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ABSTRACT

This study of student migration patterns is based on the assumption that an important determinant of change in student migration patterns in recent years has been the increase in the number of two-year colleges. The present study utilizes data which makes possible an analysis of the relationship between student characteristics and their migration to their college of first enrollment. The study contains information about a wide range of personal background variables plus certified data about where students enrolled as freshmen. Comparable data from two independent samples covering a four year span provides an opportunity for viewing the change or stability of the characteristics of migrating students. It was found that students who migrated to college in both 1966 and 1969 were likely to have the following characteristics: better than average ACT Composite Scores; educational expectations at or beyond a bachelor's degree; a rural or suburban home community; a moderate to high family income; no plans to work part-time; little importance placed on low cost as influencing their choice of college and; more than the average number of extracurricular achievements. Students who attended locally were found to have converse ratings in these areas.
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A COMPARISON OF FRESHMEN WHO ATTEND COLLEGE IN THEIR HOME
COMMUNITY AND FRESHMEN WHO MIGRATE TO COLLEGE

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A reasonable assumption is that an important determinant of change in student migration patterns in recent years has been the substantial increase in the number of two-year colleges. These institutions provide local educational opportunities at relatively low cost to many who would otherwise not have been able to begin college careers although they also enroll many students who chose the institution for other than purely economic reasons. The impact of these commuter colleges on higher education is reflected in their rapid growth. The American Association of Junior Colleges (1967, 1970) reported that during the period 1966-1969 the number of junior colleges in the United States increased by about 24% from a total of 837 institutions to 1,038. The number of students enrolled in these institutions increased from 1,464,099 in 1966 to 2,186,272 in 1969, an increase of about 49% over the 1966 figure.

In 1964-1965 the average tuition charged for full-time resident students in public two-year institutions (in 1969-70 dollars) was \$120; in comparison, tuition charged by public four-year institutions was \$271, and \$360 for public universities. In 1969-1970 the average tuition charged at public two-year institutions had increased to \$188, compared with average tuition at public

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four-year institutions which was \$310, and \$412 for public universities (NCES, 1971).

The growth of junior colleges can be partially explained by the lower state contributions required to educate students. Also, state legislators desire to provide greater educational opportunities to low income students by building many schools within commuting distance rather than building fewer but larger schools [Tuckman, 1972, p. 13].

The issue of college student migration is a very pertinent one for community-junior colleges. Clearly, information about the characteristics and backgrounds of migrating students would help to answer or provide the basis for considering such questions as the following: From the standpoint of community-junior colleges should the number of out-of-state students be curtailed? In what ways will community-junior colleges be affected by increasing large barriers to student migration? What effect are community-junior colleges having on the migration of college students? What effect has the recent increases in the number of community-junior colleges had on the migration patterns of American youth?

Previous studies of student migration have been of two types: (a) A census approach such as that taken by the USOE wherein the colleges are polled as to the home addresses of their first-time students, and (b) state-wide or other area studies of the college-going plans of high school seniors, some of which include a validation follow-up a year or more later. The first type does not usually include any information about the student other than his home address and college of present enrollment. The second type does

not have student interstate migration as the central focus and usually reports only the percentage of students planning to attend college out-of-state without reference to their destination. Typically, such studies make no attempt to relate plans for local attendance or migration to students' characteristics. As will be seen, the present study utilizes data which makes possible a combination of the above two types of approaches, that is, an analysis of the relationship between student characteristics and their migration to college of first enrollment. The present study contains extensive information about a wide range of personal background variables plus certified data about where they enrolled as freshmen. The added feature of comparable data from two independent samples covering a four-year span provides an opportunity for examining the change or stability, over time, of the characteristics of migrating students.

Method

The Instruments

The data in this study were obtained during regular nationwide administrations of the ACT Assessment and include responses to the Student Profile Section (SPS). The SPS is a short biographical inventory that is administered as an integral part of the ACT Assessment. The SPS asks prospective college students about their home background, educational and vocational plans, grades achieved in high school, goals in attending college, and interests and achievements in nonacademic areas. Maxey & Ormsby (1971) found that such self-reported grades and nonacademic achievements are sufficiently accurate to be useful sources of information, and that the accuracy of the information did not vary significantly across categories of income level,

sex, race, or class size. Correlations between self-reported grades and school-reported grades, for example, ranged from .81 to .86.

The Samples

The samples used in this study were drawn from ACT Class Profile tapes containing information furnished by students who took The American College Testing Program's Assessment between October 1, 1965, and August 1, 1965, and August 30, 1966, and between October 1, 1968, and August 30, 1969. The Class Profile tapes comprise the data bank for an ACT Research Service which lists all of the students who took the ACT Assessment during a given test year and subsequently were certified as enrolled the following fall at one of the colleges participating in the Class Profile Service. Each student record contains scores on the ACT test and information gathered through the SPS. The 1966 Class Profile tapes contained 328,416 student records, and the 1969 tapes contained 532,640 student records. The sample for the present study was obtained by transferring every tenth student record from the Class Profile tapes to a special sample tape excluding students who indicated that they were married at the time the test was administered.

The 1966 sample tape contained 32,351 student records from 796 different colleges in 39 states; the 1969 tape contained 50,205 student records from 1,103 colleges in 45 states. In both samples, the colleges were distributed fairly evenly across all regions except for the Northeastern (New England Middle Atlantic) and the far Northwestern regions which were slightly under-represented.

An average high school grade point average, an ACT Composite Score, and the student's sex were secured from the regular ACT Assessment. The following

SPS items were also included: level of educational aspiration; type of home community; family income; expected number of hours per week employment; number of high school achievements; and the extent to which low cost may have influenced their college choice.

A high degree of consistency in the distribution of these characteristics between the 1966 and 1969 samples has been recently reported (Carmody, Fenske, & Scott, 1972). The stability of the responses between these independent samples demonstrates their utility for descriptive purposes.

The Procedures

The dependent variable for the analyses in this study was constructed by comparing within each student record the state in which the home address was located with the state of the college in which the student later enrolled. A special computer program was developed to categorize each student record into the following three mutually exclusive groups: (a) those who enrolled within their home state, (b) those who enrolled in a state adjacent to their home state, and (c) those who enrolled in a distant state. The third category was comprised of students enrolled in a college in any state other than the home state and its adjacent states. A fourth category was then formed by dichotomizing the "within state" category between those who had attended college in their local home community and those who had attended elsewhere within the home state. The identification of "local" attenders was based on information given in the SPS, specifically, on the responses to the following question: "Where do you expect to live while attending college?" Among the six alternatives offered as possible responses (e.g., fraternity or sorority house, college dormitory) was "at home (or with relatives)." For the purposes of this descriptive study, the assumption was made that nearly

all of those who expected to live at home or with relatives while attending college were attending college in their local community. Exceptions to this assumption include those who would be living with relatives while attending an in-state college outside of their local community, and those students who, even though attending a college within commuting distance of their home, would not be living at home but would be living on or near the campus they are attending. The distinction between those who expected to live at home and those who expected to live elsewhere while attending an in-state college has significance for the present study because of the wide differences in out-of-pocket costs to the students' family between living at home or in separate quarters (Stecklein, Fenske & Huang, 1967). In effect, the distinction between these two types of in-state students is between those commuting from their homes during their first year of college and those living away from home, whether the college attended is in the local community or not.

The migration index was cross-tabulated with all of the independent variables listed in the preceding section. Each of the resulting tables are presented and discussed in the following section.

Results

The Two Independent Samples

The samples used were comprised of students who enrolled in fall 1966 and in fall 1969. Two entering classes (fall, 1967, and fall, 1968) intervened between the sample classes. Therefore, this report refers to a period including four academic years encompassed by the samples despite the fact that only 3 calendar years separate the samples.

The 1966 and 1969 samples exhibited somewhat different patterns of migration. The percentages for each of the migration categories in both samples, and the corresponding increases or decreases in each category from

1966 to 1969 are shown in Table 1. The statistical significance of the difference between the increases or decreases in each migration category over the 4-year period was determined by a standard test of the difference between two independent proportions (Ferguson, 1971).

There are two salient findings in Table 1. First, the percentage of students migrating to enroll as freshmen was relatively small in both the 1966 (14.1) and 1969 (12.1) samples, and second, there was a small but significant decrease in interstate migration over this 4-year period (The extremely large sample sizes enable statistical tests to detect significance of relatively small absolute percentage differences).

The 1969 sample exhibited a slight but significant increase in local attendance and a corresponding decrease in adjacent state attendance over the 1966 sample. Neither within nor distant state attendance changed significantly over the 4-year period.

TABLE 1
Local Attendance and Migration - Total Sample

Migration category	Sample percentages
Attended locally	
1966	37.0
1969	38.4
Increase or decrease	+1.4
Migrators	
1966	63.0
1969	61.6
Increase or decrease	-1.4
1966 N	32351
1969 N	50205

The remainder of this section presents the results of analyses in which the three categories of migration (within, adjacent and distant state) were combined into one category termed migrators and compared with local attenders. The resulting dichotomous variable is cross-tabulated with each of nine characteristics to determine the relative effect of the students' personal and background characteristics on their subsequent migration.* The results of these percentage tabulations and the corresponding statistical tests for significance of percentage changes over the four-year period are shown in Tables 2 through 10. Each column in Tables 2 through 10 contains the migration or local attendance percentages for all students who scored within the variable's range indicated at the top of the column. The percentage increase or decrease from 1966 to 1969 is included with the rows of migration percentages for both samples in both migration categories. Each increase or decrease was tested for statistical significance. An asterisk (*) next to any increase or decrease indicates that the change was significant at the .05 level.

ACT Composite Scores

The Composite score is an unweighted average of the separate scores on the four tests which comprise the test battery portion of the ACT Assessment: English, mathematics, social sciences, and natural sciences. For the 1966 sample the mean composite score was 20.76 with a standard deviation of 4.82. For the 1969 sample these statistics were 19.41 and 4.95, respectively for both categories. Table 2 presents the percentages of student migration cross-tabulated by ACT Composite Scores grouped into five categories.

*The reader is referred to ACT Research Report Number 54 which presents the results of analyzing a larger number of background characteristics by all three migration categories and local attendance.

TABLE 2
Percentages of Local Attendance and Migration by ACT Composite Scores

Migration to college	ACT composite scores				
	1-15	16-19	20-22	23-25	26-36
Attended locally					
1966	44.5	40.7	36.7	32.5	27.5
1969	50.0	42.5	37.3	31.2	24.4
Increase or decrease	+5.5	+1.8	+ .6	-1.3	-3.1
Migrators					
1966	55.5	59.3	63.3	67.5	72.5
1969	50.0	57.5	62.7	68.8	75.6
Increase or decrease	-5.5	-1.8	- .6	+1.3	+3.1
1966 N	5685	8296	7651	6378	4341
1969 N	10300	12905	10817	9140	7043

Table 2 shows that lower-scoring students were more likely to attend a local college; conversely, higher-scoring students were more likely to migrate to a college within the state or in an adjacent state. This relationship was stronger in 1969 than in 1966. For example, the percentage of students attending a local college in 1966 ranged from 44.5 in the lowest score category to 27.5 in the highest score category. In 1969 the range was from 50.0 to 24.4%.

The two lowest and the highest score categories showed significant changes in migration over the 4-year period. The algebraic signs of the increases or decreases revealed that nearly all of the changes (over half of which were statistically significant) were consistent with the overall trend of a strengthened association between migration and test score.

Average High School Grades

At the time of administration of the ACT Assessment, the student is asked to give the last letter grade that he earned at the end of his junior year in

high school in social studies, English, mathematics, and natural sciences. In the student's ACT record, this letter grade is converted to a numeric grade. After conversion an "A" equals 4.00, a "B" equals 3.00, etc. Table 3 contains the percentages of student migration cross-tabulated by high school grades.

TABLE 3
Percentages of Local Attendance and Migration by High School Grades

Migration to college	High school grades				
	0-2.00	2.01-2.50	2.51-3.00	3.01-3.50	3.51-4.00
Attended locally					
1966	42.9	38.9	35.1	29.8	27.6
1969	47.3	41.1	35.6	29.4	23.7
Increase or decrease	+4.4	+2.2	+ .5	- .4	-3.9
Migrators					
1966	57.1	61.1	64.9	70.2	72.4
1969	52.7	58.9	64.4	70.6	76.3
Increase or decrease	-4.4	-2.2	- .5	+ .4	+3.9
1966 N	9132	8735	7632	4406	2446
1969 N	13489	13072	12510	7115	4019

NOTE.--Letter grades converted to numeric scale where 2.00=C, 4.00=A.

Examination of Table 3 reveals that in both samples migration increased monotonically with level of high school grades and that there was a concomitant decrease in local attendance. These trends were stronger in the 1969 sample than in 1966. In 1966 the percentage attending locally declined from 42.9 for lowest level of grades to 27.6 for the highest. In 1969 the comparable percentages declined from 47.3 to 23.7, respectively. The percentage migrating to colleges increased 15.3 from the lowest to the highest grade levels in 1966 compared with an increase of 23.6 percent in 1969.

As was true for ACT Composite Scores, the two lowest and the highest categories showed significant changes over the four-year period. The

direction of the changes indicate a strengthened relationship between migration and academic achievement.

Level of Educational Aspirations

The students were asked on the SPS to indicate the highest level of education that they expected to complete from a list which included choices that ranged from a "High school diploma" to several types of doctoral degrees. These choices were grouped into four categories excluding "High School Diploma" and cross-tabulated by migration categories in Table 4. The first aspiration category ("Junior college degree") includes those who indicated on the SPS that they aspired to "college, but for less than a bachelor's degree."

TABLE 4
Percentages of Local Attendance and Migration by Educational Aspiration¹

Migration to college	Level of educational aspiration			
	Jr. coll. degree	Bachelor's degree	Master's degree	Doctoral degree
Attended locally				
1966	54.6	35.8	32.9	32.5
1969	63.2	35.6	32.5	32.5
Increase or decrease	+8.6	- .2	- .4	0
Migrators				
1966	45.4	64.2	67.1	67.5
1969	36.8	64.4	67.5	67.5
Increase or decrease	-8.6	+ .2	+ .4	0
1966 N	3785	17782	7585	3103
1969 N	6518	26657	11562	5088

¹Total 1966 N is slightly smaller because 96 students aspired to a High School degree. The total 1969 N is also slightly smaller because 280 students aspired to a High School degree.

Examination of Table 4 reveals that the only significant change in the migration distribution over the 4-year period was for junior college degree. "Junior college degree" aspirants attending local colleges increased by 8.6% in 1969.

In 1969, a total of 63.2% of those who aspired to less than a baccalaureate college degree attended locally. This percentage was almost twice that of any other aspiration group and reflects the widespread availability of community college facilities advocated by the Carnegie Commission on Higher Education (1970). Those who aspired to either bachelor's, master's, or doctoral degrees were much more likely to have attended college somewhere other than in their local communities.

Type of Home Community

On the SPS the students were asked "Which of the following best describes the community that you think of as your hometown during high schools days?" Selections were made from a list including the main headings of "Farm," "Suburb" (with four population size choices), and "Central city" (with five population size choices). For the present analysis these ten choices were combined into three groups corresponding to the main headings and were designated as "Farm," "Suburb," and "Urban." The results of cross-tabulating these grouped choices with migration are shown in Table 5.

TABLE 5
Percentages of Local Attendance and Migration by Type of Community

Migration to college	Type of community		
	Rural	Suburban	Urban
Attended locally			
1966	26.9	39.7	42.2
1969	28.8	41.7	42.3
Increase or decrease	+1.9	+2.0	+ .1
Migrators			
1966	73.1	60.3	57.8
1969	71.2	58.3	57.7
Increase or decrease	-1.9	-2.0	- .1
1966 N	9038	11315	11998
1969 N	13810	19425	16970

Significant changes were shown for both the rural and suburban categories. As might be expected, students from urban population centers had the highest percentages of local attendance and rural students had the lowest. This pattern remained stable over the 4-year period. Local or commuter-type colleges are typically not within reasonable commuting range of many rural students. In comparison with urban and suburban students who can live at home while attending college rural students are disadvantaged and probably always have been. It is possible that these data reflect substantial inequality of educational opportunities for rural students.

Family Income

Each student was also asked on the SPS to estimate his family's total annual income before taxes from a list of eight alternatives ranging from "Less than \$3,000 per year" to "\$25,000 and over." Two additional options were "I consider this information confidential" and "I don't know." For purposes of the present analysis responses to the last two options (about one fourth of the total in both samples) were combined with those in the median category of "\$5,000 to \$7,499." Table 6 presents family income data for migration and local attenders.

TABLE 6
Percentages of Local Attendance and Migration by Family Income

Migration to college	Family income						
	\$5000	\$5000 to 7499	\$7500 to 9999	\$10,000 to 14,999	\$15,000 to 19,999	\$20,000 to 24,999	\$25,000 and over
Attended locally							
1966	38.7	37.0	40.1	36.8	31.1	25.3	23.2
1969	39.4	37.4	42.9	39.3	36.7	30.7	23.3
Increase or decrease	+ .7	+ .4	+2.8	+2.5	+5.6	+5.4	+ .1
Migrators							
1966	61.3	63.0	59.9	63.2	68.9	74.7	76.6
1969	60.6	62.6	57.1	60.7	63.3	69.3	76.7
Increase or decrease	- .7	- .4	-2.8	-2.5	-5.6	-5.4	- .1
1966 N	3680	15810	5423	4995	1354	577	512
1969 N	5915	22336	7429	9201	2955	1262	1107

Table 6 shows several interesting and perhaps surprising results. All income levels decreased in migration; conversely, all income levels had increases in local college attendance during this period. The percentage changes over the four-year period were greatest in the middle to upper-middle income brackets.

Among those attending local colleges there was a fairly strong tendency for percentages to decrease inversely with increases in family income, but the highest percentages were at the third lowest income category rather than the lowest two categories. This trend is consistent with a recent study on Florida junior colleges which found that: "the presence of local junior colleges in an area is beneficial to lower income families. Since the percentage of enrollments in a local junior college is price responsive, at least in the lowest income groups, the savings obtained from having local junior colleges increase the number of low income students in college" (Tuckman, 1972).

Sex

Differences between males and females in migration to college were of direct interest in the present study, thus, sex was used as one of the set of independent variables rather than a control variable. Table 7 shows migration category percentages separately for males and females.

TABLE 7
Percentages of Local Attendance and Migration by Sex

Migration to college	Sex	
	Female	Male
Attended locally		
1966	34.4	39.1
1969	34.8	41.3
Increase or decrease	+ .4	+2.2
Migrators		
1966	65.6	60.9
1969	65.2	58.7
Increase or decrease	- .4	-2.2
1966 N	14107	18244
1969 N	22839	27366

The proportion of females in both the 1966 sample (44%) and the 1969 sample (45%) are consistent with national sample percentages for first-time fall enrollments for these years (USOE, 1967, and National Center for Educational Statistics, 1970). While both male and female migration patterns changed significantly, male migration declined more than female migration over the 4-year period. These data indicate that males migrate to college slightly less than females and that the trend is for this difference to increase. This finding is in line with previous research which found that family income of females who attend college is higher than for males, and that this difference is accentuated for students who migrate out-of-state to college (USOE, 1970).

Expected Part-Time Employment in College

On the 1966 SPS form each student was asked "About how many hours do you expect to work part-time while attending college? (excluding summer work." The student was instructed to select one of the following four responses: "1-9 hours per week," "10-19 hours per week," "20-29 hours per week," and "30+ hours per week." There were no alternatives for those who did not expect to work. The nonresponse rate of 16.8% to this question was largely attributed to lack of this alternative (nonresponse was negligible for all other SPS items).

The 1969 SPS form asked the same question with the same options except for the addition of the option "Do not expect to work." The nonresponse rate was negligible (less than 2%). In preparing these data for the present study, the decision was made to include nonresponses for the 1966 sample in the category of "Do not expect to work" (shown as "none" in the table). This classification was made on the presumption that the inordinately large number

of 1966 nonresponses were comprised mostly of those who did not expect to work but were given no option to so indicate. Table 8 shows employment data expectation and migration data.

TABLE 8

Percentages of Local Attendance and Migration by Expected Part-Time Employment in College

Migration to college	Hours/week employment				
	None	1-9 hrs.	10-19 hrs	20-29 hrs.	30+ hrs.
Attended locally					
1966	24.6	30.6	41.7	55.0	57.2
1969	25.3	32.4	43.9	59.5	64.2
Increase or decrease	+ .7	+1.8	+2.2	+4.5	+7.0
Migrators					
1966	75.4	69.4	58.3	45.0	42.8
1969	74.7	67.6	56.1	40.5	35.8
Increase or decrease	- .7	-1.8	-2.2	-4.5	-7.0
1966 N	5469	11118	10978	3560	1226
1969 N	17299	9017	15211	6520	2158

Employment expectations changed more over the 4-year period than any other single variable. Examination of Table 8 reveals that all but one employment category exhibited statistically significant shifts in percentage increases or decreases.

Percentages of local attendance more than doubled from the lowest to the highest amounts of expected employment for both the 1966 and 1969 samples. The converse trend was nearly as strong for migrators marking expected part-time employment as a potent indicator of college student migration. Furthermore, the 1969 data show an increase in the strength of the relationship over the 1966 sample.

Extracurricular High School Achievements

Both the 1966 and 1969 SPS forms used identical lists of 48 accomplishments or achievements that might have applied to the student's high school years. Each student indicated whether or not each accomplishment applied

to him. The 48 items were in the following six areas: Leadership, Music, Drama and Speech, Art, Writing, and Science. For the present analysis, student responses were grouped into five categories according to the total number of achievements that they indicated applied to them. These categories were cross-tabulated with the migration and local attendance data and are presented in Table 9.

TABLE 9
Percentages of Local Attendance and Migration by Number of Extracurricular High School Achievements

Migration to college	Number of achievements				
	1-5	6-10	11-15	16-20	21-48
Attended locally					
1966	42.9	32.4	29.1	24.9	25.4
1969	45.0	35.5	29.3	26.7	23.6
Increase or decrease	+2.1	+3.1	+ .2	+1.8	-1.8
Migrators					
1966	57.1	67.6	70.9	75.1	74.6
1969	55.0	64.5	70.7	73.3	76.4
Increase or decrease	-2.1	-3.1	- .2	-1.8	-1.8
1966 N	16675	9797	4310	1215	354
1969 N	23248	15941	7626	2566	824

Because of the nature of the achievements listed in the SPS, the frequency distribution of achievements was skewed markedly toward the lower end of the scale. The list included a few accomplishments that could have applied to many students (e.g., played a musical instrument) but was largely comprised of accomplishments that could be expected to have applied only to a very select group (e.g., was elected to one or more student offices; won literary award or prize for creative writing; or placed first, second, or third in a regional or state science contest). The cross-tabulation showed that there was a slight positive relationship between number of extracurricular achievements and migration.

Low Cost as a College Choice Factor

The final variable included in the present analysis is the influence of low cost on the student's choice of a college as reported on the SPS forms used for both the 1966 and 1969 samples. The student was asked to indicate whether this factor was a "major consideration," a "minor consideration," or of "no importance" in influencing his choice of college. These data are shown in Table 10.

TABLE 10
Percentages of Local Attendance and Migration by Importance of Low Cost

Migration to college	Importance of low cost		
	No importance	Minor consideration	Major consideration
Attended locally			
1966	27.1	33.1	47.0
1969	30.1	34.0	49.0
Increase or decrease	+3.0	+ .9	+2.0
Migrators			
1966	72.9	66.9	53.0
1969	69.9	66.0	51.0
Increase or decrease	-3.0	- .9	-2.0
1966 N	6482	13913	11956
1969 N	10127	23086	16992

Examination of Table 10 shows that local attenders were markedly different from migrators in the distribution of their rating of "low cost" as an influence on their choice of college.

Percentages of local attenders increase markedly and monotonically with increases in ratings of the importance of low cost in both samples. Furthermore, this trend increased significantly over the 4-year period. Conversely, "low cost" decreased in importance for all migrators although the amount of decrease in rating from "no importance" to "major consideration" was not as

great as the increase for local attenders. The trend for all migrators over the 4-year period was for low cost to be of decreasing importance.

The high level of influence ascribed to low cost by local attenders is consistent with the findings of research on public junior college students, nearly all of whom live at home while attending college: However, public two-year college students, as a group, are from a considerably lower socioeconomic background than are university students. This is not surprising, since various studies have shown that existence of a public two-year college in a community materially increases the number of high school graduates from lower socioeconomic homes who continue their education. In a study carried out by the Joint Committee on Higher Education (1967) for the California Coordinating Council for Higher Education the investigators concluded that of students in the State's three segments of public higher education, those attending junior colleges demonstrated the greatest financial need.

In addition, Medsker and Tillery (1971) concluded that:

As a group, two-year students, as compared with four-year students, represent a much wider range of ability and achievement, come from homes lower in the socioeconomic scale, are less likely to be motivated for college work, and are more likely to be employed while attending college.

Unfortunately, the present data do not differentiate junior college attenders from those attending local senior colleges and universities. However, had these types of attenders been differentiated, it is logical to assume that, given the known characteristics, background, and motivation of junior college students, the indicated differences between migrators and local attenders would have been accentuated had the comparisons been made between migrators and attenders of local junior colleges taken separately.

Summary and Discussion

Analysis of the relationship between migration and level of educational aspiration, family income, amount of expected part-time employment in college, number of high school achievements, and influence of low cost as a factor in college choice suggest that, in contrast to migrators, local attenders tend to have less time or inclination for extracurricular high school achievements, have limited family financial resources, will seek employment to sustain their college careers, and in general, aspire to bachelor's degrees or less. These findings delineate a profile of students who would be expected to choose a college for largely practical reasons related to cost, accessibility, and ease of finding part-time work. These data concomitantly suggest that migrators would put less emphasis on these factors but would find other reasons more important in choice of college.

This is the first national longitudinal study to compare the background and characteristics of students who began college in their local community with those who migrated from their home community to attend college either within state, an adjacent state or a state beyond those contiguous to their home states. The data revealed that over the period from fall 1966, through fall 1969 (a) interstate migration declined significantly, and (b) the proportion of those attending local colleges increased significantly. These findings were consistent with those of other migration surveys and with recent trends in higher education.

There seem to be two national developments in higher education that could at least partly account for a decline in interstate migration. One is the erection of a variety of barriers by many states to stem the influx of

out-of-state college students. These barriers include prohibitively high levels of tuition, achievement and aptitude admission standards that are higher for nonresidents than residents and outright quota restrictions. These policies seem to be growing in intensity and becoming more widespread. Such policies may be undertaken for a variety of reasons, however, since there is an almost complete lack of data comparing students who migrate to colleges with those who stay in-state, it seems clear that they have not been based on the results of research findings. Perhaps the most valuable aspect of the information provided by the study summarized in the present report is benchmark data on the background and characteristics of nonmigrating students and those who fall in various migration categories. Several important changes in migration pattern among students with certain characteristics were detected over the period studied. From this point on, it will be possible to investigate further changes or departures from the pattern revealed by these data.

The second national development which could help account for the proportionate decline in student migration is the rapid proliferation of public junior or community colleges and the concomitant mushrooming of enrollments in these institutions. For many college-bound high school graduates with family and academic backgrounds of the type normally associated with college-going, the availability of local opportunities for higher education simply provides an alternative to migrating. In addition, the availability of local higher education opportunities has encouraged the first-time enrollment of many new types of students whose financial resources and/or academic background would have discouraged them from beginning their college careers elsewhere. Encouragement of such students is specifically a policy of these "open-door"

colleges. Local enrollment of both "new" and "traditional" types of students inflates the percentage of nonmigrants and decreases the proportion of those who migrate.

Among the four migration groups, the sharpest differentiation on most variables occurred between local attenders and all migrants. These data underscore the validity of Tuckman's (1972) conclusion: "If educational policy is to be determined on the basis of benefits and costs then the enrollment inducing effects of local colleges must be taken into account."

At this point it is worth emphasizing that proportionate declines in interstate migration should not leave the impression of a decline in absolute numbers of students migrating to out-of-state colleges. Since the number of first-time enrollments increased markedly over the period studies, the percentage decline in interstate migration did not offset an increase in absolute numbers.

Students who migrated to college in both 1966 and 1969 were likely to have the following characteristics: better than average ACT Composite Scores; educational expectations at or beyond a bachelor's degree; a rural or suburban home community; a moderate to high family income; no plans to work part-time; little importance placed on "low-cost" as influencing their choice of college and; more than the average number of extracurricular achievements. Conversely, students who attended locally in both 1966 and 1969 were much more likely than interstate migrants to have low high school grades; low ACT Composite Scores; low educational expectations; urban backgrounds; and low to lower-middle family income. They expected to work more than half-time; stated "low-cost" was a "major consideration" as college choice factor and; had less than the average number of high school extracurricular achievements.

It is perilous to postulate implications from purely descriptive data but some of the trends revealed were most intriguing. For example, if the nonmigrating and interstate migrant student profiles become even more clearly differentiated, then American higher education may become sharply stratified purely on socioeconomic bases, a trend that has always been anathema to democratic ideologies.

The findings of this study have raised many questions which could be foci for further research. Probably the most obvious opportunity for further research is to extend the present study with another time frame to determine changes in the trends revealed here. Further research should make provision for migration analysis by other important control variables, e.g., public versus private colleges and junior versus 4-year colleges. Another interesting approach would be to examine migration patterns as they are affected by interactions between independent variables such as family income and academic ability or achievement. Finally, a most significant study for policy determination would be the case study of migration in sets of states which have erected barriers versus those which have not.

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