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ABSTRACT

A study was conducted of the extent to which the factors of selectivity in freshman admissions, ethnic background, and gender affect the retention and graduation rates of university students. Longitudinal retention data collected from 28 institutions in the Big Eight, Big Ten, and the Southern University Group (SUG) for the first-time freshmen classes of fall 1983 through fall 1989 were used as a basis for analysis. Findings indicated that while the overall retention rates for the 1983-89 cohort groups were generally consistent, retention rates for Black students showed significant and steady improvement, going from 75 percent for 1983 to 82 percent for 1989. Findings also showed that among minority groups, retention rates and graduation rates were highest for Asian Americans, followed by Hispanics, Blacks, and American Indians, even when subgroups of race are combined with variables of selectivity or gender. In addition, comparison of the highly selective with the selective colleges showed significant differences in retention and graduation, with the highly selective institutions retaining and graduating more students. Analysis by gender found that, in almost all of the institutions, retention and graduation rates were higher for females than they were for males. Included are seven tables and seven references. (JB)

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THE BIG EIGHT / BIG TEN / SUG LONGITUDINAL RETENTION SURVEY: A REPORT ON FINDINGS AND IMPLICATIONS

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THE BIG EIGHT/BIG TEN/SUG LONGITUDINAL RETENTION SURVEY:

A REPORT ON FINDINGS AND IMPLICATIONS

Abstract

The selectivity in freshman admissions, a student's ethnic background, and gender are among the factors which have been frequently cited in the literature of longitudinal studies of retention and persistence of university freshmen. This study examines these factors and the extent to which they affect the retention and graduation rates of students. Longitudinal retention data collected from 28 institutions in the Big Eight, Big Ten, and SUG (Southern University Group) for the first-time freshmen classes of fall 1983 through fall 1989 are used as a basis for analysis. Institutional researchers and those concerned with enrollment management are the intended audience.

THE BIG EIGHT/BIG TEN/SUG LONGITUDINAL RETENTION SURVEY:
A REPORT ON FINDINGS AND IMPLICATIONS

BACKGROUND

History

The Big Eight/Big Ten/SUG Longitudinal Retention Survey was first initiated by the University of Oklahoma in October 1989 at the BEDE (Big Eight Data Exchange) meeting, and two weeks later at the 1989 SUG (the Southern University Group) meeting. The member institutions in both consortia agreed to exchange retention data annually, and the University of Oklahoma was charged with the responsibilities of designing the survey instrument and coordinating the retention data exchange for each of the consortia.

The first retention survey was conducted in January 1990. In its first year, seven of the eight BEDE institutions and 20 of the 27 SUG institutions participated in the survey. A total of 25 institutions participated in this data exchange (the University of Oklahoma and Oklahoma State University are members of both BEDE and SUG).

In fall 1990, expansion of the retention survey was recommended at both the BEDE and the SUG meetings. At the 1990 BEDE meeting, members adopted Kansas State University's request of expanding the existing survey to include the exchange of retention data for each of the following ACT subgroups: below 16, 16-20, 21-25, 26-30, and above 30. At the 1990 SUG meeting, there was a widely expressed interest in expanding the survey to collect retention data by gender within each ethnic group. These expansions were separately implemented according to the respective recommendation of BEDE and SUG. In

addition to the expanded survey instrument, the Big Ten public universities were also invited by the University of Oklahoma to become participating members in March 1991.

The second survey was conducted in March 1991. The total number of institutions participated in the second survey increased from 25 to 39. Seven of the Big Eight, nine of the Big Ten public, and 25 of the 27 SUG institutions participated. It should be noted that with the consent of the University of Oklahoma, the Big Eight/Big Ten/SUG Longitudinal Retention Survey was adopted by AAUDE in 1991 with minor modifications. The first AAUDE retention data exchange using the adopted survey instrument took place in June 1991.

The Survey Instrument

The survey instrument displayed in Figure 1 was designed to collect longitudinal retention and graduation rates for each of the 1980 to 1989 first-time freshman cohort groups over a period as long as six years. The data elements surveyed for each year's first-time freshman cohort group include: percentage of students who were enrolled as part-time students in the first year, headcount first-time freshmen, average composite ACT or SAT score, retention rates after one year and after two years, and graduation rates and continuation rates after four, five, and six years. Each survey page may be used to report data for a designated subgroup of students. The survey instrument, therefore, has the flexibility of collecting information for as many subgroups as needed. The 1991 survey includes subgroups of race, gender, and ACT composite scores. Figure 2 displays an accompanying document which provides definitions for the terminologies used in the longitudinal retention survey.

Figure 1. BIG EIGHT / BIG TEN / SUG LONGITUDINAL RETENTION SURVEY

Institution: _____
 First-Time Freshmen - Includes part-time _____ Yes _____ No. If Yes, _____ % part-time. Subgroup: _____

Year	Total First-Time Freshmen	Average ACT/SAT	-----Retention Rate-----		----- Cumulative Graduation Rate and Continuation Rate -----			
			Beginning of Second Year	Beginning of Third Year	Beginning of Fifth Year Graduated	Beginning of Sixth Year Graduated	Beginning of Seventh Year Graduated	Continued
1980	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1981	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1982	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1983	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1984	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1985	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1986	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1987	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1988	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %
1989	_____	_____	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %

Notes: 1. If you do not have the data for all years surveyed, please provide the data for the years available.
 2. If you find inconsistencies between the given definitions and those used in your institution, please note the differences.



Figure 2. DEFINITIONS – BIG EIGHT / BIG TEN / SUG LONGITUDINAL RETENTION SURVEY

1. TIMING DEFINITION

The definition of "year" for this survey is from fall to fall. The fall enrollment status is based on the third-week census data for the IPEDS fall enrollment reporting.

2. FIRST-TIME FRESHMAN – See IPEDS definition

"An entering freshman who has never attended any college. Includes students enrolled in the fall term who attended college for the first time in the prior summer term. Also includes students who entered with advanced standing (college credits earned before graduation from high school)."

3. MINORITY GROUPS – See IPEDS definition

BLACK, NON-HISPANIC

"A person having origins in any of the black racial groups of Africa (except those of Hispanic origin)."

HISPANIC

"A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race."

ASIAN OR PACIFIC ISLANDER

"A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, Samoa, India and Vietnam."

AMERICAN INDIAN OR ALASKAN NATIVE

"A person having origins in any of the original peoples of North America or who maintains cultural identification through tribal affiliation or community recognition."

4. ADMISSION SCORE

Report either a composite ACT or SAT score and note accordingly. Beginning with fall 1990, the ACT composite score should be based on the Enhanced ACT Assessment rather than the old ACT Assessment.

5. RETENTION / CONTINUATION RATE

Retention / Continuation Rate is the percentage of first-time freshmen in a given fall semester who returned to the institution in a subsequent fall semester. For example, the beginning-of-third-year retention rate for the fall 1980 first-time freshmen is the percentage of fall 1980 first-time freshmen who returned for fall 1982. The calculation of retention / continuation rate does not include students who returned to the institution after having graduated from the same institution.

6. GRADUATION RATE

Graduation Rate is the cumulative percentage of first-time freshmen in a given fall semester who graduated prior to a subsequent fall semester. For example, the beginning-of-sixth-year graduation rate for fall 1981 first-time freshmen is the percentage of fall 1981 first-time freshmen who graduated from the institution through the summer session of 1986.

Evaluation of Data Collected

The retention survey was distributed to all Big Eight, Big Ten public, and SUNY institutions. Of the 43 institutions surveyed, 39 responded. Fifteen of the 39 institutions responded with partial data; approximately one third of the institutions indicated that retention data were not available for their 1980 to 1982 freshman classes. In order to insure statistical reliability and validity, the 1980 to 1982 first-time freshman classes were excluded from the analysis. As a result of a thorough review, data for 28 of the 39 participating institutions were selected for analysis. In addition to listing the 28 selected institutions, Figure 3 documents the responses in admissions score, typical percentage of part-time first-time freshman enrollment, inclusion/exclusion of summer first-time freshmen, availability of data for ethnic/gender breakdown, and definitional differences reported by institutions.

The differences in institutional reporting documented in Figure 3 indicate that comparability does not appear to be a problem in this data exchange. Few inconsistencies or questionable data were found upon extensive review of the 1991 retention survey data. This is particularly true for the 28 institutions selected for analysis. Minor editing was required in the cases of missing data or inconsistencies caused by definitional differences.

It is important to note that from 1990 to 1991, significant improvement in the quality of the responses to the retention survey was observed. For example, several institutions that were not able to participate in the first year's survey participated in the second year; some institutions that provided partial responses in the first year responded fully in the second year.

FIGURE 3. Documentation of Responses from 28 Selected Institutions in the 1991 Big Eight / BigTen / SUG Longitudinal Retention Survey

<i>Institution</i>	<i>ACT or SAT</i>	<i>Percent of Part Time</i>	<i>Summer First-Time Freshmen</i>	<i>Ethnic Break-down</i>	<i>Gender Break-down</i>	<i>Differences from Standard Definitions</i>	
<u>BIG EIGHT</u>							
Iowa St U	ACT	7.0%	Excluded	Yes	-	Students graduating early (prior to third and fourth years) are not counted as retained students.	
Kansas St U	ACT	0.0%	Included	Yes	-		
Okla St U	ACT	7.2%	Included	Yes	-		
U of Kansas	ACT	2.0%	Included	Yes	-		Data for 1990-91 not available.
U of Missouri	-	1.0%	Excluded	Yes	-		
U of Okla	ACT	5.0%	Excluded	Yes	-		
<u>BIG TEN</u>							
Michigan St U	ACT	2.0%	Included	Yes	-	Retention/graduation rates based on university-wide data.	
Penn State U	SAT	0.0%	Excluded	Yes	-		
Purdue U	SAT	N/A	Included	Yes	-		
U of Illinois	ACT	0.0%	Included	Partial	-	Winter to fall retention rates are calculated based on class standing rather than following a particular cohort. Retention rates by ethnic breakdown unavailable prior to fall 1988.	
U of Michigan	SAT/ACT	<1.0%	Included	Yes	-		
U of Minnesota	ACT		Included	Yes	-		Cohorts followed are those that entered at the doctoral level campus in the Twin Cities.
U of Wisconsin	-	12.0%	Included	Yes	-		
<u>SUG</u>							
Florida St U	SAT	2.0%	Included	Yes	Yes	Fall 1983-84 data are estimated.	
Louisiana St U	ACT	2-3%	Included	Yes	Yes		
N Carolina St U	SAT	-	Included	Yes	Yes		
Oklahoma St U	ACT	7.2%	Included	Yes	Yes		
Texas A&M	SAT/ACT	-	Included	Yes	Yes		
Texas Tech U	SAT	N/A	Included	Yes	Yes		
Virginia Tech	SAT	0.0%	Included	Yes	Yes		
U of Alabama	ACT	0.5%	Included	Yes	Yes		
U of Georgia	SAT	1.4%	Excluded	Yes	Yes		
U of Maryland	SAT	0.0%	Included	Yes	Yes		
U of Mississippi	ACT	0.0%	Included	Yes	Yes		
U of N Carolina-Chapel Hill	SAT	<1.0%	Included	Yes	Yes		
U of Oklahoma	ACT	5.0%	Excluded	Yes	Yes		
U of Southern Mississippi	ACT	0.0%	Included	Yes	Yes		
U of Tennessee	ACT	0.0%	Included	Yes	Yes		
U of Texas-Austin	SAT	2.5%	Excluded	Yes	Yes		
U of Virginia	SAT	0.0%	Included	Yes	Yes		

Notes: 1) Gender breakdown is only required for the SUG institutions.

2) Oklahoma State University and the University of Oklahoma are members of the Big Eight and SUG universities.

SURVEY FINDINGS

The First-Time Freshman Population

The following table (Table 1) summarizes the headcount of fall 1983 to fall 1989 first-time freshmen included in the analysis and the distribution of each year's cohort group by ethnic background of students.

TABLE 1. Headcount of First-Time Freshmen
in Selected Big Eight, Big Ten and SUG Institutions
Fall Semesters 1983 - 1989

Year	Ethnic Minorities				White & Other	Total
	Black	Hispanic	Asian	American Indian		
1983	6,446	2,048	2,084	375	98,901	109,854
1984	6,476	2,312	2,563	399	99,010	110,760
1985	6,723	2,436	2,924	407	104,023	116,513
1986	6,565	2,622	3,083	436	103,998	116,704
1987	6,817	3,098	3,613	466	105,300	119,294
1988	7,315	3,552	3,775	526	105,855	121,023
1989	7,121	3,548	4,190	558	97,051	112,468

From fall 1983 to fall 1988, the total first-time freshman enrollment reflected a gradual increase from 109,854 in fall 1983 to 121,023 in fall 1988; by fall 1989, first-time freshmen decreased to 112,468. During the same period, the minority first-time freshmen increased by 40.8%, from 10,953 to 15,417. Enrollment increases occurred in each of the minority groups: Asian Americans have the largest increase of 101%; followed by Hispanic Americans, 73.2%; American Indians, 48.8%; and blacks, 10.5%. Consequently, the minority representation as a percentage of the total first-time freshman population increased from 10.0% in fall 1983 to 13.7%, in fall 1989.

Retention Rates of First-Time Freshmen

Cope (1978) observed that "most of the evidence from national retention

studies conducted over more than four decades yields surprisingly consistent results..." Similar observation was made later by Tinto (1982): "with the exception of one period, rates of completion (dropout) have remained strikingly constant at about 55 (45) percent over the past 100 years ... the one period of noticeable change in rates of persistence (dropout) is the one that occurred during and immediately following World War II." Results from this study produced similar consistency (Table 2). Retention rates after one year for the 1983-89 cohorts range from 81.8% for the fall 1983 cohort to 84.3% for the fall 1989 cohort with an average rate of 82.7%; retention rates after two years for the 1983-88 cohorts range from 71.3% for 1983 to 73.9% for 1988 with an average rate of 72.5%.

TABLE 2. Retention Rates of First-Time Freshmen in Selected Big Eight, Big Ten and SUG Institutions Fall Semesters 1983 - 1989

	Year	Ethnic Minorities				White & Other	Total
		Black	Hispanic	Asian	American Indian		
After 1 Yr	1983	75.7%	77.8%	88.7%	54.9%	82.2%	81.8%
	1984	76.1%	77.0%	86.1%	66.4%	82.7%	82.2%
	1985	77.9%	77.7%	86.7%	71.5%	82.5%	82.2%
	1986	79.8%	77.9%	87.4%	66.7%	82.8%	82.6%
	1987	78.7%	77.4%	87.5%	67.4%	83.2%	82.9%
	1988	81.0%	76.5%	87.0%	66.7%	83.5%	83.2%
	1989	82.1%	78.6%	88.9%	69.4%	84.5%	84.3%
	1983-1989	78.8%	77.6%	87.5%	66.5%	83.1%	82.7%
After 2 Yrs	1983	60.7%	66.3%	78.9%	48.9%	72.0%	71.3%
	1984	62.0%	66.3%	75.9%	53.3%	72.6%	71.9%
	1985	63.6%	66.7%	77.5%	55.7%	72.5%	71.9%
	1986	65.5%	68.6%	78.2%	53.9%	72.9%	72.5%
	1987	66.6%	66.7%	78.7%	53.7%	73.6%	73.1%
	1988	68.9%	66.7%	78.9%	56.4%	74.4%	73.9%
	1983-1988	64.7%	66.9%	78.1%	53.8%	73.0%	72.5%

While the overall retention rates for the 1983-89 cohort groups were generally consistent, retention rates for black students showed significant and steady improvement. Retention rates after one year for black students improved from 75.7% for the 1983 cohort to 82.1% for the 1989 cohort, and retention rates after two years improved from 60.7% for the 1983 cohort to 68.9% for the 1988 cohort. The improvement may be attributed to strengthened undergraduate minority retention programs that have been implemented in recent years on many campuses.

Graduation Rates of First-Time Freshmen

Table 3 summarizes the survey results in graduation rates within four years, five years and six years for the fall 1983-86, fall 1983-85, and fall 1983-84 first-time freshman cohort groups respectively.

TABLE 3. Graduation Rates of First-Time Freshmen in Selected Big Eight, Big Ten and SUG Institutions

	Freshman Class	Ethnic Minorities				White & Other	Total
		Black	Hispanic	Asian	American Indian		
After 4 Years	1983	15.0%	19.1%	30.1%	12.2%	31.9%	30.6%
	1984	14.6%	19.7%	30.4%	13.5%	31.8%	30.4%
	1985	14.8%	20.7%	30.6%	13.8%	31.6%	30.3%
	1986	16.2%	20.1%	32.2%	13.4%	31.6%	30.4%
	1983-1986	15.2%	19.9%	30.9%	13.2%	31.7%	30.4%
After 5 Years	1983	32.7%	41.3%	55.2%	24.3%	55.5%	53.8%
	1984	33.1%	40.9%	54.0%	30.1%	55.9%	54.1%
	1985	33.3%	43.3%	55.2%	30.2%	56.2%	54.5%
	1983-1985	33.0%	41.9%	54.8%	28.3%	55.9%	54.1%
After 6 Years	1983	39.0%	48.0%	62.2%	28.5%	61.0%	59.4%
	1984	39.5%	48.0%	61.8%	34.3%	61.0%	59.4%
	1983-1984	39.2%	48.0%	62.0%	31.5%	61.0%	59.4%

No statistically significant variance is observed in the overall graduation rates for the different first-time freshman cohort groups from

fall 1983 to fall 1986. On the average, 30.4% of the first-time freshmen graduated within four years, 54.1% graduated within five years, and 59.4% graduated within six years.

The longitudinal statistics that track retention of first-time freshmen over a full period of six years are available for only the cohort groups of fall 1983 and fall 1984. Therefore, aggregated retention statistics for these two cohorts are used in the following comparisons of longitudinal retention and graduation rates for various subgroups.

Retention and Ethnic Background of Students

Among the minority groups, retention rates and graduation rates are the highest for Asian Americans, followed by Hispanics, blacks, and American Indians. This pattern persists even when subgroups of race are combined with variables of selectivity or gender. However, further analyses in this study will verify that the extent to which race influences retention and graduation rates do vary when selectivity is controlled.

TABLE 4. Retention and Graduation Rates
of First-Time Freshmen by Race
in Selected Big Eight, Big Ten and SUNG Institutions
Fall Semesters 1983 - 1984, Aggregated

Race	Retention Rates		Graduation/Continuation Rates					
	After 1 Year	After 2 Years	After 4 Years		After 5 Years		After 6 Years	
			Graduate	Continue	Graduate	Continue	Graduate	Continue
Black	75.9%	61.4%	14.8%	33.6%	32.9%	11.4%	39.2%	4.7%
Hispanic	77.4%	66.3%	19.4%	37.4%	41.1%	13.3%	48.0%	5.2%
Asian	87.3%	77.3%	30.3%	38.6%	54.5%	12.7%	62.0%	5.3%
American Indian	60.8%	51.2%	12.9%	28.0%	27.3%	12.0%	31.5%	7.3%
White/Other	82.5%	72.3%	31.9%	33.8%	55.6%	8.8%	61.1%	3.7%
All First-time Freshmen	82.0%	71.6%	30.5%	33.9%	54.0%	9.1%	59.4%	3.8%

This longitudinal study found that while the retention rate after one year for the 1983-84 first-time population in general is 82%, it is significantly lower for the American Indians, 60.8%.

Retention and Selectivity

Lenning (1982) observed that "The more highly selective colleges tend to have higher student retention rates. This may be largely explained by the fact that they attract higher-ability students to begin with." To study the impact of student selectivity on retention, 24 of the 28 institutions were separated into two subgroups, highly selective and selective, based on the reported average ACT/SAT composite scores. Four of the 28 institutions who did not report the average test scores were excluded from the study. The 24 institutions with average test scores were evenly divided into two subgroups. Institutions with an average ACT score above 24 or an average SAT above 980 are included in the highly selective subgroup; others are included in the selective subgroup. All of the 12 institutions in the selective subgroup reported ACT rather than SAT composite scores; the lowest average ACT score reported for this subgroup was 19.3.

The results shown in Table 5 indicate significant differences in retention and graduation rates between the highly selective and the selective subgroups. The overall retention rates after one year vary from 86.3% for the highly selective subgroup to 76.1% for the selective subgroup; and graduation rates after six years vary from 67.8% for the highly selective subgroup to 48.9% for the selective subgroup. In addition, students from the highly selective subgroup graduated earlier: 39.6% of the 1983-84 first-time freshmen graduated within four years, compared with 19.4% for the selective subgroup.



TABLE 5. Retention and Graduation Rates
of First-Time Freshmen by Selectivity of Institutions
in Selected Big Eight, Big Ten and SUG Institutions
Fall Semesters 1983 - 1984, Aggregated

Race	Retention Rates				Graduation Rates					
	After 1 Year		After 2 Years		After 4 Years		After 5 Years		After 6 Years	
	Selective	Highly Selective	Selective	Highly Selective	Selective	Highly Selective	Selective	Highly Selective	Selective	Highly Selective
Black	70.0%	79.9%	55.6%	66.3%	8.4%	20.3%	24.4%	40.1%	31.3%	46.2%
Hispanic	73.0%	81.2%	59.3%	70.8%	12.2%	22.9%	28.4%	47.0%	34.0%	54.3%
Asian	84.8%	89.2%	71.5%	80.7%	18.1%	36.1%	38.4%	62.0%	48.2%	68.4%
Amer. Indian	55.9%	80.4%	44.7%	67.6%	7.6%	25.9%	17.8%	48.2%	22.0%	53.2%
White/Other	76.6%	86.8%	66.2%	77.7%	20.3%	41.6%	44.1%	65.3%	50.4%	69.7%
All First-time Freshmen	76.1%	86.3%	65.4%	76.9%	19.4%	39.6%	42.5%	63.2%	48.9%	67.8%

Note: In this report, 24 institutions are evenly divided into two subgroups: highly selective and selective. The division is made based on the average ACT/SAT scores of first-time freshmen enrolled in these institutions. The highly selective subgroup includes institutions with an average ACT score above 24, or an average SAT score above 980; the selective subgroup includes institutions with average ACT scores ranging from 19.3 to 23.3.

Another finding is that when comparisons by race are controlled by selectivity, the dispersion in graduation and retention rates is narrower for the highly selective subgroup than it is for the selective subgroup. For example, the graduation rates within six years by race range from 22.0% to 50.4% for the selective subgroup, and from 46.2% to 69.7% for the highly selective subgroup.

Retention and ACT Composite Scores

Table 6 tabulates the survey results of retention and graduation rates by ACT subgroups in four of the Big Eight universities. The data shows a strong linkage between subgroups of ACT scores and student retention. The percentages of 1983-84 first-time freshmen who graduated within six years range from 27.1% for the lowest ACT subgroup to 72.7% for the highest ACT subgroup. In general, students in the higher ACT subgroups graduated earlier. For students in the lowest ACT subgroup, 32% of those who graduated

within six years actually did so within four years, compared with 58% for the highest ACT subgroup.

TABLE 6. Retention and Graduation Rates of First-Time Freshmen by ACT Composite Score in Four of the Big Eight Universities Fall Semesters 1983 - 1984, Aggregated

ACT	Retention Rates		Graduation Rates		
	After 1 Year	After 2 Years	After 4 Years	After 5 Years	After 6 Years
Above 30	92.4%	83.5%	42.0%	68.4%	72.7%
26 - 30	84.5%	76.3%	33.5%	58.5%	64.1%
21 - 25	77.3%	67.2%	25.5%	47.0%	52.6%
16 - 20	69.6%	56.6%	15.8%	35.7%	40.5%
Below 16	60.9%	46.5%	8.7%	22.5%	27.1%

Note: Participating institutions include Kansas State U, U of Missouri, Oklahoma State U, and U of Oklahoma.

Retention and Gender

Cope (1978) stated that "The students sex appears to be somewhat related to retention, with most early research reporting more men persisting to graduation. However, these studies were made prior to the recent feminist movement, the pill, and 'living in'." This study (Table 7) indicates a

TABLE 7. Retention and Graduation Rates of First-Time Freshmen by Gender and Race in 17 of the SUG Institutions Fall Semesters 1983 - 1984, Aggregated

Race	Retention Rates				Graduation Rates					
	After 1 Year		After 2 Years		After 4 Years		After 5 Years		After 6 Years	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Black	73.9%	77.0%	60.3%	63.5%	10.5%	20.7%	26.3%	38.4%	33.3%	44.1%
Hispanic	75.7%	77.5%	64.4%	68.0%	14.1%	22.5%	36.6%	45.1%	45.5%	51.0%
Asian	85.8%	88.9%	78.3%	78.7%	26.0%	35.1%	50.9%	60.9%	59.9%	66.8%
Amer. Indian	62.7%	61.6%	53.3%	50.3%	9.5%	18.0%	23.2%	31.9%	30.2%	34.2%
White/Other	79.8%	81.6%	70.2%	71.3%	24.2%	35.8%	48.9%	56.4%	56.1%	60.9%
All First-time Freshmen	79.3%	81.2%	69.6%	70.6%	23.0%	34.1%	47.1%	54.6%	54.4%	59.2%

change in how gender relates to retention and graduation. In almost all of the 17 institutions included in this study, retention and graduation rates are higher for females than they are for males. Gender appears to be a stronger factor for blacks than it does for other ethnic groups.

CONCLUSION

The subgroups included in the Big Eight/Big Ten/SUG Longitudinal Retention Survey are based on the most commonly used control variables for studies of student retention among colleges and universities. The studies based on these variables (race, gender, and test scores) are characterized by researchers as descriptive or atheoretical "... because they are not based on a theory that links the variables in the study. Linkages (correlations) may be established, but the reasons why variables are related is not specified" (Bean, 1982).

Although retention analyses based on demographic variables are not very useful in identifying causes of attrition, descriptive studies "as a first step can be valuable in generating propositions to be examined in a second study" (Bean, 1982). As an example, this study found that the graduation rate was significantly higher for American Indians in the highly selective subgroup when compared with those in the selective subgroup. A second study may then be conducted to find the causes for this difference.

Descriptive retention studies can also be used to determine baselines for monitoring the impact of institutional policies and programs on retention. Through longitudinal tracking of retention and graduation statistics, significant changes may be observed in an institution. Further analysis of that institution's policies and programs may lead to useful findings that are beneficial to other institutions.

The retention survey has been continued to the third year. Now that the retention data exchange has become a routine exercise among the 39 participating institutions, efforts will be made in the future to improve the survey instrument. In the next stage of development, the instrument will be expanded to collect information on institutional variables. Attempts will be made to study theoretical linkages between institutional retention data and institutional characteristics.

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