# MULTIPLE-TRANSFER STUDENTS IN A PUBLIC URBAN UNIVERSITY: Background Characteristics and Interinstitutional Movements

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Little research has been conducted on multiple-transfer students, those students who transfer more than once during their collegiate careers. In this study, background characteristics and previous interinstitutional movements of a sample of multiple transfers enrolled at a large, urban, public university were examined. These students moved along four different transfer paths before enrolling at the university, where they comprised one-fifth of new undergraduate enrollments. Their paths differed significantly on a number of demographic, institutional, and interaction variables. Overall, these students were academic achievers with high socioeconomic status backgrounds, who focused on academic quality and programs in choosing four-year colleges. Their tendency to transfer among large, inexpensive, public institutions has negative implications for the private sector of higher education.

Thousands of undergraduates march annually across commencement stages to receive their college diplomas. Both the new graduates and those in the commencement audiences would probably be amazed to learn that only onethird of the people receiving their diplomas actually matriculated at the schools conferring their degrees (U.S. Department of Education, 1986). This fact illustrates the extent of student transfer or movement among American colleges and universities. Fifty-six out of every 100 freshmen entering four-year colleges or universities leave their first institution without receiving a degree, including 44 percent within two years of matriculation. Within two years, 42 percent of these individuals transfer to other higher education institutions, 14 percent

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What these statistics fail to reveal is the number of students who transfer not once but several times during their academic careers. This phenomenon of multiple transfer has rarely been studied. Rather, research on transfer students has concentrated on first-time transfers who move from their original colleges or universities to a second institution. These single-institution studies typically examine the experiences, background characteristics, academic performance, and persistence of community college students who have transferred to fouryear institutions (e.g., Holmstrom and Bisconti, 1974; Johnson, 1987; Jones and Lee, 1992; Velez and Javalgi, 1987).

While no body of literature describes the multiple-transfer student, the literature on student persistence, college choice, and transfer behavior contains a number of relevant overlapping variables and concepts. Congruency or incongruency between the student and institution has been shown to interrelate with student expectations, college choice, and persistence (Cope and Hannah, 1975; Hossler, 1984; Peng, 1977; Williams, 1984). In addition, various student and institutional attributes have been linked to initial college choice, transfer behavior, and withdrawal from the system of higher education. Among these are institutional characteristics such as size, selectivity, type, control, academic program variety, class size, quality of teaching, and social life; individual factors such as educational aspiration, academic achievement and ability, socioeconomic status, and parental education level; and interaction characteristics such as student expectations of the college environment and student satisfaction (Astin, Korn, and Green, 1987; Bean, 1982; Chapman, 1981; Hossler, 1984; Johnson, 1987; Kotler and Fox, 1985; Lenning, 1982; Peng, 1977; Richardson and Bender, 1987).

Although Bean's (1982) and Tinto's (1975, 1987) theoretical models can account for some of the factors involved in a student's decision to transfer *from* an institution, they do not address the factors that might attract the student *to* a subsequent college or university. Moreover, the theory-based models developed to describe the college choice process (Chapman, 1981; Hossler, 1984; Hossler and Gallagher, 1987; Kotler and Fox, 1985) have been applied to first-time transfer students (Becker, 1988; Smith, 1987). A study of *multiple*-transfer students, therefore, may be a way to link extant theories of student persistence and college choice.

# PURPOSE AND OBJECTIVES

The primary purpose of this descriptive, exploratory study was to examine individual and institutional factors influencing previous choice and withdrawal

behaviors of undergraduate multiple-transfer students who enrolled at a large, public, urban, Midwestern university in Fall 1989. A multiple-transfer student was defined as one who had attended two or more colleges or universities prior to enrolling at the subject institution. This study had the following objectives: (1) to identify demographic and academic background variables, goals, and aspirations of multiple-transfer students; (2) to discover the most common inter-institutional enrollment/transfer patterns of this population; and (3) to delineate these students' self-reported reasons for leaving (transferring from) and choosing (transferring to) previous institutions.

#### METHOD

#### The Sample

The population was the 906 undergraduate students who had attended two or more postsecondary institutions prior to transferring to the subject university in Fall 1989. This group of students constituted 44 percent of the university's incoming transfer population and 19 percent of the entering undergraduate population. A sample consisting of 453 subjects was randomly selected from the 906 multiple-transfer students to participate in the study. The sample was later reduced by 33 to 420 to reflect students who were misclassified or who never matriculated at the university.

### Measurement and Variables

To describe the sample, we drew secondary data on all 420 students from the university's official records. This information included (1) student demographics (age, sex, and ethnicity), (2) the names of all previous postsecondary institutions attended, (3) dates of attendance, (4) transfer credits earned at each institution, (5) the college in which each student was enrolled in the subject university (e.g., College of Business), (6) the number of credit hours for which the student was enrolled in Fall 1989, (7) the class each student was in upon matriculation, (8) the cumulative GPA earned for the Fall 1989, Winter 1990, and Spring 1990 academic quarters, and (9) each student's enrollment status for each of those quarters.

To supplement these data, we identified certain information about each institution attended by students in the sample: (1) institutional type, (2) control, (3) Carnegie classification, (4) location by state, (5) average tuition/fees,(6) enrollment levels, and (7) average ACT scores of the entering student body (used as a selectivity measure). For colleges that published only average SAT scores (U.S. News and World Report, 1989), we transformed these scores into average ACT scores using conversion tables developed by Astin (1971).

We then sent students in the sample a researcher-designed questionnaire focusing upon variables previously found to be related to college choice, student persistence, and transfer behavior. These variables included student background characteristics and student perceptions of characteristics of the institutions they had attended. Using a Likert or summated rating scale format, we also included questions to elicit respondents' reasons for transferring to and from previous schools in terms of various institutional characteristics.

Experts in the fields of college choice, persistence, and survey research analyzed the survey instrument for content validity. In addition, we pilot tested the instrument on ten multiple-transfer students who entered the subject university in Fall 1988. Results of the pilot test and interviews indicated that the survey had high face validity. Dillman's Total Design Method for mail surveys (1978) guided the design, printing, and mailing of the questionnaires.

## RESULTS

First we will present the secondary data on all 420 students in the sample. Next we will present results of the researcher-designed survey. Finally, we will present information about the four multiple-transfer paths taken by the majority of these students.

#### Characteristics of the Multiple-Transfer Sample

According to secondary data derived from the university's records, the majority of the 420 multiple transfers in the original sample were white (64%), were 18 to 22 years old (57%), were enrolled full-time (78%), and were classified as sophomores or juniors when they matriculated at the university (76%). In addition, 64 percent were enrolled in the College of Liberal Arts and 68 percent had earned cumulative GPAs in the 3.0-3.9 range (on a 5.0 scale) after three academic quarters. Of the 420 multiple transfers, 323 (77%) were still enrolled at the subject university three quarters after they had matriculated.

For comparison purposes, the university provided academic and demographic data on first-time freshmen and transfers who completed an institutional survey in Fall 1989 (UIC Office of Data Resources, 1989). These populations are compared with the multiple-transfer student sample in Tables 1 and 2.

### Interinstitutional Movements of Multiple-Transfer Students

The 420 multiple-transfer students in the sample moved among a total of 305 different higher education institutions. These 305 colleges and universities represented 1,002 student transfer decisions and 1,422 enrollment decisions (including the decision' to attend the subject university). While the majority (72%) of the students had attended two schools prior to enrolling at the subject university, 21 percent had attended three and 7 percent four to seven.

In the multiple-transfer sample, the number of students transferring from the

	Multiple Transfer Sample N = 420 (%)	Freshman Population N = 2,609 (%)	Transfer Population N = 2,070 (%)		
Male	53	52	54		
Female	47	48			
Ethnicity	-77	40	40		
American Indian	1		1		
Black	14	10	12		
Asian	13	20	12		
Hispanic	5	14	10		
White	64	52	63		
Unknown	3	4	7		
Age	5	-	1		
18-22	57	95	32		
23-28	29	4	49		
29-33	9	1	11		
34-38	2		4		
39 +	2		5		
Unknown	1	_			
Class	•				
Freshman	8	100	17		
Sophomore	35		37		
Junior	41		35		
Senior	16	_			
Hours Enrolled	10				
Full-time	78	90	78		
Part-time	22	10	22		
Curriculum					
Liberal Arts	64	67	64		
Business	16	11	17		
Engineering	10	13	10		
Art/Architect.	5	7	7		
Physical Educ.	3	2	2		
Social Work	2	_	1		

TABLE 1. Comparison of Demographic Background Characteristics

four-year, private sector was substantially higher than from community colleges and public four-year institutions. In addition, the multiple transfers showed a strong tendency to move from smaller, more expensive, more selective institutions to larger, less expensive, less selective colleges and universities. All of the students in the sample eventually transferred to the subject institution, classified as a moderately selective public research university with very large (15,000 and up) enrollments and low annual tuition and fees (in the \$1,100-\$3,000 range).

The multiple-transfer paths of the 420 students in the sample are illustrated in Figure 1. Of the 420 multiple transfers, 192 (46%) began their collegiate careers at community colleges. Of these students, 105 (55%) subsequently transferred to four-year institutions, while 87 (45%) moved horizontally to other community colleges. A second group of 228 students (54% of the sample) originally attended four-year colleges or universities (one of these students began at an upper-division university). Of these students, 158 (69%) subsequently moved to community colleges, and 70 (31%) transferred horizontally to other four-year institutions. By the time students in the sample transferred to the subject university, 243 (58%) had most recently attended community colleges; 174 (41%) four-year institutions; and three (1%) upper-division universities. Of these four-year colleges and universities, 63 percent were public, 36 percent private, and 1 percent proprietary. When we examined the Carnegie classifications of the institutions (Carnegie Foundation for the Advancement of Teaching, 1987), 26 percent were research universities; 19 percent doctorate-granting colleges and universities; 40 percent comprehensive colleges and universities; 11 percent liberal arts colleges; and 3 percent specialized institutions.

When we looked at selectivity level, or average ACT scores of the entering student body at each school, we found that 40 percent of the multiple transfers moved from higher-selectivity to lower-selectivity, lower-prestige institutions; and 32 percent moved from their first institution to a second at the same selectivity level. Of these students, 85 percent transferred from one nonselective institution to another. Of the multiple transfers, 83 percent had attended inexpensive public institutions in the \$0-\$3,000 tuition range just prior to transferring to the subject university. On the other hand, of the 16 percent of students who had most recently attended private institutions, 18 percent had been enrolled at colleges or universities in the moderate (\$3,000-\$6,000) tuition range; 68 percent the high-cost range (\$6,100-\$10,000); and 13 percent the extremely high-cost range (above \$10,000). Multiple transfers at all income levels were found to enroll at low-cost, public institutions. In the highest income range (\$70,000 and above), 68 percent of survey respondents began their collegiate careers at inexpensive institutions, and 84 percent of the multiple transfers at all income levels had attended public institutions just prior to enrolling at the subject university.

The vast majority (71%) of the 420 multiple transfers had most recently attended institutions with average enrollments of 8,600 to over 15,000. Average enrollments were found to be significantly related to sector of institutional control for students in the sample ( $x^2$  (10) = 226.950, p < 0.0000). Of public institutions most recently attended by the multiple transfers before enrolling at the subject university, 80 percent were in the largest two enrollment categories.

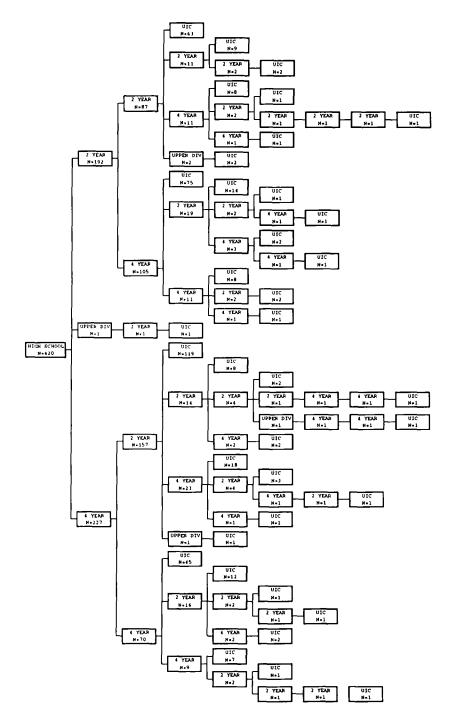


FIG. 1. Multiple-transfer paths of the sample population.

Private institutions attended by students in the sample were much more disparate in terms of size, with only 27 percent in the largest two categories and 41 percent in the smallest categories. Finally, 81 percent of the multiple transfers had attended colleges or universities in the same state as the subject university prior to enrolling there; and 7 percent had most recently attended institutions elsewhere in the Midwest. Of the sample, 67 percent of all students (281 of 420) remained within the same state during their first two transfer movements. Of these students, 87 percent continued to remain in-state when they transferred a third time to attend the subject university.

Students in the sample who had transferred among four or more colleges prior to enrolling at the subject university were significantly more likely to be older  $(x^2 (20) = 75.083, p < 0.0000)$  than those who had attended only two previous institutions. These students were also more likely to be black. They were less likely to persist at the subject university through Spring 1990 than those who had transferred less frequently.

#### Characteristics of Survey Respondents

Of the 420 multiple-transfer students in the sample, 271 returned their surveys for a response rate of 65 percent. Demographic and academic comparisons indicated nonsignificant differences between the sample and the population of multiple-transfer students who entered the subject university in Fall 1989. Few significant differences existed  $(x^2, p < 0.0000)$  between respondents (n = 271) and nonrespondents (n = 149), implying a low response bias. The primary differences occurred on the variables ethnicity, cumulative GPA, and persistence at the subject university through Spring 1990.

A significantly lower percentage of blacks than whites responded to the survey. Although 14 percent of the sample consisted of black students, only 8 percent of respondents and 25 percent of nonrespondents were black. Although white students comprised 64 percent of the multiple-transfer sample, 72 percent of respondents were white as compared with 55 percent of nonrespondents. In addition, a significantly greater percentage of survey respondents (32%) had earned cumulative GPAs in the A and B range by Spring quarter 1990 than had nonrespondents (16%). Finally, a significantly greater percentage of respondents were still enrolled at the subject university by Spring 1990 than were nonrespondents (81% and 69%, respectively).

Not all students responded to every question asked on the survey. Of the 271 survey respondents, 222 (82%) responded to all pertinent questions concerning background characteristics and educational aspirations. The majority of these respondents were single (85%), had attended college preparatory high schools (81%), attained high school GPAs in the B - to A - range (53%), and ranked in the top or second quarter of their high school class (70%). In addition, the

respondents had college-educated fathers (46%), possessed high aspirations to earn an advanced degree (83%), and were employed 20 or fewer hours per week while enrolled at the subject university (65%). For the students who classified themselves as financially dependent on their parents (51%), there was a wide range of family incomes: the highest concentration of dependent survey respondents was in the \$50,000 and over income category (43%). When compared to entering freshmen and first-time transfers at the subject university, multiple-transfer respondents were distinguished, in particular, by their high socioeconomic status backgrounds (see Table 2).

Survey respondents who had transferred among four or more colleges prior to enrolling at the subject university were more likely to be married, to have better-educated parents, and to come from higher socioeconomic status families; to aspire to earn the master's degree; and to have earned an associate or vocational/technical degree than respondents who had transferred less frequently.

#### Respondents' Reasons for Transferring

For each institution they attended, survey respondents were asked to indicate which three (of 15 possible) institutional or personal characteristics most influenced their decision to enroll at that institution. In addition, respondents were asked to indicate which three of these same characteristics most influenced their decision to transfer out of that college or university.

No matter what transfer path they took, the multiple-transfer students' selfreported reasons for moving among colleges were highly practical and focused on the academic system of the institution. Respondents' criteria for choosing and transferring out of specific colleges differed according to institutional type (two-year or four-year) and control (public or private). In their selection of four-year colleges and universities (including the subject university), students in all of the multiple-transfer groups considered quality of academic programs the most important criterion, and ranked variety of courses and programs second. On the other hand, respondents cited perceived low quality of these academic attributes as an important reason for transferring *out* of community colleges. The primary reasons for selecting community colleges were affordability of tuition and convenience of campus location.

Respondents gave a much wider range of reasons for choosing and for transferring out of four-year institutions than they did for community colleges. These reasons varied according to institutional control. Students in the multiple-transfer sample ranked quality of academic programs as the primary factor considered in selecting four-year institutions. However, they rated affordability of tuition second most important and convenience of location third in the choice of four-year *public* colleges and universities. For *private* institutions, respon-

Dased on Survey Responses							
	Multiple Transfer Sample N = 222 (%)	Freshman Population N = 2,609 (%)	Transfer Population N = 2,070 (%)				
Household Income							
(Dependent)	(N = 113)						
<\$10,000	10	7	4				
\$10-\$19,999	6	11	18				
\$20-\$29,999	14	24	18				
\$30-\$39,999	9	26	16				
\$40-\$49,999	17	16	14				
\$50,000 +	43	17	31				
Median	\$46,000	\$33,000	\$36,000				
Household Income							
(Independent)	(N = 109)						
< \$10,000	48	83	48				
\$10-\$19,999	27	8	18				
\$20-\$29,999	12	_	15				
\$30-\$39,999	8	8	6				
\$40-\$49,999	2	_	4				
\$50,000 +	3	_	9				
Median	\$11,000	\$6,000	\$11,100				
Father's Education							
No college	37	41	43				
Some college	18	26	19				
At least bachelor's	46	32	38				
Mother's Education							
No college	45	53	51				
Some college	24	23	22				
At least bachelor's	30	24	27				
Employed							
Yes	65	63	78				
No	35	37	22				
Goal in Attending							
Subject University							
Bachelor's degree	93	87	92				
Transfer credits	5	10	6				
Job-related courses	—	1	1				
Self-improvement	—	—	1				
Other	1	2					

 TABLE 2. Comparison of Background Characteristics

 Based on Survey Responses

dents ranked location, variety of programs, and faculty teaching ability (in descending order) after academic program quality. Respondents' reasons for choosing the subject university were related to the control of the institution from which they transferred. Those transferring from public colleges cited academic program quality first, followed by program variety and location; while those transferring from private colleges cited affordability of tuition first, academic program quality second, location third, and faculty teaching ability fourth.

Affordability of tuition was given most frequently as the primary reason for transferring out of four-year *private* colleges, followed by program variety, social atmosphere, and academic program quality. By contrast, respondents made the decision to leave four-year *public* institutions for personal/family reasons, followed by change of residence, academic program quality, and program variety.

#### Intent to Graduate

Although the multiple transfers indicated varying degrees of intent to graduate from their previous colleges, 93 percent of survey respondents stated that their goal in attending the subject university was to earn a bachelor's degree (see Table 2). These multiple transfers expressed greater intent to graduate from the subject university than did freshmen matriculating in Fall 1989, 87 percent of whom planned to earn an undergraduate degree at the institution (UIC Office of Data Resources, 1989). In addition, respondents in the multiple-transfer sample possessed high levels of aspiration to earn an advanced (master's, doctorate, or professional) degree. The multiple transfers' high aspiration level, but low commitment to graduating from colleges attended prior to the subject university, is consistent with earlier research on first-time transfer students (Getzlaf et al., 1984; Hackman and Dysinger, 1970).

#### The Four Multiple-Transfer Paths

We ran a series of cross-tabulations to establish the most common enrollment/transfer patterns of the 420 multiple-transfer students in the sample. We discovered four primary paths that accounted for the transfer movements of 350 or 83 percent of the students. Seventy students (17%) could not be classified as belonging to any specific group, as there were too few subjects in any given cell for meaningful analyses to be performed. Of the 350 students who took one of the four primary paths, 194 (55%) answered all relevant questions on the survey. The four multiple-transfer paths and the characteristics of the 194 respondents who took those paths are described below.

Significant differences occurred among survey respondents in each of the four multiple-transfer groups on a number of demographic, academic, and interaction/attitudinal variables. These variables appear in Table 3, and include

	P	2 > 4 ATH = 74)	P	4 > 4 ATH = 56)	P	2 > 4 ATH = 38)	PA	4 > 4 ATH = 26)
Age	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	N	%	N	%	N	%	N
18-22	62	(46)	71	(40)	34	(13)	77	(20)
23-28	28	(21)	23	(13)	34	(13)	8	(2)
29-33	5	(4)	4	(2)	18	(7)	12	(3)
34-38	2	(1)	2	(1)	11	(4)	4	(1)
Over 38	3	(2)		_	3	(1)		
TOTAL		(74)		(56)		(38)		(26)
		Value		DF	Significance			
	χ <sup>2</sup>	27.408		12	p < .00675			
Father's Education	%	N		N	%	N	%	N
No college	34	(25)	38	(21)	55	(21)	42	(11)
Some college	13	(10)	21	(12)	24	(9)	16	(4)
College degree	53	(39)	41	(23)	21	(8)	42	(11)
TOTAL		(74)		(56)		(38)		(26)
		Val	ue	DF	S	ignifican	ce	
	χ <sup>2</sup>	11.035 6		6	p < .0873			
High School GPA	%	N	%	N	%	N	%	N
$\dot{A}$ – to A	20	(15)	9	(5)	5	(2)	31	(8)
B to A –	20	(15)	25	(14)	24	(9)	19	(5)
B – to B	28	(21)	32	(18)	15	(6)	31	(8)
C to B –	20	(15)	23	(13)	37	(14)	15	(4)
C – to C	9	(7)	9	(5)	11	(4)	4	(1)
D to C -	1	(1)	2	(1)	3	(1)	_	
Below D	_				5	(2)		
TOTAL		(74)		(56)		(38)		(26)
		Value		DF	Significance			
	$\chi^2$	27.046		18	p < .07813			
Persistence Through								
Spring 1990	%	Ν	%	Ν	%	N	%	N
Enrolled	91	(67)	73	(41)	76	(29)	65	(17)
Not enrolled	9	(7)	27	(15)	24	(9)	35	(9)
TOTAL		(74)		(56)		(38)		(26)
		Value		DF	Significance		ce	
	· $\chi^2$	10.262		3	p < .01647			
Expectations of								
Academic Quality	%	N	%	N	%	N	%	N
Extremely low	_		2	(1)	3	(1)		
Low	1	(1)	_	· ·		. ,	4	(1)
								• • •

TABLE 3. Significant Differences According to Transfer Path

		<u> </u>						
		2 > 4 ATH		4 > 4 \TH	2 > 2 > 4 PATH			4 > 4 ATH
		= 74)		= 56)		= 38)		= 26)
					_			
Neutral	12	(9)	27	(15)	8	(3)	15	(4)
High	39	(29)	50	(28)	32	(12)	53	(14)
Extremely high	47	(35)	21	(12)	58	(22)	27	(7)
TOTAL		(74)		(56)		(38)		(26)
	χ²			DF 12	Significance $p < .01705$			
	X	<u>χ</u> 24.301 12		12	<i>p</i>			
Expectations of								
Financial Aid	%	N	%	N	%	N	%	N
Extremely low	22	(16)	25	(14)	18	(7)	19	(5)
Low	19	(14)	14	(8)	5	(2)	11	(3)
Neutral	27	(20)	29	(16)	32	(12)	8	(2)
High	5	(4)	20	(11)	11	(4)	31	(8)
Extremely high	27	(20)	13	(7)	34	(13)	31	(8)
TOTAL		(74)		(56)		(38)		(26)
	Value		DF	Significance				
	χ <sup>2</sup>	24.137 12		12	<i>p</i> < .01948			
Ethnicity	%	Ν	%	Ν	%	N	%	Ν
Native American					3	(1)	4	(1)
Black	11	(8)	2	(1)	3	(1)	19	(5)
Asian	9	(7)	18	(10)	13	(5)	19	(5)
Hispanic	7	(5)	4	(2)	13	(5)		
White	73	(54)	77	(43)	68	(26)	58	(15)
TOTAL		(74)		(56)		(38)		(26)
		Value DF		DF	Significance			
	$\chi^2$	22.460		12	р	<i>p</i> < .04033		
Main Goal in								-
Attending Most								
Recent College	%	N	%	Ν	%	Ν	%	N
Earn assoc.	27	(20)	2	(1)	42	(16)	8	(2)
Earn bach.			70	(39)			50	(13)
Courses for transfer	59	(44)	23	(13)	52	(20)	27	(7)
Job-related courses				_	3	(1)		
Courses for self	12	(9)	2	(1)	3	(1)	15	(4)
Other	1	(1)	4	(2)				
TOTAL		(74)		(56)		(38)		(26)
		Value		DF	Significance			
	χ²	122.	175	15		< .0000		

TABLE 3. (continued)

(1) age, (2) ethnicity, (3) father's educational level, (4) high school GPA, (5) main goal in attending most recent college, (6) expectations of the subject university in the areas of academic program quality and financial aid, and (7) persistence at the university through Spring quarter, 1990.

The 4 > 2 > 4 Path

The 4 > 2 > 4 transfers initially attended one or more four-year schools; transferred to one or more community colleges; and then transferred to the subject university. The most common multiple-transfer path, it was followed by 33 percent of students in the sample (140 of 420). Of the 140 students who took this path, 74 responded to all of the relevant survey questions. Respondents who followed the 4 > 2 > 4 path were more likely than respondents in the other three groups to have participated in college preparatory high school programs; to have college-educated fathers; and to persist at the subject university through Spring 1990. In addition, a higher percentage of respondents in the 4 > 2 > 4 group were U.S. citizens; unmarried; and enrolled full-time at the subject university than respondents in the other groups.

*The* 2 > 4 > 4 *Path* 

The second most common multiple-transfer path was taken by 18 percent of students in the sample (75 of 420). These students originally enrolled at one or more community colleges; transferred to one or more four-year institutions; and then moved to the subject university. The 56 respondents who took the 2 > 4 > 4 path were more likely to be white than respondents in the other three groups. However, these respondents had the second lowest persistence rate at the subject university through Spring 1990. Of the three multiple-transfer paths in which students attended community colleges at some point (4 > 2 > 4, 2 > 4 > 4, and 2 > 2 > 4), respondents who took this path were less than half as likely as those in the other two groups to have earned an associate or vocational/technical degree.

*The* 2 > 2 > 4 *Path* 

The third major path, followed by 20 percent (83 of 420), was that of attending two or more community colleges consecutively prior to enrolling at the subject university. The background characteristics and educational goals of the thirty-eight 2 > 2 > 4 transfers who responded to the relevant survey questions differed most substantially from those of respondents in the other three groups. Respondents who took this path had lower high school grades and were less likely to have attended college preparatory high schools. Their fathers were the

least likely of the four groups to have attended college or to have earned a college degree. Respondents in the 2 > 2 > 4 group were also significantly older; more likely to be married and to have earned a previous associate or vocational/technical degree; and less likely to be enrolled in the university's College of Liberal Arts than respondents in the other three groups. Instead, 2 > 2 > 4 respondents were most frequently enrolled in business, engineering, physical education, and social work programs.

In addition, this group contained a higher percentage of Hispanics than the other transfer paths. These students came from lower socioeconomic status families than the other groups, and were the least geographically mobile in their transfer patterns. Despite these disadvantages, 2 > 2 > 4 respondents earned the highest cumulative GPAs in the subject university and evidenced the highest intent to earn a bachelor's degree from the university of the four groups.

The 4 > 4 > 4 Path

The fourth multiple-transfer path, taken by 12 percent of students in the sample (52 of 420), consisted of enrolling at three or more four-year colleges or universities consecutively (including the subject university). The 26 respondents who followed the 4 > 4 > 4 path were younger than respondents in the other groups, and were more likely to be black, Asian, and foreign. They came from families with higher income levels and achieved higher high school grades and class ranks than did respondents who took the other three paths. The most geographically mobile of the four groups, these respondents had attended an equal number of public and private four-year colleges prior to enrolling at the subject university. Once there, 4 > 4 > 4 respondents were more likely than the other groups to enroll in the College of Liberal Arts.

These respondents were least likely to be enrolled full-time at the university, where they earned lower cumulative GPAs and were least likely to persist through Spring 1990 of the four groups. This was not a surprising finding, as positive significant relationships were found to exist between multiple-transfer students' cumulative GPAs and persistence at the subject university ( $x^2$  (4) = 22.211, p < 0.0000), as well as between the number of hours enrolled and persistence ( $x^2$  (1) = 34.370, p < 0.0000).

#### Student Experiences and Expectations

Survey respondents in both the 4 > 2 > 4 and 2 > 4 > 4 multiple-transfer groups reported having had better overall experiences at the community colleges than at the four-year colleges they attended. In addition, respondents in the 2 > 4 > 4 and 4 > 4 > 4 groups who attended colleges in both the public and private sectors (n = 65) reported having had better overall experiences at public than at private four-year institutions. Respondents in all four groups had their highest expectations of the subject university in the academic realm, and their lowest expectations in the areas of social atmosphere, attractiveness of facilities and grounds, financial aid, and class size. Expectations of the four groups differed significantly on the variables of academic program quality and financial aid availability (see Table 3). Multiple-transfer respondents taking the 2 > 2 > 4 path—the only students who had not previously attended a four-year institution—had higher expectations in these two areas than students in the other three groups. The extremely high expectations of the 2 > 2 > 4 group, whose previous experience at a four-year institution may have contributed to their having the lowest expectations of academic program quality and financial aid availability of the four groups.

Finally, the four paths differed significantly on respondents' main goal in attending their most recent institution prior to enrolling at the subject university (see Table 3). Not surprisingly, survey respondents who took the 4 > 2 > 4 and 2 > 2 > 4 paths, who had most recently attended community colleges, planned to earn an associate degree or transfer to another institution; while those taking the 4 > 4 > 4 and 2 > 4 > 4 paths and most recently attending four-year colleges aspired to earn the bachelor's degree or to transfer.

#### DISCUSSION AND IMPLICATIONS

Results of this study suggest that multiple-transfers possess to a high degree the demographic, academic, and motivational attributes that have characterized college persisters in other studies (Astin, 1975; Beal and Noel, 1950; Hossler, 1984; Lenning, 1982; Manski and Wise, 1983; Pascarella and Terenzini, 1980, 1983; Porter, 1989; Tinto, 1975, 1987; Velez, 1985). These attributes include high levels of parental education, family income, academic ability and achievement, educational aspirations, and family support to attend college. In addition to possessing many of these attributes to a greater degree than first-time freshmen and transfers at the subject university, the multiple-transfer respondents evidenced higher levels of intent to graduate from the subject university than these other populations, and thus an increased potential for attaining the baccalaureate degree. Indeed, multiple transfers may be considered the *ultimate* persisters, in that they make the decision to remain within the system of higher education several times over the course of their collegiate careers.

Awareness of the extent of the multiple-transfer phenomenon may cause researchers to reexamine existing models of student persistence. Individual colleges and universities have traditionally failed to distinguish between attrition and transfer, regarding both behaviors as highly undesirable in that they result in increased costs and decreased tuition revenues for a specific institution. However, findings from this study indicate that transfers should be separated from dropouts instead of lumping them together into aggregate data. Results of this study and others show that transfers have a great deal more in common with persisters than they do with dropouts (Carroll, 1989; Holmstrom and Bisconti, 1974; Jones and Lee, 1992; Lee and Frank, 1990; Velez and Javalgi, 1987; Wisner, 1984). In this regard, it is important to understand that what is beneficial for individual institutions, e.g., retaining a student to graduation, may not ultimately be beneficial for the student, and that transferring to improve student-institution fit can increase the likelihood that an individual will attain a college degree.

Although multiple transfers may leave an institution in search of a better fit, other multiple transfers will likely enroll at that same institution to take their places. Researchers have accused transfer students of making ill-informed college choices that often result from exaggerated, inaccurate expectations of an institution (Hossler, 1984; Noel, Levitz, Saluri, and Associates, 1987; Peng, 1977). In turn, poor college choice is said to be partly responsible for any incongruencies that later arise between the student and institution (Tinto, 1987). Respondents in the multiple-transfer sample did not appear to make "poor" college choices, nor did they seem ill-informed about the institutions they attended. Rather, these students selected institutions based on practical, specific attributes—location and cost for community colleges and perceived academic program quality for four-year institutions.

Although multiple-transfer respondents gave a much broader range of reasons for transferring from four-year institutions than they did from community colleges, the vast majority of respondents to the survey reported that they chose, and also left, four-year colleges and universities because of academic program quality and/or variety. Since 40 percent of the multiple transfers moved from higher-selectivity to lower-selectivity, less-prestigious institutions, there is some question as to how respondents defined academic program quality. Presumably, however, many of these students transferred to obtain a better academic fit. As the survey respondents exhibited low levels of intent to graduate from their previous colleges, it is possible that they were also very sensitive to any incongruencies they experienced in their fit with these colleges. As a result, the multiple transfers may have been highly prone to transfer when their expectations of an institution were not met.

Respondents were bright, highly motivated individuals who did not hesitate to leave an institution when they judged the costs of remaining to outweigh the perceived benefits of transferring elsewhere. For most of these students, transferring was a positive experience in that it meant moving to an institution that was a better fit academically, socially, financially, or geographically, thus enhancing their persistence within the system of higher education.

Rather than resulting from poor choice, the transfer behavior of students in

this sample appeared to be due at least in part to their conscious selection of lower-choice, less selective community colleges and public four-year institutions prior to entering the subject university. This pattern occurred despite the findings of previous research that high socioeconomic status, high-ability students prefer selective, private institutions (Davis and Van Dusen, 1975; Hearn, 1984; Zemsky and Oedel, 1983). Tinto (1987) theorized that attending lowerchoice colleges would contribute to transfer behavior, a theory that the findings of this study seem to bear out. Perhaps the multiple-transfers' choices were limited by geographical and/or financial constraints, rather than by academic ability. This hypothesis is supported by the fact that many respondents in all four multiple-transfer groups stated that they intended to transfer from their previous institutions at the time of their initial enrollment, an intention shown to be a strong predictor of transfer behavior (Bean, 1982; Lenning, Beal, and Sauer, 1980; Metzner and Bean, 1987).

That multiple transfers in the sample tended to transfer from private to public institutions may be disheartening news for the private sector of higher education. Private institutions are generally smaller, more academically competitive, more limited in the number and type of academic programs offered, and more expensive than their public counterparts. In the three multiple-transfer groups in which students attended one or more four-year schools prior to enrolling at the subject university, a substantial number attended private colleges at some point during their collegiate careers. However, all of these students ended up at a large, urban, moderately selective public university. It is possible that, due to the limited nature of this study, a negative selection bias may have distorted the low enrollment of students in the sample at private colleges. However, the general movement of transfers from private to public institutions has been documented in other studies (Carnegie Foundation for the Advancement of Teaching, 1986; Holmstrom and Bisconti, 1974; Knoell and Medsker, 1965; Peng, 1977; Willingham and Findyikan, 1969).

The tendency of financially dependent multiple-transfer respondents at all income levels to enroll at low-cost, public institutions presents a particularly problematic situation for private colleges. In order to attract and retain these students, private colleges will have to find ways to downplay or mitigate the tuition differential between themselves and public institutions and accentuate attributes such as academic program quality, program variety, faculty teaching ability, and campus location. Since academic program quality was given as the foremost reason that respondents selected four-year public as well as private institutions, marketers of public universities may find it valuable to emphasize the excellence of their academic programs when recruiting transfer students to their campuses.

Multiple-transfer respondents' answers to survey questions concerning the quality of their overall experiences and the existence of supportive relationships

with faculty and staff at each institution attended indicate that private colleges have some work to do in these areas as well. Most of the 65 multiple transfers who had attended schools in both sectors reported that they had more positive experiences at public than at private four-year institutions. In addition, many respondents indicated that they had enjoyed more supportive relationships with faculty or staff members at four-year public institutions than at private ones.

Community colleges played a major role in the transfer behavior of many of the students, both prior to *and* following their enrollment at four-year institutions. Students in three of the four paths transferred to or from community colleges at some point during their collegiate careers. The majority of students who had attended community colleges reported better overall experiences there than at four-year institutions. In addition, many respondents indicated that they had enjoyed more supportive relationships with members of the faculty or staff at the community colleges than at four-year institutions. As the low tuition cost, convenient class schedules, and central locations of community colleges make them more acceptable alternatives to four-year institutions, it is likely that students will transfer back and forth between the two- and four-year sectors with increasing frequency in the years ahead. As competition between these sectors increases, community colleges will pose an increasingly formidable challenge to four-year institutions for the first two years of a student's undergraduate education.

The fact that multiple transfers move among so many institutions over the course of their collegiate careers also has curricular implications. Multiple transfers taking the 4 > 4 > 4 path were much more likely than others to enroll in the subject university's College of Liberal Arts, while students in the 2 > 2 > 4 group—who had never before enrolled at a four-year institution—were found in the professional and technical fields of business and engineering. It is speculated that many 2 > 2 > 4 transfers are career-motivated students who are attracted by the low cost of a community college education and the good academic reputation of the subject university's professional programs. Their goal is to acquire a high-quality credential that will allow them access to a professional career at a low cost. The high cumulative GPAs and persistence rates of students in the 2 > 2 > 4 group give further support to this hypothesis.

While multiple transfers undoubtedly accumulate the credit hours and earn the academic credentials necessary to receive a college degree, the possibility that they will have a coherent and unified educational experience is small. Multiple transfers' frequent movements from college to college preclude the likelihood that any one institution's curriculum will have a significant impact. The multiple-transfer phenomenon may provide a pragmatic justification for the distributive model of general education curricula, as opposed to those which currently emphasize a cohesive, four-year sequence.

The background characteristics, educational aspirations, and interinstitutional

movements of multiple-transfer students are areas worthy of future research. Therefore, replication of this study at other four-year institutions (both public and private), at the community college level, and at the national level (using data from the 1972 National Longitudinal Study and the High School and Beyond Study) would be useful. The extent to which multiple transfers differ from first-time freshmen and transfers in background characteristics, academic performance, educational aspirations, institutional commitment, and systemic persistence should be examined.

It would also be valuable to examine in more depth the numerous transfer and choice decisions made by multiple transfers to discover the ways in which these decisions differ from those of freshmen and first-time transfers. In particular, the role of perceived academic program quality should be looked at more closely, since it appears to have a large impact on multiple transfers' choice and withdrawal behaviors. We hypothesize that the choice process of multiple transfers is more sophisticated than that of other students, and that multiple transfers include fewer institutions in their choice sets due to geographical and/ or financial constraints. We theorize further that the choice process evolves with each multiple-transfer movement as students develop a "learning curve" regarding the selection of various types of institutions. Further research on the multiple-transfer population may facilitate the development of more comprehensive, systemic theories of college choice and persistence.

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