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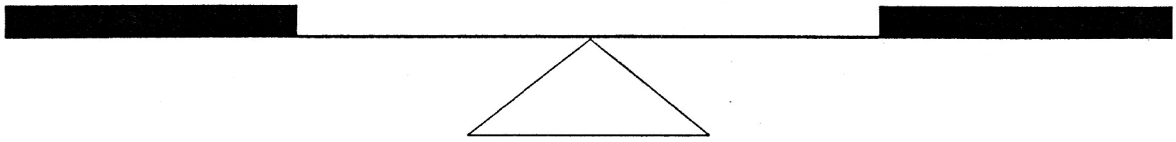

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Institutional Attractiveness: What is Important to Students?

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Institutional Attractiveness: What is Important to Students?

In the spring of 1990, researchers for the Assessment of the Status of Minorities in Education (ASME) project collected data from over 10,600 students of 11 Illinois four-year institutions. In the spring of 1992, over 750 students at four Illinois community colleges were also surveyed. The surveys by ASME staff were designed to capture student perceptions of institutional attractiveness, racial climate, social climate, and academic climate. Findings from the four-year institutions indicate that minority students perceive the academic climate to be less supportive than white students and that females were more likely than males to view the academic climate favorably (Morris, Gumia, & Neal, 1992).

Regarding institutional attractiveness, minority females at four-year institutions were more likely than white males to say that a multicultural and diverse environment is important. These findings emerged again in a study of 177 students at an Illinois community college. Further, white students agreed more strongly than minority students that there were opportunities for leadership roles at their institution (Morris, Neal, Canabal, 1993). White females at four-year institutions rated academic programs and services as more important than white males rated those items (Morris, Gumia, & Neal, 1992).

A Case Study

This report analyzes data not previously analyzed from one of the four community colleges participating in the ASME project. It specifically focuses on student ratings of institutional attractiveness. The research questions were: "Do males and females differ in the reasons for which they find the institution attractive?" and "Do minority students and majority students differ in the reasons for which they find the institution attractive?"

Method

Instrument. The community College Student Inventory (CCSI) is a survey instrument that assesses student perceptions of factors which describe campus climate. Only findings from the "institutional attractiveness" section are reported here. Students were asked to rate their level of agreement with 26 statements about institutional attractiveness: "If you could choose the ideal college to attend, how important are the [following institutional attractiveness] items in your decision?"
The four-point scale ranged from strongly disagree (1) to strongly agree (4). See the appendix for the list of question items.

Data Analysis. The ASME research staff analyzed 26 variables related to institutional attractiveness by race and gender. All 26 items were submitted for a factor analysis. Six factors resulted. A measure of reliability, Cronbach's alpha, was used to determine how well individual items making up a factor measure the concept of

substantive interest. Of the six factors, three had Cronbach alpha's of at least .75. That is, three substantive concepts emerged which were reliable measures of student responses. The three factors, including loadings, eigen values, and percent of explained variance, are listed in Table 2. Differences in responses between groups of students were tested using ANOVA. A "difference" between groups of students refers to a statistically significant F-value at the .05 level of probability. The F-value and level of probability tell us that there is 95 percent certainty that observed differences in means between two groups really are significant.

General questions about institutional sensitivity and about discrimination experienced by different groups of students were also asked. For each variable the phi coefficients, derived using the cross-tabs procedure, were determined thereby measuring (the strength of) association with 1) gender, and 2) race. A phi coefficient is a standardized number ranging from 0 to 1. A coefficient of 1 means that there is perfect association; that is, the value of the dependent variable (e.g., experienced discrimination) can be perfectly predicted by the independent variable (e.g., race). A coefficient of 0 would mean that no association between race and experienced discrimination exists.

Since previous research has found that the experiences of black and Hispanic students are more similar to each other than they are to the experiences of Asian-American students, black and Hispanic students were combined into one group. The responses of Asian-American students were not analyzed in this study. American Indian students responses also were not analyzed as the numbers were too small for statistical analysis. Additional surveys are necessary to examine the experiences of Asian-American and Native American students. Henceforth in this report, the term "minority students" refers only to African-American or Hispanic students, and the term "majority students" refers to white, non-Hispanic students.

Results

Demographics. Two hundred and ninety-three randomly selected students from one community college responded to the CCSI. This represents 3.4 percent of the total student population. Table 1 shows selected demographic variables of these students. Due to incomplete responses, percentages do not total 100.

Institutional Attractiveness Factors. When the responses of all 293 students were considered, the three factors with Cronbach alphas of at least .75 were consistent with three of the factors found for students at four-year institutions (ASME, 1992). As Table 2 shows, the factor "Inclusion in Leadership Roles" is comprised of items related to the participation of women and students of all races/ethnicities in student organizations. Another factor, "Culturally Diverse Campus Environment" is comprised of items related to the presence of race and gender diversity on campus -- among persons as well as among campus and community activities. A third factor, "Availability of Support Services" is comprised of items related to the availability of counseling services, tutoring services, and services for those with disabilities. Overall, students rated "Availability of

Support Services" as the most important factor (x=3.29), followed by "Inclusion Leadership Roles" (x=2.87), and "Culturally Diverse Campus Environment" (x=2.74).

The means of the items making up a factor were averaged to obtain a factor score. (Only those students responding to all items within a factor were included in the computation for an overall mean). ANOVA was used to test the hypothesis that means between males and females and means between minority students and majority students differ on the three factors.

Females agreed more strongly than males that all three factors are important for an ideal campus. Minority students and white students differ on two of the three factors: minority students agreed more strongly than white students that "Inclusion in leadership roles" and a "Culturally diverse campus environment" are important for an ideal campus. Tables 3 and 4 list the means and F-statistics for the different groups of students.

Institutional Attractiveness Factors by Gender. The 26 institutional attractiveness items were submitted for factor analysis two more times, once using only male responses and once using only female responses. This procedure allows examination of the difference in the composition of the factors as determined for each group. The results indicate that males and females do indeed differ on the items they think most important. Tables 5 and 6 show these different factor structures for males and females, respectively. Since the factor structures differ, they are not named, but rather are referred to as A, B, C, and D.

There are several interesting issues to point out about the differing factor structures for males and females. For both males and females, items related to services for people with disabilities are part of Factor A. The similarity ends there. For males, Factor A is rounded out with items related to leadership and participation in campus organizations/events, while for females Factor A is completed with items related to support services (e.g., counseling, tutoring center, etc.).

The support services items fall into factor B for males, while for females Factor B is comprised of the leadership and participation items. Factor C is the same for males and females; these are items related to racial and gender diversity of students, faculty, administrators, and staff on campus. Factor D for males is comprised of items related to the social life on campus. Factor D for females is comprised of not only social life items but also two items concerning financial aid. Table 7 summarizes the different factor structures for males and females.

Because the factor structures differ for males and females, it is useful to review how the means of individual items differ by gender. ANOVA was used to test for differences between means of groups only on those items which appeared to be most important to either males or females. Those items include 27, 28, 29, 30, 31, 36, 37, 38, 39, 42, 44, 45, 46, 48, 50, and 51. Statistically different means were found for items 28,38, 42, 44, 46, 50, and 51. Table 8 lists the means and F-statistics.

For all of the items listed in Table 8, females have higher means than males. The presence of women faculty, administrators, and staff; leadership roles of women in student government; the participation of all students in disciplinary processes; counseling services; child care services; and services for people with disabilities are all more important to females than males. It should be noted, however, that the differences, while statistically significant, are not particularly large. None of the items explain more than 10 percent of the variance between males and females. For all other items, males and females were equal in their assessment of importance.

Institutional Attractiveness Factors by Race. The means of individual items by race were also compared. For all of the items on which students differ, minority students rate the importance of the item at a higher level than white students. Briefly, these items are: the presence of culturally diverse faculty, administrators, staff, and students; availability of social/cultural life on campus and in the community; availability of support services for people with disabilities; the participation of students of all races/ethnic groups in disciplinary processes; and leadership roles of students of all races/ethnic groups in student organizations. Table 9 lists the means of those items where white students differ from black and Hispanic students. Only those items with statistically significant results are shown. Again, the differences are small.

Additional Item Analyses. In addition to the 26 items which were factor analyzed, the institutional attractiveness section contains a series of statements about the institution to which students were asked to respond "yes" or "no." Responses to questions 52, 54, 55, 56, 63, and 65 were analyzed by gender and race.

By gender, males and females differed on only one item: "This institution is sensitive to the needs of female students." Just over eleven percent of females responded "no" to the question compared with 3.3 percent of the males. Although eleven percent is a relatively small percentage of female students, it is significantly different from the responses of males.

No differences were found for items 52, 54, 55, 56, 63, and 65 by race. However, when comparisons by sub-groupings of gender *and* race were made, differences did emerge. The four subgroups were minority males, minority females, majority males, and majority females. Minority females were more likely than any of the other three subgroups to perceive that racial discrimination, discrimination against females, or discrimination against people with disabilities exists on campus.

Discussion and Implications

Colleges and universities at all levels are realizing the importance of demonstrating responsiveness to a culturally diverse student body if they hope to attract, retain, and graduate those students. In this case study, males and females differ in the reasons for which they find an institution attractive. Where differences exist, females always agree more strongly than males that the item is important for an ideal campus. This finding is consistent with the finding that females were more likely than males to

say their institution is not sensitive to the needs of female students. Institutions need to consider those issues which are most important to females, such as child care and counseling services, if they want to be perceived as being sensitive to the needs of female students.

Minority students and majority students also differ in their ratings of institutional attractiveness. In this case study minority students rated the importance of cultural diversity and inclusion in leadership roles higher than majority students. Perhaps most telling is that minority females are much more likely than minority males and majority students (male and female) to report that racial and gender discrimination exist on campus, as well as discrimination against people with disabilities.

The differences found in this study are small. Eta, which ranges from 0 (to indicate no relationship) to 1 (to indicate perfect relationship) never is larger than .30. Furthermore, eta^2, which indicates the proportion of variance between two groups explained by the independent variable, is never greater than .08 (or 8 percent). However, even small differences within a population can make all the difference for any one particular student on a campus. Many other studies tell us that students of different gender, races, and ethnicities have different perceptions of institutional attractiveness and consequently have different needs (Morris, Gumia, & Neal, 1992; Morris, Neal, & Canabal, 1993). It is important that administrators, faculty, and staff, listen carefully to students of all cultural backgrounds.

Table 1.

Selected Demographics
(n=293)

Item	Number of Respondents	Percent
Gender[1]		
Females	190	65.0 %
Males	96	33.0
Race/Ethnicity		
Asian/Pacific Islander	23	7.8
American Indian	1	.03
Black (non-Hispanic)	12	4.0
Hispanic	14	5.0
White (non-Hispanic)	235	80.0
Other	2	1.0
Age		
18-22	86	29.0
23-30	60	20.0
31-40	76	26.0
41-50	41	14.0
51 +	16	5.0
Enrollment		
Full-time	74	25.0
Part-time	217	74.0
Class Level		
Freshmen	84	29.0
Sophomore	102	35.0
Unclassified	62	21.0
Other	41	14.0

[1]Numbers do not total 293 due to incomplete responses.

Table 2.

Institutional Attractiveness Factors

Factor 1: Inclusion in Leadership Roles

Item	Item Description	Loading
IA45	Leadership roles of students of all races/ethnic groups in student organizations.	.817
IA44	Participation of students of all races/ethnic groups in disciplinary processes.	.744
IA46	Leadership roles of women in student government organizations.	.744
IA48	Majority student participation in events sponsored by minority students.	.576

Eigen Value = 8.53
% of Variance = 32.8
Cronbach's alpha = .86

Factor 2: Culturally Diverse Campus Environment

Item	Item Description	Loading
IA28	Presence of women faculty, administrators,and staff.	.745
IA27	Presence of faculty, administrators, and staff of different race/ethnic groups	.692
IA29	Presence of an ethnically diverse student body.	.686
IA30	Availability of social/cultural life for members of my race/ethnic group in the community.	.655
IA31	Availabililty of social/cultural life for members of my race/ethnic group on campus.	.611

Eigen Value = 2.14
% of Variance = 8.2
Cronbach's alpha = .83

Table 2 continued . . .

Factor 3: Availability of Support Services

Item	Item Description	Loading
IA37	Availability of support services, auxiliary aids,or adaptive equipment for students with disabilities.	.770
IA36	Availability of academic support services (such as tutoring, study skills center,etc).	.682
IA50	Easy access to buildings for people with disabilities.	.669
IA38	Counseling services.	.645
IA51	Programs/activities that include people with disabilities.	.566

Eigen Value = 1.50
% of Variance = 5.8
Cronbach's alpha = .83

Table 3.

Means of Three Institutional Attractiveness Factors by Gender

Factor	Male	Female	F
1	2.72	2.95	6.54*
2	2.62	2.80	5.23*
3	3.18	3.34	5.06*

* Significant at $p < .05$.

Table 4.

Means of Three Institutional Attractiveness Factors by Race

Factor	Minority	Majority	F
1	3.15	2.85	4.18*
2	3.08	2.71	7.66*
3	3.51	3.29	3.55

* Significant at $p < .05$.

Table 5.

Institutional Attractiveness Factors for Males

Factor A

Item	Item Description	Loading
IA48	Majority student participation in events sponsored by minority students.	.787
IA45	Leadership roles of students of all races/ethnic groups in student organizations.	.712
IA46	Leadership roles of women in student government organizations.	.683
IA50	Easy access to buildings for people with disabilities.	.602
IA51	Programs/activities that include people with disabilities.	.599
IA44	Participation of students of all races/ethnic groups in disciplinary processes.	.575

Eigen Value = 8.82
% of Variance = 33.9
Cronbach's alpha = .88

Factor B

Item	Description	Loading
IA38	Counseling services.	.750
IA26	Availability of recruitment/admission programs.	.693
IA36	Availability of academic support services (such as tutoring, study skills center,etc).	.643
IA37	Availability of support services, auxiliary aids,or adaptive equipment for students with disabilities.	.631

Eigen Value = 2.79
% of Variance = 10.7
Cronbach's alpha = .80

Table 5 continued . . .

Factor C

Item	Description	Loading
IA28	Presence of women faculty, administrators,and staff.	.861
IA27	Presence of faculty, administrators, and staff of different race/ethnic groups.	.763
IA29	Presence of an ethnically diverse student body.	.744

Eigen Value = 1.92
% of Variance = 7.4
Cronbach's alpha = .79

Factor D

Item	Description	Loading
IA30	Availability of social/cultural life for members of my race/ethnic group in the community.	.682
IA31	Availabililty of social/cultural life for members of my race/ethnic group on campus.	.681
IA40	Friends on campus.	.625
IA34	Availability of intercollegiate athletics.	.534

Eigen Value = 1.50
% of Variance = 5.8
Cronbach's alpha = .82

Table 6.

Institutional Attractiveness Factors for Females

Factor A

Item	Description	Loading
IA50	Easy access to buildings for people with disabilities.	.817
IA37	Availability of support services, auxiliary aids, or adaptive equipment for students with disabilities.	.812
IA51	Programs/activities that include people with disabilities.	.727
IA38	Counseling services.	.596
IA36	Availability of academic support services (such as tutoring, study skills center,etc).	.565

Eigen Value = 8.36
% of Variance = 32.1
Cronbach's alpha = .86

Factor B

Item	Description	Loading
IA45	Leadership roles of students of all races/ethnic groups in student organizations.	.823
IA44	Participation of students of all races/ethnic groups in disciplinary processes.	.795
IA46	Leadership roles of women in student government organizations.	.786

Eigen Value = 2.00
% of Variance = 7.7
Cronbach's alpha = .89

Table 6 continued . . .

Factor C

Survey Item	Description	Loading
IA28	Presence of women faculty, administrators, and staff.	.716
IA27	Presence of faculty, administrators, and staff of different race/ethnic groups	.651
IA29	Presence of an ethnically diverse student body.	.628

Eigen Value = 1.53
% of Variance = 5.9
Cronbach's alpha = .74

Factor D

Survey Item	Description	Loading
IA31	Availabililty of socIAl/cultural life for members of my race/ethnic group on campus.	.688
IA30	Availability of social/cultural life for members of my race/ethnic group in the community.	.664
IA49	Allocation of financial aid based on financial need.	.648
IA32	Availability of financial aid.	.581

Eigen Value = 1.23
% of Variance = 4.7
Cronbach's alpha = .78

Table 7.

Summary of Different Factor Structures for Males and Females.

Item	Item Description	Factor for Males	Factor for Females
IA26	Availability of admission programs.	B	
IA27	Presence of faculty, administrators, and staff of different race/ethnic groups	C	C
IA28	Presence of women faculty, administrators, and staff.	C	C
IA29	Presence of an ethnically diverse student body.	C	C
IA30	Availability of social/cultural life for members of my race/ethnic group in the community.	D	D
IA31	Availabililty of social/cultural life for members of my race/ethnic group on campus.	D	D
IA32	Availability of financial aid.		D
IA34	Availability of intercollegiate athletics.	D	
IA36	Availability of academic support services (such as tutoring, study skills center,etc).	B	A
IA37	Availability of support services, auxiliary aids, or adaptive equipment for students with disabilities.	B	A
IA38	Counseling services.	B	A
IA40	Friends on campus.	D	
IA44	Participation of students of all races/ethnic groups in disciplinary processes.	A	B
IA45	Leadership roles of students of all races/ethnic groups in student organizations.	A	B
IA46	Leadership roles of women in student government organizations.	A	B
IA49	Allocation of financial aid based on financial need.		D
IA48	Majority student participation in events sponsored by minority students.	A	
IA50	Easy access to buildings for people with disabilities.	A	A
IA51	Programs/activities that include people with disabilities.	A	A

Table 8.

Means of Institutional Attractiveness Items by Gender

Item	Male	Female	F	Eta	Eta^2
IA28	2.63	3.11	25.75*	.29	.08
IA38	3.23	3.45	5.83*	.14	.02
IA42	2.39	2.72	6.79*	.15	.02
IA44	2.78	3.02	5.30*	.14	.02
IA46	2.73	3.12	15.40*	.23	.05
IA50	3.18	3.36	3.88*	.12	.01
IA51	2.89	3.16	6.63	.15	.02

* Significant at $p < .05$.

Note: Eta is a standardized measure of association ranging from 0 to 1; The stronger the relationship, the closer the number is to 1. Eta^2 is the proportion of explained variance. For example, gender explains only 8 percent of the variation that occurs between the two groups on item ia28.

Table 9.

Means of Institutional Attractiveness Items by Race

Item	Whites	Blacks and Hispanics	F	Eta	Eta^2
IA27	2.54	3.16	13.43*	.22	.05
IA29	2.73	3.20	8.40*	.18	.03
IA30	2.65	3.00	3.78*	.12	.01
IA31	2.67	3.00	3.70*	.12	.01
IA37	3.12	3.52	6.16*	.15	.02
IA44	2.91	3.28	4.33*	.13	.02
IA45	2.90	3.40	8.15*	.18	.03

* Significant at $p < .05$; items IA30 and IA31 are significant at $p < .06$.

APPENDIX
INSTITUTIONAL ATTRACTIVENESS QUESTION ITEMS

There are many different types of colleges to choose from and students are attracted to them for different reasons. If you could choose the ideal college to attend how important are items #26 through #51 in your decision?

For the appropriate response, please use the following scale:

1 = SD (Strongly Disagree)
2 = D (Disagree)
3 = A (Agree)
4 = SA (Strongly Agree)

26. Availability of recruitment/admission programs

27. Presence of faculty, administrators, and staff of different race/ethnic groups

28. Presence of women faculty, administrators and staff

29. Presence of an ethnically diverse student body

30. Availability of social/cultural life for members of my race/ethnic group in the community

31. Availability of social/cultural life for members of my race/ethnic group on campus

32. Availability of financial aid

33. Location of the college

34. Availability of intercollegiate athletics

35. Quality of academic programs

36. Availability of academic support services (such as tutoring, study skills center, etc.)

37. Availability of support services, auxiliary aids, or adaptive equipment for students with disabilities.

38. Counseling services

39. Opportunity for frequent contact with faculty

40. Friends on campus

41. Accessibility of religious services

42. Availability of child care services

43. Quality of placement/career services

44. Participation of students of all races/ethnic groups in disciplinary processes

45. Leadership roles of students of all races/ethnic groups in student organizations

46. Leadership roles of women in student government organizations

47. Funding for all student organizations

48. Majority student participation in events sponsored by minority students

49. Allocation of financial aid based on financial need

50. Easy access to building for people with disabilities

51. Programs/activities that include people with disabilities

For questions #52 through #62, please respond "yes" or "no".

52. "If I could start over, I would still attend this institution."

54. "This institution is sensitive to the needs of students of all races/ethnic groups."

55. "This institution is sensitive to the needs of female students."

56. "This institution is sensitive to the needs of students with disabilities."

For questions #57 through #62, please respond "yes" or "no" that certain conditions currently exist on your campus.

57. Racial discrimination

58. Discrimination against females

59. Discrimination against people with disabilities

61. Discrimination based on religious preference

63. Please indicate the number of incidents of racial discrimination you have personally experienced on your campus this term.

65. Please indicate the number of incidents of sexual harassment you have personally experienced on your campus this term.

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