	PUV: Achievements (Other)	.000	.000	-0.05	0.505	.000	.000	0.02	0.589	.000	.000	0.07	0.051
	UCUES: Course Disengagement	-.001	.000	-0.19	0.012	-.001	.000	-0.20	0.000	-.001	.000	-0.22	0.000
	API Score (2000)	.001	.000	0.18	0.053	.000	.000	0.06	0.118	.000	.000	0.07	0.095
	Missing API? (1=Yes, 0=No)	-.014	.089	-0.01	0.876	.016	.035	0.02	0.648	.104	.034	0.12	0.002
	First Generation College?	.074	.064	0.09	0.248	-.036	.033	-0.04	0.269	-.064	.048	-0.05	0.181
	Low Parent Income (< \$30,000)?	.062	.065	0.07	0.339	-.015	.037	-0.02	0.692	.069	.061	0.04	0.262
	Unweighted High School GPA	.313	.090	0.30	0.001	.411	.067	0.22	0.000	.467	.065	0.30	0.000
	SAT I Total	.000	.000	0.08	0.634	.000	.000	0.08	0.189	.000	.000	-0.03	0.629
	SAT II Writing Score	.001	.001	0.22	0.079	.001	.000	0.13	0.016	.000	.000	0.09	0.095
	SAT II Math Score	.000	.001	-0.04	0.772	.000	.000	0.02	0.671	.000	.000	-0.01	0.794
	Third SAT II Achievement Test	.000	.000	-0.02	0.813	.000	.000	0.05	0.222	.000	.000	0.04	0.427
	Number of Semesters of A-F Courses	.001	.005	0.01	0.902	-.003	.002	-0.05	0.159	.006	.002	0.12	0.003
	Number of Semesters of AP/Honors Courses	-.002	.004	-0.04	0.600	-.002	.002	-0.04	0.279	-.004	.002	-0.09	0.052
	Number of AP Test Scores of "5"	.080	.045	0.15	0.081	.049	.010	0.19	0.000	.061	.011	0.25	0.000
	Is in College of Letters and Science?	.284	.103	0.25	0.007	.078	.047	0.08	0.100	.207	.051	0.21	0.000
	Is in College of Engineering?	.418	.166	0.23	0.013	-.124	.058	-0.11	0.033	.014	.065	0.01	0.834

Figure 1 shows that “obstacles” to success present at the time of admission predicts (lack of) success in college, *IF students fail to engage academically*. Table 8 examines the relationship of the PUV obstacles and UCUES factor course disengagement on UC Berkeley GPA, to determine if there is a different pattern of relationships for African Americans-Chicano/Latinos.

Table 8 shows that obstacles, in a negative sense, do indeed play a role in predicting latest term UC GPA, for African Americans-Chicano/Latinos and Asians, but not for whites. UCUES factor course disengagement is strongly associated with lower GPAs for all groups. In the regression model that contains the academic and demographic predictor variables, course disengagement along with unweighted high school GPA are the two most important factors regardless of ethnic group. However, API score is also a predictor for African Americans-Chicano/Latinos; while SAT II writing, number of AP tests with scores of “5”, and spark-spunk-maturity are predictors for Asians. Number of AP tests with scores of “5”, number of semesters of A-F courses, number of semesters of AP/honors courses, and the PUV achievements (other) are predictors for whites.

Summary of Findings

To summarize the major findings, underrepresented students (African Americans and Chicano-Latinos) do score higher on both skill development in college and college leadership measures than Asians or whites even though they score lower on traditional academic outcome measures (e.g. college GPA). African Americans and Chicano-Latinos scored consistently lower than Asians or whites on career engagement/preparation, but did not score consistently lower than other groups on course disengagement, an important measure of the more generalized “academic engagement”. Notably, African Americans and Chicano/Latinos in the top third of the UC freshman class based on high school GPA, report higher engagement in research and creative projects than Asians or whites.

The higher scores on the UCUES skill development factor are related to higher GPAs in high school, but also are related to *less* academic achievements while there. Students with such a profile may be more motivated to “grow” academically now that they are in college.

Activities/leadership in high school does predict leadership in college for African Americans-Chicano/Latinos and Asians, but not for whites. This finding occurs despite the fact that African Americans and Chicano/Latinos, in the Berkeley data file, scored lower on activities/leadership in high school than Asians or white. However, African Americans-Chicano/Latinos did have highest scores on the spunk-spark-maturity-passion-likely-to-contribute factor, which may explain this discrepancy. High school academic measures, e.g., high school GPA, are also important in predicting college leadership for African Americans-Chicano/Latinos.

Finally, while personal, social, family obstacles to achievement in high school do result in lower academic outcomes (i.e., lower GPAs) in college, there is no evidence that these obstacles differentially affect African Americans-Chicano/Latinos and Asians compared with whites.

Conclusions

What emerges from these data is a picture of two underrepresented groups who “engage” at UC in key ways: improving their academic/interpersonal skills and becoming leaders, despite lower GPAs. Their academic profiles in high school were also lower than other ethnic groups, but they were assessed by UC admission evaluators with a greater “potential to contribute” in college. In addition, those in the top third of the UC class report higher levels of engagement in research and creative activities. While these “facts” stand by themselves, a better understanding of the meaning of these findings can be obtained with additional research in this area on both current and new data sets (see Caveat/Disclaimer).

Caveat/Disclaimer

Despite the availability of two data bases rich in nuanced variables, belief in the verity of the findings in this study would be increased if these analyses could be repeated on larger cohorts of students or with additional control variables. Some analyses, e.g., analyses by ELC or by API level, could not be performed due to small sample sizes when the data were also disaggregated by ethnicity. The “richness” of the datasets, especially UC Berkeley’s, also made it difficult to “choose” the variables to study. It is hoped that the analyses in this paper will encourage investment in building additional data sets with a wide variety of predictor and outcome measures similar to the ones used in this report.

References:

Agronow, S. J., Freelon, R., and Levitan, C. *An admissions outcome study: a report of a work-in-progress*. Presentation made at the 45th Annual Forum of the Association for Institutional Research (AIR), May 29-30, 2005.

Agronow, S. J. *Eligibility in the Local Context (ELC) as a Predictor of Engagement in College*. Paper prepared for the University of California Board of Admissions and Relations with Schools (BOARS), September 30, 2005.

Flacks, R., Castillo, S., Agronow, S. J., and Brown, M. *UCUES and admissions*. Paper prepared for the University of California Board of Admissions and Relations with Schools (BOARS), July 18, 2005.

Hout, M. *Berkeley’s Comprehensive Review Method for Making Freshman Admission Decisions: An Assessment*. Berkeley: University of California, Berkeley, <http://www.berkeley.edu/news/media/releases/2005/05/16/houtreport.pdf>, May 16, 2005.

APPENDIX A – Coding of PUVs

CODING VARIABLES AND INSTRUCTIONS (Regular and AR)

THE FOLLOWING INSTRUCTIONS WILL LEAD YOU THROUGH THE APPLICATION BY INDICATING THE VARIOUS ITEMS THAT HAVE BEEN SELECTED FOR CODING. THE INSTRUCTIONS LIST THE VARIABLE, THE RANGE OF RESPONSES, WHICH WILL BE REPRESENTED BY NUMERICAL VALUES, AND ON OCCASION A NON-EXHAUSTIVE LIST OF EXAMPLES DESCRIBING THE VARIABLE. THE VARIABLES TO BE CODED WILL APPEAR IN TRUNCATED FORM ON THE CODE SHEET AND PROCEED VERTICALLY AND THEN BY COLUMN. THEY WILL CORRESPOND NUMERICALLY WITH THIS INSTRUCTIONS SHEET. WRITING ON THE APPLICATIONS IS PERMISSIBLE.

FOR ITEMS THAT ARE NOT APPLICABLE PLEASE USE “0.”

Educational History

1. FrstLang: Language learned first: 1=English only or 2=English and another language or 3= Another language
2. InstOthEng: Instruction in a language other than English: Indicate 1=Yes or 2=No
3. NumHSatnd: Number of high schools attended (do not include summer school): Tally and indicate the number

Major Awards and Activities

PLEASE CONSIDER THE SIGNIFICANCE OF THE APPLICANT’S HONORS, ACTIVITIES, AND SERVICE. WHETHER AN HONOR, ACTIVITY OR SERVICE HAS MAJOR SIGNIFICANCE, IS THE DISTINGUISHING FEATURE. MAJOR AWARDS OR HONORS INCLUDE THOSE IN ACADEMIC, ATHLETIC, ARTISTIC, OR COMMUNITY SERVICE AREAS.

4. NumMajAwd: Number of major awards: Tally and indicate number

Examples of major awards include Bausch and Lomb, Rensselaer Scholarship, GOVERNOR’S SCHOLAR AWARD, Westinghouse Science Competition (finalist or semi-finalist), Golden State Exam (GSE High Honors only), Brown/Yale/Harvard Book Awards, Siemens Award, school district, county, state, national science fair awards, AP Scholar (two tests w/a score of at least 4 or any 3 credit bearing), etc. A major award may also include an MVP distinction, or other athletic, artistic or service awards that signify distinction beyond the school site such as at a district, regional, state or national level (e.g., award in FFA or JSA, etc.).

A MAJOR ACTIVITY IS AN ACADEMIC, ATHLETIC, ARTISTIC OR SERVICE ACTIVITY THAT MEETS ONE OR MORE OF THE FOLLOWING FOUR CRITERIA:

a. Sustained participation (more than one year) in a major organization or group such as:

Academic examples include: Yearbook, school newspaper, literary magazine, Academic Decathlon, Science Olympiad, Brain Bowl, Math Competitions, Mock Trial, Speech and Debate, Model UN, National Forensics League (NFL), robotics club, published author, etc.

Other major activities include: Youth symphony (district, county, state, etc.), visual art exhibited in a juried show, participation in an adult artistic organization or endeavor (adult symphony, professional actor), etc.

- b. Individual positions of significant responsibility such as:** Founder or co-founder, President (or other student government officer), Editor, Board of Directors, Team Captain (including cheerleading), CEO, soloist, lead acting role, concertmaster, composer, producer, director, choreographer, section leader, District Board of Directors, School Site Council, city/county youth council, WASC Council, HOBY, Girls/Boys State, Teen hotline/crisis hotline, Mayor’s Youth Advisory Board, Youth Commissioner (to school, principal or beyond, e.g. city or county), Eagle Scout, **TUTORING** in an academic subject, internships (if high level of responsibility), etc.

DRAFT, 10-15-06 DO NOT CIRCULATE OR CITE

- c. Sustained participation in less important organizations or groups that have achieved distinction or have competed beyond the school level such as a member of a regional or state championship team, etc.
- d. Participation in less important organizations or groups (including school sports teams) in which the applicant has been a founder or leader, or achieved individual distinction such as an MVP award. For example, the following count as major activities only if the applicant exercises a leadership role or receives distinction: Young Entrepreneurs, FBLA, Future Farmers of America (FFA), 4-H, Distributive Education Clubs of America (DECA), Junior Statesmen of America (JSA), HOSA, ROTC, Kiwanis/Key Club, CSF, NHS, etc.

NOTE: Pop-culture and other social groups or organizations such as the anime club, hip hop club, pep club, chess club, etc. are NOT considered major activities EVEN IF the applicant holds a leadership position. But, if the applicant is a founder of such a club it may be considered a major activity.

5. NumMajActs: Number of major activities: Tally and indicate number
6. NumLeadActs: In activities tallied in #5 how many leadership roles did the applicant assume? Tally and indicate number
7. ActsAca: Are any of the activities tallied in #5 academic? 1=Yes or 2=No
8. ActsArt: Are any of the activities tallied in #5 artistic? 1=Yes or 2=No
9. ActsAthl: Are any of the activities tallied in #5 athletic? 1=Yes or 2=No
10. ActsServ: Are any of the activities tallied in #5 community service? 1=Yes or 2=No
11. ActsLead: Did the applicant assume a leadership role in an activity not tallied in #5 above? 1=Yes or 2=No

Employment (paid work)

IF THE APPLICANT DID NOT FILL OUT ITEM 115, ANSWER #12. YOU MAY LEAVE #13 BLANK OR ENTER "00".

IF THE APPLICANT WORKED OTHER THAN DURING THE SOPHOMORE OR JUNIOR SCHOOL YEAR REMEMBER TO ANSWER #14-17.

12. EmplSchlYr: Applicant is employed at least once during the sophomore or junior school year (**if employed a minimum of 12 weeks then assume it is employment during the academic year**). 1=Yes or 2=No or 3=Can't determine
13. EmpHrs: If **Yes** on #12, what is the maximum reported number of hours worked per week? Write the number.
14. EarnsnonDis: Applicant uses earnings for non-discretionary purposes: 1=Yes or 2=No or 3=Can't determine
- Non-discretionary purposes include earnings spent to help support family (including paying for personal items like gas, food, rent in order to reduce family financial hardship), paying for tests and applications, etc.
15. AcaPosition: Applicant holds a paid position with academic content: Indicate 1=Yes or 2=No or 3=Can't determine

FOR QUESTIONS #16 AND #17, PLEASE CONSIDER THE STATURE OR NATURE OF THE PAID POSITION. POSITIONS SUCH AS LIFEGUARD, CAMP COUNSELOR, TEEN CRISIS HOTLINE STAFF, TUTOR, TEACHER, SUPERVISOR, TEAM LEADER, PROGRAMMER, CHILD CARE PROVIDER, COACH, LEAGUE REFEREE, TRANSLATOR, CEO, ETC. HAVE A HIGH LEVEL OF RESPONSIBILITY AND REQUIRE ADDITIONAL SKILLS, TALENT, TRAINING, AND/OR MATURITY.

16. RespPosition: Applicant holds a responsible position: Indicate 1=Yes or 2=No or 3=Can't determine
17. SpecSkil: Applicant holds a position that requires special skill: 1=Yes or 2=No or 3=Can't determine

JUDGMENT

18. StrngPg8: Are items 112-115 considered to be strong overall, relative to the Berkeley applicant pool? Indicate 1=Yes or 2=No

A strong page 8 constitutes sustained participation in a number of activities with significant leadership and honors.

19. LightPg8: Are items 112-115 considered to be light overall, relative to the Berkeley applicant pool? Indicate 1=Yes or 2=No

A light page 8 constitutes sparse or intermittent participation, generally without significant leadership or honors.

Personal Statement and Additional Documents

PLEASE CONSIDER THE PERSONAL STATEMENT AND ANY OTHER DOCUMENTATION INCLUDED WITH THE APPLICATION. THEN CODE FOR THE FOLLOWING VARIABLES.

The application for 1999-2000 gives the applicant three prompts. The applicant can choose one or combine the prompts in order to write a 2 page personal statement. Please indicate the prompt chosen by the applicant.

20. PrmptA: Did the applicant choose prompt A? Indicate 1=Yes or 2=No
21. PrmptB: Did the applicant choose prompt B? Indicate 1=Yes or 2=No
22. PrmptC: Did the applicant choose prompt C? Indicate 1=Yes or 2=No
23. EvidAchvmnt: Is there evidence of academic achievement not mentioned elsewhere in the application? Indicate 1=Yes or 2=No
24. EvidLead: Is there evidence of leadership not mentioned elsewhere in the application (either new information or significant details about activities mentioned on p.8)? Indicate 1=Yes or 2=No
25. EvidAccomp: Is there evidence of other non-academic accomplishments not mentioned elsewhere in the application (either new information or significant details about activities mentioned on p.8)? Indicate 1=Yes or 2=No
26. EvidPassion: Is there evidence that the applicant pursued a passion? Indicate 1=Yes or 2=No
27. EfrtAcad: Is there evidence that the applicant made special effort to seek advanced academic coursework? Indicate 1=Yes or 2=No
28. EfrtAcaChal: Is there evidence that the applicant made special effort to seek other academic challenges? Indicate 1=Yes or 2=No
29. TaughtSlf: Is there evidence that the applicant taught self or other an academic subject or skill? Indicate 1=Taught self or 2=Taught other or 3=Taught self and other or 4=Taught neither
30. TaughtOth (AddDocs): Other than the application and the personal statement, is there any additional documentation? Indicate 1=One or more letters of recommendation or 2=Any other documentation or 3=Both #1 and #2 or 4= No

JUDGMENT

31. IntelMaturity: The **Personal Statement (and other text written by the applicant)** shows intellectual maturity, relative to the Berkeley applicant pool: Indicate 1=Yes or 2=No

Significant Obstacles

PLEASE CONSIDER THE APPLICANT'S PERSONAL STATEMENT AND ANY OTHER DOCUMENTATION INCLUDED WITH THE APPLICATION. EXAMPLES OF OBSTACLES THAT MAY BE SIGNIFICANT INCLUDE:

<ul style="list-style-type: none"> *Homelessness *Environment discouraged educational aspirations or participation in extracurriculars *Neglect or mistreatment by family member *Lives in dangerous neighborhood *Sibling caretaker *Home not suitable for homework (crowded or chaotic) *Commutes more than an hour to school 	<ul style="list-style-type: none"> *Has lived apart from parents *Foster home *Divorce or separation *Death *Incarceration *Disruptive and frequent moves (multiple schools, homes, etc) *Low-income family in high income school *Contributes to family income *Must work for free in family business *Student must help parents (e.g., as translator, conducts business, pays bills, etc.) 	<ul style="list-style-type: none"> *Parents have low English proficiency *Home language not English *Prior schooling not in English *Comes from a culture with no written language *Low-level or no experience with institutionalized education *Victim of discrimination *Stressful immigration experience 	<ul style="list-style-type: none"> *Serious or chronic illness or injury *Physical Disability *Learning Disability *Pregnancy *Coming out *Victim of violence
--	--	--	---

32. EvidObs: Is there evidence of family, economic, personal, or social obstacles? Indicate 1=Yes or 2=No

33. NumObs: Number of obstacles: Tally and indicate number

JUDGMENT: OVERALL APPLICATION

Please glance through the entire application and consider the overall strength of the applicant.

34. LimitObs: Does the applicant excel despite obstacles enumerated in #33? Indicate 1=Strong yes 2=Average yes 3=Not really

35. ImpctObs: Did the applicant live and learn in an environment with limited academic opportunities, relative to the Berkeley applicant pool? 1=Yes or 2=No

36. SigContr: Is there evidence that the applicant contributed significantly to the school or community, relative to the Berkeley applicant pool? Indicate 1=Yes or 2=No

37. DemSpark: Applicant demonstrates spark, pluck, energy, grit, insight, maturity, or originality, relative to the Berkeley applicant pool: Indicate 1=Strong yes or 2=Average yes or 3=Not really

38. ContrCampLf: Applicant will likely contribute to campus life: 1=Strong yes or 2=Average yes or 3=Not really

Additional AR variables

39. DiffAchvAR: How difficult do you believe it was for the applicant to compile this record of achievement (academic or other)? 1=Very difficult or 2= Somewhat difficult or 3=Not difficult

40. ResrflAR: How resourceful was the student in achieving academic or other success despite obstacles presented. 1=Very resourceful or 2=Somewhat resourceful or 3=Not resourceful

41. PersistAR: Does the applicant demonstrate personal qualities that indicate a strong likelihood that they will persist to graduation? 1=Strong Yes or 2=Average Yes or 3=Not really

42. PrepAR: Does the applicant demonstrate levels of preparation that indicate a strong likelihood that they will persist to graduation? 1=Strong Yes or 2=Average Yes or 3=Not really

43. PAQIAP: Is there: 1=a PAQ questionnaire or 2=an IAP questionnaire or 3=Neither

APPENDIX B

Factor Analysis of Previously Unrecorded Variables (PUVs)

A factor analysis was performed on “Previously Unrecorded Variables” (PUVs) coded from the Undergraduate Application for Admission for 4,536 of 4,556 freshmen who first matriculated at UC Berkeley in fall term 1999 or spring term 2000. The coding system used to capture these PUVs was originally developed by Berkeley Professor Michael Hout as part of his 2005 report, *Berkeley’s Comprehensive Review Method for Making Freshman Admission Decisions: An Assessment* (<http://www.berkeley.edu/news/media/releases/2005/05/16/houtreport.pdf>). The variables coded represent a subset of the variables coded by Professor Hout on a fall 2004-spring 2005 applicant cohort – excluding grades and grade trends found on pages 4-5 of the application. A complete description of the coding of these Previously Unrecorded Variables (PUVs) is found in **Appendix A** of this report.

All factors were determined from principal components analysis with a minimum eigenvalue of 1.2, and varimax rotation. The five factors that emerged from the analysis accounted for 45.3 percent of the variance in the variables. Note that most factors are negatively (-) scored, but in **that this direction was reversed for the multiple regression analyses shown in this report.**

Factor #1: Spark-Passion-Maturity – Likely to Contribute to School/Community/Berkeley (Negative Scores = More Spark, Passion, Contributions)

Question #	Text of Item	Factor Loading
v24_EvidLead	Is there evidence of leadership not mentioned elsewhere in the application?	.466
v25_EvidAccomp	Is there evidence of other non-academic accomplishments not mentioned elsewhere in the application? (1=Yes, 2=No)	.589
v26_EvidPassion	Is there evidence that the applicant pursued a passion? (1=Yes, 2=No)	.567
v31_IntelMaturity	The Personal Statement (and other text written by the applicant) shows intellectual maturity, relative to the Berkeley applicant pool? (1=Yes, 2=No)	.581
v36_SigContr	The Personal Statement (and other text written by the applicant) shows intellectual maturity, relative to the Berkeley applicant pool? (1=Yes, 2=No)	.658
v37_DemSpark	Applicant demonstrates spark, pluck, energy, grit, insight, maturity, or originality, relative to the Berkeley applicant pool: Indicate 1=Strong yes or 2=Average yes or 3=Not really	.755
v38_ContrCampLf	Applicant will likely contribute to campus life: 1=Strong yes or 2=Average yes or 3=Not really	.794
Cronbach’s Alpha (Internal Consistency Reliability)		.793
Correlation with UC GPA at Graduation (or last term attended)		-.06

Factor #2: Participation or Leadership in Activities (*Negative* = More Activities)

Question #	Text of Item	Factor Loading
v5_NumMajActs	Number of major activities: Tally and indicate number.	-.837
v6_NumLeadActs	In activities tallied in #5 how many leadership roles did the applicant assume? Tally and indicate number.	-.760
v7_ActsAca	Are any of the activities tallied in #5 <u>academic</u> ? 1=Yes or 2=No	.487
v10_ActsServ	Are any of the activities tallied in #5 <u>community service</u> ? 1=Yes or 2=No	.615
v18_StrngPg8	Are items 112-115 considered to be strong overall, relative to the Berkeley applicant pool? Indicate 1=Yes or 2=No	.637
v19_LightPg8	Are items 112-115 considered to be light overall, relative to the Berkeley applicant pool? Indicate 1=Yes or 2=No	-.588
Cronbach's Alpha (Internal Consistency Reliability)		.781
Correlation with UC GPA at Graduation (or last term attended)		-.09

Factor #3: Have Significant Obstacles (*Negative* Scores = More Obstacles)

Question #	Text of Item	Factor Loading
v32_EvidObs	Is there evidence of family, economic, personal, or social obstacles? Indicate 1=Yes or 2=No	.850
v33_NumObs	Number of obstacles: Tally and indicate number.	-.811
v20_PrmptA	Did the applicant choose prompt A (talents)? Indicate 1=Yes or 2=No	-.450
v21_PrmptB	Did the applicant choose prompt B (intellectual)? Indicate 1=Yes or 2=No	-.434
v22_PrmptC	Did the applicant choose prompt C (Wrote personal statement about challenges aka, OBSTACLES – see definition below)? Indicate 1=Yes or 2=No	.775
Cronbach's Alpha (Internal Consistency Reliability)		.722
Correlation with UC GPA at Graduation (or last term attended)		0.17

Factor #4: Other Academic Achievements (*Negative* Scores = More Achievement)

Question #	Text of Item	Factor Loading
v23_EvidAchvmnt	Is there evidence of academic achievement not mentioned elsewhere in the application? Indicate 1=Yes or 2=No	.719
v27_EftrAcad	Is there evidence that the applicant made special effort to seek advanced academic coursework? Indicate 1=Yes or 2=No	.741
v28_EftrAcaChal	Is there evidence that the applicant made special effort to seek other academic challenges? Indicate 1=Yes or 2=No	.734
Cronbach's Alpha (Internal Consistency Reliability)		.695
Correlation with UC GPA at Graduation (or last term attended)		0.02

**Factor #5: Prompt A vs. B Factor (Negative Scores = Chose Essay Prompt “B”,
Positive = Chose Prompt “A”)**

Question #	Text of Item	Factor Loading
v20_PrmptA	Did the applicant choose prompt A (talents)? Indicate 1=Yes or 2=No	.686
v21_PrmptB	Did the applicant choose prompt B (intellectual ach.)? Indicate 1=Yes or 2=No	-.652
Cronbach’s Alpha (Internal Consistency Reliability)		.397
Correlation with UC GPA at Graduation (or last term attended)		0.07

Note: Description of Essay Prompts

Essay Prompt A: The university seeks to enroll on each of its campuses an entering class that is academically superior and that embodies a wide range of talents, experiences, achievements, and points of view. Describe the qualities and accomplishments you would bring to the undergraduate student body at the University.

Essay Prompt B: Describe one of your intellectual achievements – such as a paper, project, production, or performance.

Essay Prompt C: Describe any unusual circumstances or challenges you have faced and discuss the way you have responded.

APPENDIX C

UC and UCB Spring 2003 UCUES Factor Analysis

Method

UCUES items from the 2003 survey were factor analyzed using the UC sample (n=6,652) and a cohort of freshmen who matriculated at UC Berkeley in Fall 1999-Spring 2000 (n=1,628). The UC sample includes students from all campuses and all class levels. The UCB cohort completed the survey in their senior year. Items factored included those related to “engagement”, but a separate analysis also identified a number of factors assessing “satisfaction” and “utilization of services”. All factors were determined from principal components analysis with varimax rotation.

Engagement Factors

Two sets of almost identical factors emerged in both the UC and UCB data sets with respect to engagement. Differences between the two sets occurred in terms of the “ordering” of the factors noted in the table below. Some of the factors are similar to those emerging in an analysis of the 2004 UCUES survey, performed by Sal Castillo, at UCSB. Some engagement items were excluded from the analyses if they were reduced the sample size appreciably.

The main difference in the factors used in the first versus second set is one of discrimination and “nuance”. A lower minimum eigenvalue (1.0) was used in the second set, as opposed to the first (1.4), splitting some factors.

Engagement Factor Set #1 (Smaller Number of Factors - Mineigen 1.4 – Loadings of > 0.40)

UC Factor #1 –UCB Factor #1: Engagement in Research and Creative Projects

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q7a_a_1	This year classes from faculty who refer to own research		.425
q7a_a_2	This year small research-oriented seminars from faculty	0.607	.619
q7a_a_3	This year conduct research under faculty for course requirement	0.603	.537
q7a_a_4	This year conduct research under faculty for independent study	0.757	.763
q7a_a_5	This year work on faculty-mentored research for course credit	0.720	.739
q7a_a_6	This year work for pay on faculty research project	0.664	.610
q7a_a_7	This year present research findings for conference	0.768	.722
q7a_a_8	This year produce own creative project for course credit	0.563	.521
q7a_a_9	This year produce own creative project for independent study	0.710	.683
q7a_a_10	This year work on faculty-produced creative project outside course	0.704	.677
a6_a_2	Skills develop further research skills		.432
	Cronbach’s Alpha (Internal Consistency Reliability)	.867	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.06	.17

UC Factor #2 –UCB Factor #2: Skills (Academic/Other) Developed in College

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q6_a_1	Skills develop further writing clearly	0.564	.569
q6_a_3	Skills develop further oral presentation skills	0.482	
q6_a_4	Skills develop further express my views with in discussions	0.597	.650
q6_a_5	Skills develop further analytical & critical thinking skills	0.542	.535
q6_a_6	Skills develop further appreciation for cultural arts	0.603	.599
q6_a_8	Skills develop further culturally diverse viewpoints	0.683	.684
q6_a_9	Skills develop further interpersonal skills	0.671	.671
q6_a_10	Skills develop further leadership skills	0.520	.509
q6_a_11	Skills develop further acquiring well-rounded general education	0.618	.662
q6_a_14	Skills develop further personal code of values	0.650	.603
q6_a_15	Skills develop further informed citizen	0.639	.684
Cronbach's Alpha (Internal Consistency Reliability)		.850	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.04	.12

UC Factor #3 –UCB Factor #4: Communicate with Faculty/TA

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10a_a_2	This year met with faculty in person	0.448	.464
q10a_a_3	This year met with TAs in person	0.647	.755
q10a_a_4	This year sent email to a faculty	0.660	.534
q10a_a_5	This year sent email to a TA	0.879	.837
q10a_a_6	This year received individualized email from faculty	0.630	.467
q10a_a_7	This year received individualized email from TA	0.868	.819
Cronbach's Alpha (Internal Consistency Reliability)		.867	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.02	.02

UC Factor #4 –UCB Factor #3: Faculty Engagement

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10a_a_1	This year class where professor knows your name	0.763	.758
q10a_a_2	This year met with faculty in person	0.550	.580
q10a_a_4	This year sent email to a faculty	0.445	.602
q10a_a_6	This year received individualized email from faculty	0.457	.632
q10a_a_8	This year had class where professor grades your work	0.706	.689
q10a_a_9	This year made a class presentation	0.578	.539
Cronbach's Alpha (Internal Consistency Reliability)		.828	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.16	.16

UC Factor #5 –UCB Factor #5: Course Disengagement/Academic Diligence

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q8	Completion of assigned readings this academic year	0.635	.653
q9	Do you think you spent the right amount of time on coursework this year	-0.435	-.449
q10b_a_2	This year come to class without completing reading & assignments	0.702	.705
q10b_a_3	This year skipped class for work	0.480	.501
q10b_a_4	This year skipped class lectures were available online	0.589	.464
q10b_a_5	This year skipped class for other reasons	0.732	.734
	Cronbach's Alpha (Internal Consistency Reliability)	.670	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	-0.28	-.29

UC Factor #6 –UCB Factor #7: Community Service-Leadership

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q2b_a_4	Other obligations community service	0.801	.780
q3	Are you an officer in campus organizations (1=No, 2=Yes)	0.631	.567
q4	Community service work this academic year (1=No, 2=Yes)	0.791	.752
q6_a_10	Skills develop further leadership skills	0.411	.465
	Cronbach's Alpha (Internal Consistency Reliability)	.680	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.05	.00

UC Factor #7 –UCB Factor #6: Career Engagement and Preparation

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q6_a_7	Skills develop further basic science & math	0.563	.693
q6_a_12	Skills develop further prep for specific career	0.517	.637
q6_a_13	Skills develop further prep for grad school	0.535	.458
q10b_a_2	This year come to class without completing reading & assignments		-.539
	Cronbach's Alpha (Internal Consistency Reliability)	.599	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.06	.01

UC Factor #8 –NO UCB Factor: Work with Others

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10b_a_7	This year work with classmates outside of class to prepare assignments	0.772	
q10b_a_8	This year studied for tests with other students	0.732	
	Cronbach's Alpha (Internal Consistency Reliability)	.755	
	Correlation with UC GPA (End-of-Term – Winter 2003)	-.05	

Engagement Factor Set #2 (Larger Number of Factors - Mineigen 1.0 – Loadings of > 0.40)

UC Factor #1 –UCB Factor #2: Engagement in Research

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q6_a_2	Skills develop further research skills	0.488	.632
q6_a_13	Skills develop further prep for grad school		.421
q7a_a_1	This year classes from faculty who refer to own research	0.558	.562
q7a_a_2	This year small research-oriented seminars from faculty	0.685	.607
q7a_a_3	This year conduct research under faculty for course requirement	0.695	.656
q7a_a_4	This year conduct research under faculty for independent study	0.715	.652
q7a_a_5	This year work on faculty-mentored research for course credit	0.703	.656
q7a_a_6	This year work for pay on faculty research project	0.539	.441
q7a_a_7	This year present research findings for conference	0.612	.462
	Cronbach's Alpha (Internal Consistency Reliability)	.829	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.11	.05

UC Factor #2 –UCB Factor #1: Skill Developed- Informed/Well Rounded

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q6_a_4	Skills develop further express my views with in discussions		.439
q6_a_6	Skills develop further appreciation for cultural arts	0.637	.673
q6_a_8	Skills develop further culturally diverse viewpoints	0.700	.734
q6_a_9	Skills develop further interpersonal skills	0.507	.573
q6_a_11	Skills develop further acquiring well-rounded general education	0.608	.649
q6_a_14	Skills develop further personal code of values	0.645	.675
q6_a_15	Skills develop further informed citizen	0.649	.696
	Cronbach's Alpha (Internal Consistency Reliability)	.780	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.04	.27

UC Factor #3 –UCB Factor #4: Communicate with Faculty/TA

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10a_a_2	This year met with faculty in person	0.449	
q10a_a_3	This year met with TAs in person	0.657	.756
q10a_a_4	This year sent email to a faculty	0.659	.485
q10a_a_5	This year sent email to a TA	0.878	.880
q10a_a_6	This year received individualized email from faculty	0.626	
q10a_a_7	This year received individualized email from TA	0.866	.829
	Cronbach's Alpha (Internal Consistency Reliability)	.867	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.00	.04

UC Factor #4 –UCB Factor #3: Faculty Engagement

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10a_a_1	This year class where professor knows your name	0.772	.808
q10a_a_2	This year met with faculty in person	0.557	.653
q10a_a_4	This year sent email to a faculty	0.479	.669
q10a_a_6	This year received individualized email from faculty	0.509	.723
q10a_a_8	This year had class where professor grades your work	0.741	.771
q10a_a_9	This year made a class presentation	0.556	.419
Cronbach's Alpha (Internal Consistency Reliability)		.828	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.15	.14

UC Factor #5 –UCB Factor #5: Engagement in Creative Activities

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q7a_a_4	This year conduct research under faculty for independent study		.400
q7a_a_7	This year present research findings for conference.	0.456	.551
q7a_a_8	This year produce own creative project for course credit	0.712	.710
q7a_a_9	This year produce own creative project for independent study	0.772	.789
q7a_a_10	This year work on faculty-produced creative project outside course	0.740	.742
Cronbach's Alpha (Internal Consistency Reliability)		.812	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		-0.04	-.02

UC Factor #6 –UCB Factor #6: Skills Developed - Academic/Critical Thinking

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q6_a_1	Skills develop further writing clearly	0.463	.459
q6_a_3	Skills develop further oral presentation skills	0.692	.726
q6_a_4	Skills develop further express my views with in discussions	0.672	.588
q6_a_5	Skills develop further analytical & critical thinking skills	0.465	.440
q6_a_9	Skills develop further interpersonal skills	0.467	
q6_a_10	Skills develop further leadership skills	0.575	.526
q10a_a_9	This year made a class presentation		.431
Cronbach's Alpha (Internal Consistency Reliability)		.781	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.03	.12

UC Factor #7 –UCB Factor #9: Community Service-Leadership

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q2b_a_4	Other obligations community service	0.820	.840
q3	Are you an officer in campus organizations (1=No, 2=Yes)	0.589	.506
q4	Community service work this academic year (1=No, 2=Yes)	0.817	.823
	Cronbach's Alpha (Internal Consistency Reliability)	.665	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.05	.05

UC Factor #8 –UCB Factor #8: Course Disengagement/Academic Diligence

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q8	Completion of assigned readings this academic year	0.796	.793
q9	Do you think you spent the right amount of time on coursework this year	-0.530	-.539
q10b_a_2	This year come to class without completing reading & assignments	0.754	.789
q10b_a_5	This year skipped class for other reasons	0.438	.473
	Cronbach's Alpha (Internal Consistency Reliability)	.653	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	-0.24	-19

UC Factor #9 –UCB Factor #7: Career Engagement and Preparation

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q6_a_7	Skills develop further basic science & math	0.636	.704
q6_a_12	Skills develop further prep for specific career	0.626	.674
q6_a_13	Skills develop further prep for grad school	0.522	.551
q10b_a_2	This year come to class without completing reading & assignments	-0.515	-.551
	Cronbach's Alpha (Internal Consistency Reliability)	.484 - .590*	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	.00	.02

*Higher reliability if drop item q10b_a_2.

UC Factor #10 –UCB Factor 11: Work with Others

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10b_a_7	This year work with classmates outside of class to prepare assignments	0.856	.612
q10b_a_8	This year studied for tests with other students	0.846	.676
	Cronbach's Alpha (Internal Consistency Reliability)	.755	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	-.01	-.07

UC Factor #11 –UCB Factor #10: Skipped Class for Good Reason

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q10b_a_3	This year skipped class for work	0.695	.686
q10b_a_4	This year skipped class lectures were available online	0.737	.716
q10b_a_5	This year skipped class for other reasons	0.616	.549
Cronbach's Alpha (Internal Consistency Reliability)		.596	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		-0.15	-.15

Factor Set #3: Satisfaction and Service Utilization - Mineigen 1.2 – Loadings of > 0.40)

UC Factor #1 –UCB Factor #3: Satisfaction with the Academic Experience

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q14a_a_5	Accessibility of faculty outside of class	0.417	
q14a_a_6	Availability of courses needed for graduation	0.652	.700
q14a_a_7	Access to small classes	0.515	.588
q14b_a_1	Variety of courses & subjects at this campus	0.663	.604
q14b_a_2	Ability to get into a major you want	0.631	.667
q14b_a_3	Availability of courses for general edu requirements	0.693	.643
q14b_a_4	Your overall UC GPA	0.401	.505
q14b_a_5	Overall quality of faculty instruction	0.562	.459
q14b_a_6	Overall quality of TAs	0.428	.427
q14b_a_7	Overall academic experience	0.565	.477
Cronbach's Alpha (Internal Consistency Reliability)		.809	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.25	.38

UC Factor #2 –UCB Factor #2: Utilization of Special Services

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q12a_a_6	Child care services	0.652	.726
q12a_a_8	First-generation low-income student services	0.560	.585
q12a_a_9	Gay lesbian bisexual transgender services	0.597	.696
q12b_a_3	Psychological counseling services	0.462	.419
q12b_a_4	Reentry student services	0.631	.696
q12b_a_7	Services for disabled students	0.584	.669
q12b_a_8	Student life or programming office	0.418	
q12b_a_9	Transfer student services	0.543	.759
Cronbach's Alpha (Internal Consistency Reliability)		.704	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		-.04	-.03

UC Factor #3 –UCB Factor #1: Overall Satisfaction

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q11_a_4	I feel that I belong at this campus	0.694	.665
q11_a_5	Knowing what I know now I would still choose to enroll at my UC	0.687	.703
q14b_a_7	Overall academic experience	0.466	.584
q14b_a_8	Overall social experience	0.795	.789
q14b_a_9	Overall cultural and life experience	0.764	.795
q14b_a_10	Overall UC experience		.790
Cronbach's Alpha (Internal Consistency Reliability)		.830	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.04	.15

UC Factor #4 –UCB Factor #6: Satisfaction with (Faculty) Advising

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q14a_a_1	Advising by faculty on academic matters	0.792	
q14a_a_2	Advising by faculty on other matters	0.790	.807
q14a_a_3	Advising by staff in your major on academic matters	0.682	.792
q14a_a_5	Accessibility of faculty outside of class	0.527	.644
Cronbach's Alpha (Internal Consistency Reliability)		.830	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.04	-.04

UC Factor #5 –UCB Factor #7: Utilization of Recreational/Student Life Services

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q12a_a_2	Campus recreational facilities	0.666	.714
q12a_a_3	Campus recreational programs	0.669	.753
q12b_a_6	Residential life programs	0.410	
q14b_a_9	Overall cultural and life experience	0.609	
q12b_a_8	Student life or programming office	0.485	
Cronbach's Alpha (Internal Consistency Reliability)		.623	
Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation		.08	.01

UC Factor #6 –UCB Factor #4: Respect for Personal Freedom of Expression

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q11_a_1	I can express my political & personal views on campus	0.608	.435
q11_a_2	Students are respected here regardless of religious beliefs	0.859	.867
q11_a_3	Students are respected here regardless of sexual orientations	0.811	.857
q12	Students are respected <undefined>..		.855
	Cronbach's Alpha (Internal Consistency Reliability)	.728	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	-.07	.00

UC Factor #7 –UCB Factor #5: Utilization of Essential Services

Question #	Text of Item	UC Factor Loading	UCB Factor Loading
q12a_a_1	Campus financial aid office	0.565	.497
q12a_a_2	Campus recreational facilities		
q12a_a_3	Campus recreational programs		
q12a_a_4	Cashiers office	0.720	.455
q12a_a_5	Career center	0.400	
q12a_a_6	Child care services		
q12a_a_7	Educational abroad program		
q12a_a_8	First-generation low-income student services		
q12a_a_9	Gay lesbian bisexual transgender services		
q12b_a_1	New student orientation		.567
q12b_a_2	Personal safety programs		.576
q12b_a_3	Psychological counseling services		
q12b_a_4	Reentry student services		
q12b_a_5	Registrars office	0.580	.590
q12b_a_6	Residential life programs		.439
q12b_a_7	Services for disabled students		
q12b_a_8	Student life or programming office		.418
	Cronbach's Alpha (Internal Consistency Reliability)	.487	
	Correlation with UC GPA (Winter 2003)/UCB GPA at Graduation	-.13	.03