

office for student affairs RESEARCH BULLETIN

Student Demand and Preferences for University Area Housing

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Abstract

A survey of 941 randomly selected students on the Twin Cities campuses of the University of Minnesota indicated that 72% or an estimated 28,800 students lived or would consider living near the campuses. Of the 28,800 students it was estimated that 11,000 students did not live in the University area but would consider doing so. Both single and married students rated two bedroom apartments as the most desirable accommodation near the University, and one bedroom apartments were rated the next most desirable. Single students also rated other accommodations, such as group living with six or fewer other students, sleeping rooms, fraternities, sororities, and dormitories as desirable, but married students did not rate any alternative to apartments as desirable. Both married and single students showed moderate interest in cooperative housing, and both preferred lowrise building apartments to highrise building apartments.

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The housing policies and supporting statements accepted by the Regents of the University of Minnesota in 1973 focused on the impact of housing on students' university experiences. The statements emphasized the need for healthful housing with sufficient space for study and the need for housing which gives easy access to University resources. The University of Minnesota is located in the center of a large metropolitan area and university students commute to the University from all parts of the Twin Cities area. Also, many students are housed in apartments, houses and University-owned dormitories on or near the University's campuses. Questions have been repeatedly raised of the best balance between residences available for students close to the University versus residences in the larger metropolitan area and of the types of housing needed in the University area. The Campus Committee on Housing (1972) reviewed studies of student housing and attempted to integrate information on existing housing and housing preferences of students. The purposes of the present study, undertaken at the request of the Campus Committee on Housing by the Minnesota Student Association with support from Student Life Studies and Support Services and Operations, was to obtain a gross estimate of the potential student demand for housing in the University area, and to assess students'

preferences for housing types in the University area.

Method

Sample

A random sample of 1,070 students was drawn from the active files of University of Minnesota day students on the Twin Cities campuses during Spring quarter. Of the 1,070 students, 941 or 88% were contacted by telephone or by mail when telephone contact was not feasible. Those contacted were asked if they lived in the University area and, if not, would they consider living in the University area. The 678 who either lived or would consider living in the University area were asked to complete a questionnaire on housing. Responses to the questionnaire were received from 558 or 82% of the 678 students, 434 of whom were single, and 124 of whom were married.

Questionnaire

The questionnaire was developed from a draft suggested by the Campus Committee on Housing (Campus Committee on Housing, 1972). The questionnaire asked students to indicate their housing, rental rate per month, and other identifying information. The bulk of the questionnaire listed alternative housing in terms of basic type and number of roommates sharing the housing, and asked students to rate the perceived desirability of each option on a five-point scale varying from very desirable to very undesirable. Students were also asked how much money they would be willing to pay for each of the options. The housing options concentrated on

apartment units within highrise and lowrise (two and one-half walkup) buildings. In addition, students were asked of their interest in a series of other possible housing types within the University area, such as possible arrangements within dormitories, fraternities or sororities and rooming houses. Several questions assessed students' interest in cooperative housing. In this report, students' ratings of desirability of the various types of housing were combined into the three levels of desirable, neutral and undesirable. Cost data are not presented.

Results

Potential Demand

Six hundred and seventy eight or 72% of the 941 students who were contacted indicated that they either lived in the University area or would consider living in the area. Based on the 72% estimate and on an approximate figure of 40,000 students on the Twin Cities campuses at the University of Minnesota, approximately 28,800 students lived or would consider living in the University area. Of the students who indicated that they lived or would consider living in the University area, 78% were single and 22% were married. These percentages closely approximate estimates in 1970-71 of the percentages of single and married students in the student population of the University (Huebner, 1971). Using figures resulting from an analysis of zip codes of University students' addresses in 1971 (Twin City local address distribution by zip code, 1971), 45% of the student body or 17,688 students lived on or within three miles of the Minneapolis-

St. Paul campuses. Based on the discrepancy between the 72% of the sample who lived or would consider living near the campus and the 45% who lived near the campus in 1971, and using a base of 40,000 to approximate the number of students at the University, we can estimate that about 11,000 students in addition to those currently living within the three mile radius of the University campuses would consider living in close proximity.

Housing of Sample

The housing of students who lived or would consider living in the University area is presented in Table 1 along with the housing of all students on the Twin Cities campuses (Huebner, 1971). Single students and married students are presented separately. Thirty eight percent or 166 single students in the sample did not respond to the question of the kind of housing they occupied. For the rest of the single students, the most frequent housing indicated was apartments with 28% of the single student sample indicating they occupied apartments. Other types of housing were much less frequently indicated with the most frequent being "dormitory" (10%) and "other" (11%). In comparison to the housing types lived in by all students at the University of Minnesota, the most underrepresented group in the sample was single students living with parents or relatives. Fifty seven percent of all students at the University of Minnesota lived with relatives, while only 5% of the sample indicated they lived with parents or relatives. Even if all of those

students not responding to the item lived with parents or relatives, there still would be a 20% discrepancy between the total student population and the students in the sample. Twenty one percent of all students lived in apartments while 28% of the sample lived in apartments. It seems likely that some of the students who did not respond to the item also lived in apartments, suggesting single student apartment dwellers were overrepresented in the sample. The percentages of students in dormitories, fraternities and sororities, own house, and sleeping rooms were approximately equivalent to the total student population.

For married students, the percentages are quite similar between the sample and all married students. For example, 63% of the married students in the sample live in apartments as compared to 61% of the total married student population at the University. The largest discrepancy is in the "own home" category: 34% of the married students in the student body lived in their own home, while only 13% of the students in the sample did. Compared to single students, married students were much more heavily clustered in apartments and houses, with the other options of dormitories, parents and relatives, fraternities, and sororities much less used.

Table 2 presents sample students' ratings of satisfaction with their housing. Most single students (76%) who lived in apartments were satisfied. Equivalent or higher satisfaction

was expressed by students living in "other" (79%), "own home" (75%), and "fraternity or sorority" (100% satisfied). The most dissatisfied single students lived with parents or relatives (57% satisfied, 24% dissatisfied), in sleeping rooms (50% satisfied, 12% dissatisfied) and in dormitories (61% satisfied, 18% dissatisfied).

Married students' satisfaction with their housing was higher than was single students' satisfaction. Seventy eight percent of married students who lived in apartments reported that they were satisfied, 85% living in their own homes, and 87% of those living in "other" accommodations reported they were satisfied.

Desirability of housing types in the University area

Table 3 presents single students' and married students' ratings of the desirability of apartments in highrise buildings and for different numbers of roommates. For single students, the most desirable housing type was a two bedroom apartment shared with one roommate (58% rated the option as desirable). Nearly as desirable was a one bedroom apartment with no roommates (51% desirable) or one roommate (49% desirable). All other options were endorsed as undesirable by 49% or more of the students. Two of the options rejected by the majority, two bedrooms with no roommates and three bedrooms with no roommates or one roommate, suggest a consideration for the expense of such arrangements for one or two persons. Most other options required sharing bedrooms with another person, or sharing the entire living space with

two or more persons. For example, sharing a three bedroom apartment with three, four, and five roommates was seen as undesirable by 68%, 82% and 89% respectively of the single students in the sample. Likewise, sharing one bedroom with two roommates was seen as undesirable by 78%, sharing two bedrooms with three roommates was seen as undesirable by 70%, and sharing no bedroom with one roommate was seen as undesirable by 64%.

The pattern of married students' desirability ratings for apartment types in highrise buildings was very similar to the pattern for single students, given that married students answered the questions in terms of sharing apartments with roommates in addition to their spouses and children. For them, no roommates was the equivalent of one (or more) roommate for singles. A two bedroom apartment with no roommates was the most preferred option for married students (47% desirable), followed closely by one bedroom apartment with no roommate (39% desirable) and three bedrooms with no roommate (27% desirable). All other options are strongly rejected by married students, with undesirable ratings ranging from 82% to 100%.

Table 4 presents single and married students' ratings of desirability of apartment sizes and numbers of roommates in low-rise buildings. The pattern of desirable ratings is the same for lowrise buildings as for highrise buildings. Single students preferred two bedroom units with one roommate (67% desirable), one bedroom with no roommates (62% desirable), one bedroom and one roommate (57% desirable) and an efficiency with no roommate

(50% desirable). They most strongly rejected a one bedroom with two roommates (75% undesirable), two bedroom with three roommates (63% undesirable), and an efficiency with one roommate (60% undesirable). The married student pattern, allowing for their pre-existing roommate, followed the same pattern. Desirable were two bedroom apartments with no roommate (65%) and one bedroom apartments with no roommate (52%). Married students strongly rejected all other options ranging from efficiency apartments with no roommate (83% undesirable) to one bedroom apartments with two roommates (98% undesirable). Comparing the highrise and lowrise housing preferences, married and single students preferred lowrise building options to highrise building options in all cases. The degree of preference, while not large, was consistent.

Table 5 presents student interest in six alternatives to highrise and lowrise apartment building units. Single and married students were most interested in apartment dwellings in dormitory buildings. Seventy six percent of single students and 61% of married students expressed interest in apartment units with living and sleeping areas, kitchen and bath within on-campus dormitory buildings. Single students expressed a nearly equal interest (75%) in houses rented to at most six persons where each person has his own room. Less desirable but still seen as interesting by sizeable minorities of single students were housing units shared by six or more persons (45% interested), on-campus dormitories (40% interested), sleeping rooms (38% interested), and fraternities and

sororities (30% interested).

Married students showed little interest in options other than apartment units in dormitories. Twenty five percent expressed an interest in houses rented to at most six persons, but 85% or more married students rejected all other options.

Students' ratings of their interest in cooperative housing are presented in Table 6. Thirty eight percent of single students and 45% of married students indicated interest in cooperative housing. Twenty five percent of married students were definitely not interested while only 12% of single students were not interested. Around 50% of both single and married students indicated a willingness to be actively involved in resident managed housing. While 41% of single students were willing to take a passive role in resident management, only 28% of married students were willing to do so.

Discussion

The estimate of 28,800 students who lived or would consider living in the University area yields an estimate of 11,000 students who did not live near the University but would consider doing so. Whether these students would move close to the University would depend on whether housing of the kind they preferred was available and whether it was available at a price they would be willing to pay. The "hard" demand for new housing given realistically possible rental rates and amenities would surely be considerably less than 11,000. The market figure generated by this

study of 28,800 compares to the figure of 20,210 estimated in the Cedar-Riverside Market Survey of 1970. The housing projects planned for 1970 to 1974 (Campus Committee on Housing, 1972) were heavily weighted toward moderately to very expensive units and thus, in all probability, will not be particularly attractive to most of the 11,000 students potentially in the market for the increased supply of housing in the University area.

Students who lived or who would have considered living near the University compared to the general student population were more likely to dwell in apartments, less likely to live with parents or relatives, and, if married, were less likely to own their homes. Students dissatisfied with their housing were likely to live with their parents or relatives, in sleeping rooms or in dormitories.

The most desirable type of housing for single and married students whether in highrise, lowrise or dormitory buildings was two bedroom apartments. Single students preferred arrangements with their own room and with common space shared with one individual. The desirability of housing decreased as students needed to share their room and as they needed to share the common space with more than one other individual. It is important to note that married students and single students saw the same housing alternatives as desirable. Single and married students compete directly with each other for the most desirable space. With an insufficient supply of desirable housing, and provided that

married students have less money to spend on housing than do two single students collectively, married students can be expected to be squeezed out of the market. In this case the need for University sponsored low cost apartment type housing is greater for married students than for single students.

The ratings of alternatives to apartment units in low and highrise buildings pin-point students' preferences for apartments. However, single students considered as desirable a wide variety of other housing including group living, dormitories, fraternities, sororities, and rooming houses. Married students did not see as desirable any alternative to apartments.

Both married and single students indicated a moderate degree of interest in cooperative housing. The greater willingness of single students than married students to adopt a passive role in the management of cooperative housing suggests that single and married student cooperative housing might experience different levels of active participation. The overall preference of students for lowrise apartments suggests that the fill rates of highrise buildings would lag behind that of lowrise buildings near the University.

References

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Twin City Local Address Distribution by Zip Code. University of Minnesota Housing Office Report, 1971.

Table 1

Percentages of Sample and Twin City Campuses Students^a

Living in Housing Types

Housing Types	Single Students		Married Students	
	% Sample ^b	% Campuses ^c	% Sample ^d	% Campuses ^e
Apartment	28	21	63	61
Dormitory	10	8	2	0
With Parent or Relative	5	57	1	4
Fraternity or Sorority	4	3	0	0
Own Home	1	3	13	34
Sleeping Room	2	2	0	1
Other	11	0	18	1
Non-response	38	4	6	0

^aData from Huebner, J.M. Where Students Live 1970-1971. University Housing Office Report, 1971.

$${}^b_N = 434$$

$${}^c_N = 34,370$$

$${}^d_N = 124$$

$${}^e_N = 8,607$$

Table 2
Students' Satisfaction Ratings of their Housing^a

Housing	Single Students				Married Students			
	N	Sat.	Neu.	Dis.	N	Sat.	Neu.	Dis.
Apartment	128	76	10	14	78	78	9	13
Dormitory	41	61	20	18	2	100	0	0
With Parents and Relations	21	57	19	24	1	100	0	0
Fraternity or Sorority	16	100	0	0	0	0	0	0
Own Home	4	75	25	0	13	85	8	8
Sleeping Room	8	50	38	12	0	0	0	0
Other	52	79	10	12	23	87	0	13

^aPresented in terms of percentages of students rating themselves as Satisfied, Neutral or Dissatisfied with their housing

Table 3

Student Desirability Ratings of Apartment Sizes and Number
of Roommates in High Rise Buildings^a

Apartment Size and Number of Roommates ^b	Single Students ^c			Married Students ^d		
	Des.	Neu.	Undes.	Des.	Neu.	Undes.
Efficiency						
No roommates	36	14	49	10	8	82
One roommate	25	11	64	1	2	97
One Bedroom						
No roommates	51	14	35	39	7	54
One roommate	49	12	38	7	2	91
Two roommates	12	9	78	4	4	93
Two Bedrooms						
No roommates	14	8	77	47	9	44
One roommate	58	15	27	12	10	76
Two roommates	39	11	50	3	9	76
Three roommates	22	8	70	2	2	97

Continued on next page

^aPresented by percent of students' ratings of Desirable, Neutral and Undesirable within each size - roommates option. Some row total percentages for single and for married students do not equal 100% due to rounding error.

^bFor married students, roommate is in addition to spouse and children.

^cNumber of single students rating housing options varied from 350 to 421.

^dNumber of married students rating housing options varied from 106 to 120.

Table 3 Continued

Apartment Size and Number of Roommates ^b	Single Students ^c			Married Students ^d		
	Des.	Neu.	Undes.	Des.	Neu.	Undes.
Three Bedrooms						
No roommates	6	5	89	27	14	59
One roommates	13	10	76	10	6	84
Two roommates	32	10	57	2	4	95
Three roommates	20	12	68	0	0	100
Four roommates	10	7	82	0	0	100
Five roommates	7	4	89	0	0	100

^aPresented by percent of students' ratings of Desirable, Neutral, and Undesirable within each size - roommates option. Some row total percentages for single and for married students do not equal 100% due to rounding error.

^bFor married students, roommate is in addition to spouse and children

^cNumber of single students rating housing options varied from 350 to 421

^dNumber of married students rating housing options varied from 106 to 120

Table 4

Student Desirability Ratings of Apartment Sizes and Number
of Roommates in Low Rise Buildings^a

Apartment Size and Number of Roommates ^b	Single Students ^c			Married Students ^d		
	Des.	Neu.	Undes.	Des.	Neu.	Undes.
Efficiency						
No roommates	50	13	38	12	5	83
One roommate	30	9	60	3	0	97
One Bedroom						
No roommates	62	11	27	52	10	38
One roommate	57	11	32	4	4	92
Two roommates	14	11	75	1	1	98
Two Bedrooms						
No roommates	22	11	67	65	8	27
One roommate	69	10	21	14	9	78
Two roommates	43	15	42	5	4	91
Three roommates	29	7	63	3	1	96

^aPresented by percent of students' ratings of Desirable, Neutral, and Undesirable within each size - roommates option. Some row total percentages for single and for married students do not equal 100% due to rounding error.

^bFor married students, roommate is in addition to spouse and children

^cNumber of single students rating housing options varied from 373 to 415

^dNumber of married students rating housing options varied from

Table 5

Student Ratings of Interest in Alternatives to High and Low
Rise Building Apartments^a

Alternative	Single Students ^b		Married Students ^c	
	Int.	Not Int.	Int.	Not Int.
Apartment units with living and sleeping areas, kitchen and bath within on-campus dormitory	76	24	61	39
House rented to at most six persons where each person has own room	75	25	25	75
Group of more than six shared kitchen and bath, common eating and recreational spaces	45	55	15	85
On-campus dormitory	40	60	12	88
Rooming house with sleeping room and shared kitchen	38	62	8	92
On-campus fraternity or sorority house with room and board provided	30	70	4	96

^aPresented by percent of students' ratings of Interested and Not Interested within each alternative. Some row totals for single and for married students do not equal 100% due to rounding error.

^bNumber of single students rating alternatives varied from 357 to 430

^cNumber of married students rating alternatives varied from 106 to 122

Table 6

Students' Ratings of Interest and Willingness to Manage
Cooperative Housing^a

Item	Single Students ^b			Married Students ^c		
	Yes	Neutral Don't Know	No	Yes	Neutral Don't Know	No
		Yes			Yes	
Interested in cooperative housing which is owned and/or operated by residents?	38	51	12	45	30	25
Willing to take an active role in resident managed housing?	41	26	33	42	32	26
Willing to take a passive role in resident managed housing?	41	33	27	28	42	31

^aPresented by percent of students' ratings of Yes, Neutral or Don't Know, and No for each question. Some row totals for single and for married students do not equal 100% due to rounding error.

^bNumber of single students rating items varied from 404 to 427

^cNumber of married students rating items varied from 110 to 115

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SCHOLASTIC APTITUDE AND HIGH SCHOOL PERFORMANCE OF
1973 ENTRANTS TO MINNESOTA COLLEGES AND AREA
VOCATIONAL-TECHNICAL INSTITUTES

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Abstract

Scholastic aptitude (measured by the Minnesota Scholastic Aptitude Test, Form C: MSAT-C) and high school performance (high school rank: HSR) of 1973 entrants to six types of Minnesota post-secondary institutions are summarized. In general, average HSRs and MSAT-C scores are highest for freshmen in four-year private liberal arts colleges, followed in rank order by University freshmen, state college freshmen, private junior college freshmen, community college freshmen, and entrants to area vocational-technical institutes. Similarities and differences between types of institutions and specific institutions within type on these measures are presented and discussed. Females have, on the average, slightly higher MSAT-C scores and considerably higher HSRs than males. HSR and MSAT-C trends for classes entering Minnesota colleges from 1959-1973, the period in which MSAT was used by the Minnesota Statewide Testing Program, are also summarized. HSRs showed a gradual increase through this period while MSAT scores peaked in the late 1960s and have shown a slight decline in the 1970s.

Scholastic Aptitude and High School Performance
of 1973 Entrants to
Minnesota Colleges and Area Vocational-Technical Institutes

For many years, periodic surveys of the ability and high school performance of students entering Minnesota colleges have been made by the Minnesota Statewide Testing Program. The results of research from the 1930s through 1959 are summarized by Berdie, Layton, Hagenah, and Swanson (1962) in Who Goes to College? More recent surveys have been made of 1961 freshmen (Swanson, Merwin, and Berdie; 1968), 1965 and 1968 freshmen (Perry, Swanson, and Joselyn; 1971) and 1971 freshmen (Swanson and Perry, 1974). The information provided by these surveys provides an important historical view of changing trends in the academic aptitude and high school achievement of students entering Minnesota postsecondary institutions.

Each of these previous studies used high school percentile rank (HSR) as the measure of high school performance; however, the indices of ability reported in them have varied. In the earliest years of the Minnesota Statewide Testing Program the College Aptitude Test was used (1926 to 1935); the Cooperative Vocabulary Test was administered briefly in 1935 and 1936; and from 1937 to 1957 the ACE Psychological Examination was given. It, in turn, was replaced in 1958 by the Minnesota Scholastic Aptitude Test (MSAT), a shortened version of the Ohio State University Psychological Examination, Form 23, developed especially for use in Minnesota. In 1973, the Preliminary

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Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT; intended primarily for college-bound students) and the School and College Abilities Test (SCAT; suggested for students planning vocational-technical training or who were undecided on post high school plans) replaced the MSAT, adding an index of numeric aptitude to the verbal measure common to all the previous tests. One aspect of the Minnesota Statewide Testing Program which is particularly helpful to test users is the work done on the relationships of tests to one another; thus, although tests and test forms have changed, the program has provided equivalence tables which permit comparisons over an extended period of years.

The present survey, of fall 1973 entrants to Minnesota postsecondary institutions, reports MSAT-C (Form C) as the ability measure because most of these students were 1973 high school graduates tested either as high school juniors in the 1971-2 academic year or as seniors in 1972-3. The MSAT is a test of verbal aptitude and consists of three types of items: reading, same-opposites, and analogies. It has been administered to a large proportion of Minnesota high school juniors each year and because of this "every student" nature is an extremely useful index for this research.

High school percentile rank (HSR) is perhaps the most important summary indicator of a student's high school performance. Because it combines factors of both ability and motivation, it is also one of the best indices of how a student will do scholastically in his postsecondary educational experience.

The present report provides a summary of the scholastic ability (MSAT-C) and previous performance (HSR) of students entering six different types of Minnesota postsecondary institutions: four-year private liberal arts colleges,

the University of Minnesota (which includes both two- and four-year colleges), state colleges, community colleges, private junior colleges, and area vocational-technical institutes (AVTIs). The next report in this series, involving 1975 college freshmen, will use the PSAT/NMSQT or SCAT as an indicator of student ability. Therefore, this report ends a cycle of reports spanning the period between 1959 and 1973 which used the MSAT to measure aptitude.

Method

In February of 1974 each member of the Association of Minnesota Colleges was contacted by letter and asked to participate in the study by submitting the following information on each of their entering Minnesota freshmen: sex, HSR, and MSAT-C raw score (or college percentile, which can be converted to raw score with a fair degree of accuracy). Most colleges submitted the data requested. Some schools, however, did not maintain MSAT scores in their files because the test was not required for admission or used for placement. In these instances lists of students by high school were requested, and the necessary data were located in testing program files (where data are organized by high school).¹ The request procedure was slightly different for the AVTIs and community colleges. In the latter case, the community college board received the request and provided the information via their computer center at Lakewood Community College. For AVTI data, Dr. David Pucel at the University of Minnesota, who directs a large follow-up project on AVTI students, was able to provide an alphabetic list of 1973 AVTI entrants which included home address. Since this listing contained thousands of

¹ Nancy Brandenburg and Robin Carpenter provided much of the effort required to locate these scores in a large file of computer printouts. Having assisted in this task and realizing its magnitude, the author expresses deep appreciation.

students, a sample of 845 (every fifteenth name) was selected and an attempt was made to locate MSAT scores and HSRs in the Minnesota Statewide Testing program files using the student's address as the key to his or her high school.

All colleges in the Association participated with the exception of Macalester. Table 1 provides information on the completeness of the data obtained. The first three columns give the total number of students entering each type of postsecondary institution and the number and proportion of these students who were Minnesota residents. For example, of the 7525 students entering the University in fall 1973, 7060 (or 93.8%) were Minnesota residents. The last four columns of the table indicate the number of HSRs and MSAT scores available for these Minnesota residents. To use the University again as an example, 6145 students out of 7060, or 87%, had HSRs and 6305, or 89.3%, had MSAT scores. Examining the percentage figures closely, it is clear that the data on the University and state college systems are the most complete and range from 87.0% to 91.3% of the potential scores. These systems either furnished the data or a list of students by high school, which proved to be the most effective means of locating test scores. Data on the two types of private college, two- and four-year, are next most complete, ranging from 74.3% to 82.8%. These colleges submitted data individually, sometimes by high school and sometimes by student address, which is less effective in matching students and scores. Data received from the Community College Computer Center are even less complete; only 58% of the students had MSATs and 68.9% HSRs. Since these schools require neither measure for admission decisions this is not surprising; the lack of complete data, however, is disappointing for the purposes of this study and

Table 1
 Completeness of Data on 1973 Entrants to
 Minnesota Postsecondary Institutions

Type of Institution	1973 Freshmen ^a			Data Available			
	<u>Total</u>	<u>Minnesota</u>		<u>HSR</u>		<u>MSAT-C</u>	
		N	%	N	%	N	%
Private Liberal Arts Colleges	8345	5281	63.3	4237	80.2	4077	77.2
University of Minnesota	7525	7060	93.8	6145	87.0	6305	89.3
State Colleges	5928	5350	90.3	4886	91.3	4779	89.3
Community Colleges	10283	9902	96.3	6826	68.9	5744	58.0
Private Junior Colleges	632	482	76.3	399	82.8	358	74.3
Area Vocational Technical Institutes	16682	16182	97.0	-	-	-	-
(AVTI Sample)		(845)		(530)	62.7	(529)	62.6

^a From "Fall 1973 County of Residence Survey." Minnesota Higher Education Coordinating Commission. April, 1974. Includes full and part time entering freshmen.

results for these colleges should be interpreted cautiously. The smallest amount of data available is for the sample of AVTI entrants. As indicated earlier, student address was the only clue to student high school, and hence to test scores and HSR, for this group. Student address is a relatively poor criterion to use for matching, especially since here the students appeared to be reporting their school address, which probably in many cases was different from home address (i.e., parents' address and, therefore, student's address during high school when he or she would have taken the MSAT). In spite of these limitations, the proportion of data available is high enough to warrant considerable confidence.

Results and Discussion

Means and standard deviations on HSR and MSAT-C raw score for 1973 Minnesota entrants to several types of postsecondary institutions in Minnesota are found in Table 2. Average MSAT-C raw scores for all 1971-2 Minnesota high school juniors, the class from which most of these students were drawn, are included for comparison purposes. (Similar HSR data are not available.) As in previous studies, the highest average HSR and MSAT scores are found in the four-year private liberal arts colleges, followed in rank order by University freshmen, state college freshmen, private junior college freshmen, community college freshmen, and AVTI entrants. In general, this same rank order holds for the data separately by sex. Looking only at averages, however, obscures an important fact--the variability of students within each type of institution and the similarity (or overlap) of students across institutional type. Variability within type can be seen by observing the size of the standard deviation (SD) for each variable. For example, the SD for HSR ranges from 18.54 for private liberal arts females to 25.47 for

Table 2

Means and Standard Deviations on High School Percentile Rank and
MSAT-C Raw Score for 1973 Minnesota Postsecondary Entrants
by Type of Institution and Sex

Type of Institution	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males and Females						
Private Liberal Arts	4237	76.95	20.81	4077	43.74	11.76
University of Minnesota	6145	70.81	23.31	6305	41.82	11.68
State Colleges	4886	65.92	23.42	4779	37.02	11.09
Community Colleges	6826	55.18	25.47	5744	33.61	10.96
Private Junior Colleges	399	59.22	24.00	358	34.20	11.78
AVTIs	530	47.45	25.35	529	29.04	10.26
1971-2 High School Juniors	-	-	-	64805	31.53	12.65
Males						
Private Liberal Arts	1883	72.34	22.51	1867	42.92	11.41
University of Minnesota	3639	68.08	24.13	3713	41.42	11.74
State Colleges	2119	59.14	24.43	2062	36.30	10.79
Community Colleges	3660	48.08	24.88	3114	32.41	10.52
Private Junior Colleges	124	50.80	24.57	117	32.65	11.58
AVTIs	295	40.76	24.02	297	28.19	10.07
1971-2 High School Juniors	-	-	-	32461	30.53	12.49
Females						
Private Liberal Arts	2354	80.65	18.54	2210	44.43	12.00
University of Minnesota	2505	74.78	21.45	2591	42.39	11.57
State Colleges	2765	71.12	21.20	2715	37.56	11.29
Community Colleges	3166	63.39	23.60	2630	35.02	11.31
Private Junior Colleges	275	63.02	22.79	241	34.95	11.84
AVTIs	235	55.86	24.45	232	30.12	10.40
1971-2 High School Juniors	-	-	-	32308	32.55	12.72

community college students (sexes combined). Overlap across institutional types is illustrated graphically in Figures 1.1 and 1.2 which show the mean, plus or minus one-half SD (38% of the cases) and plus or minus one SD (68% of the cases) on HSR and MSAT for students at each type of institution. (The University here is divided into two- and four-year colleges.)

While various types of postsecondary institutions appear, on the average, to have students of diverse performance and ability levels, it should be remembered that each "type" of institution is made up of several schools or colleges. These individual institutions are in many cases different from each other, as can be seen by a close examination of Tables 3.1-3.5, which present the data on individual institutions within each type. (These data are not available for individual AVTIs due to the method of data collection used.) Each college is identified only by a code number to maintain the confidentiality of results.

Table 3.1 gives the means and standard deviations on the 19 private four-year colleges which participated in the study. Within this group, there is considerable variation, and the student populations range from the highly selected (average HSR and MSAT-C raw score of 92.04 and 55.82 respectively) to the moderately selected (HSR about 55 and MSAT-C raw score about 37). The private liberal arts colleges represent the most diverse group of the six types of postsecondary institutions examined in this study.

Results for the colleges and campuses of the University of Minnesota are given in Table 3.2. There is a considerable range of mean HSRs (38.30 in General College freshmen to 83.72 in Institute of Technology freshmen). A similar spread exists in average MSAT-C raw scores, which range from 28.90 in General College freshmen to 47.24 in Institute of Technology freshmen. In general, average scores on both HSR and MSAT-C are lower for the

Figure 1.1
 High School Percentile Rank Distribution
 for 1973 Postsecondary Entrants by Type of Institution

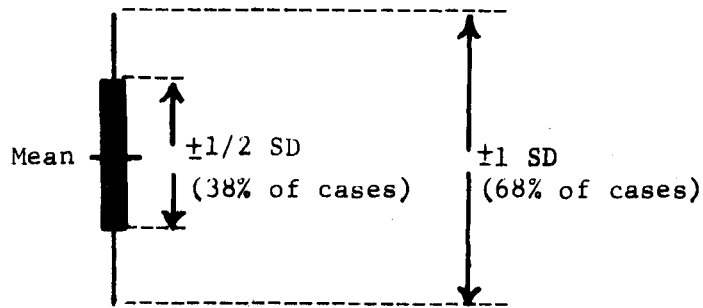
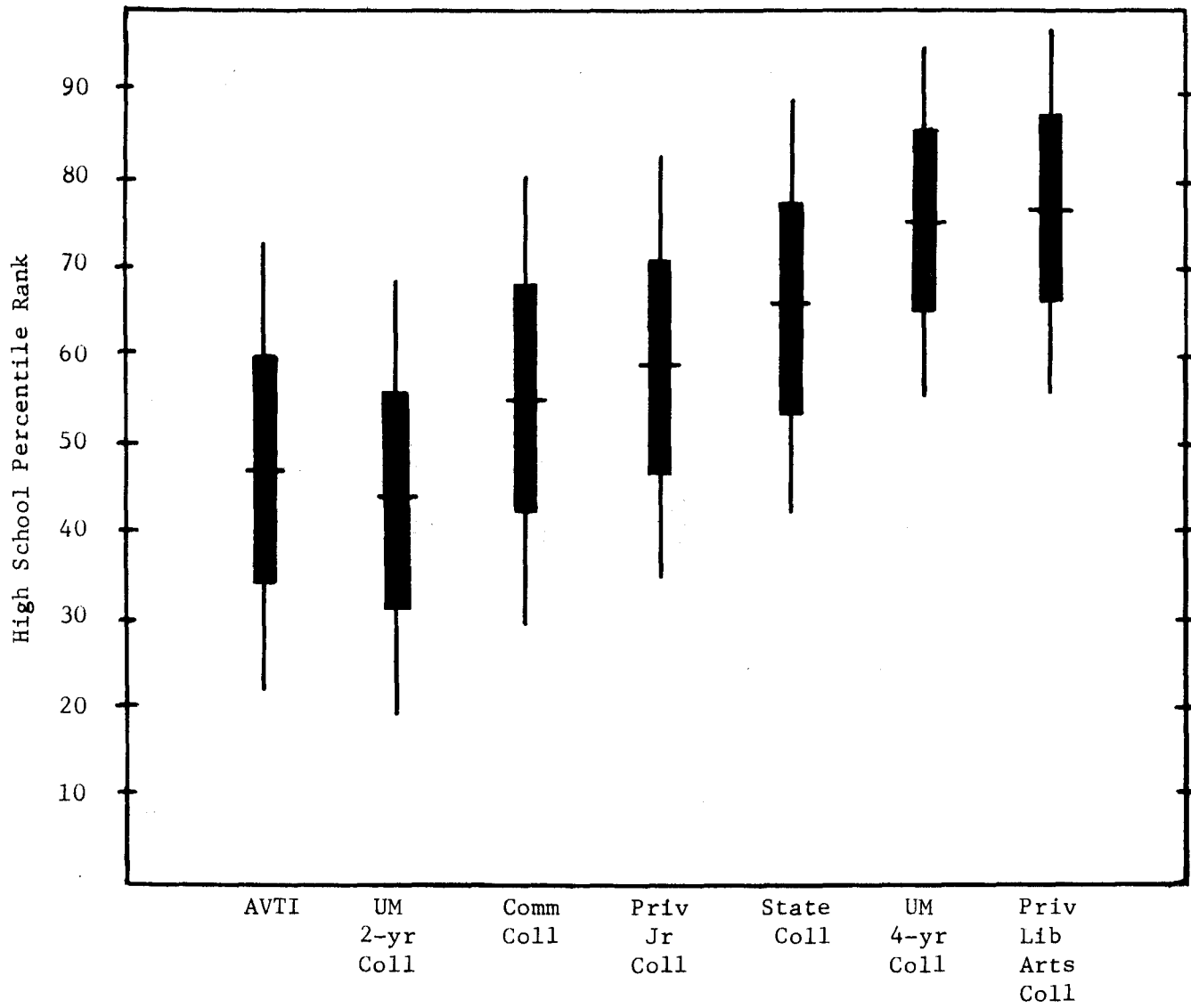


Figure 1.2

MSAT-C Raw Score Distribution
for 1973 Entrants
by Type of Institution

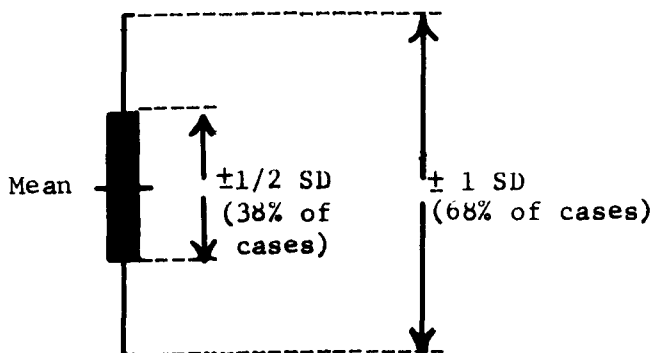
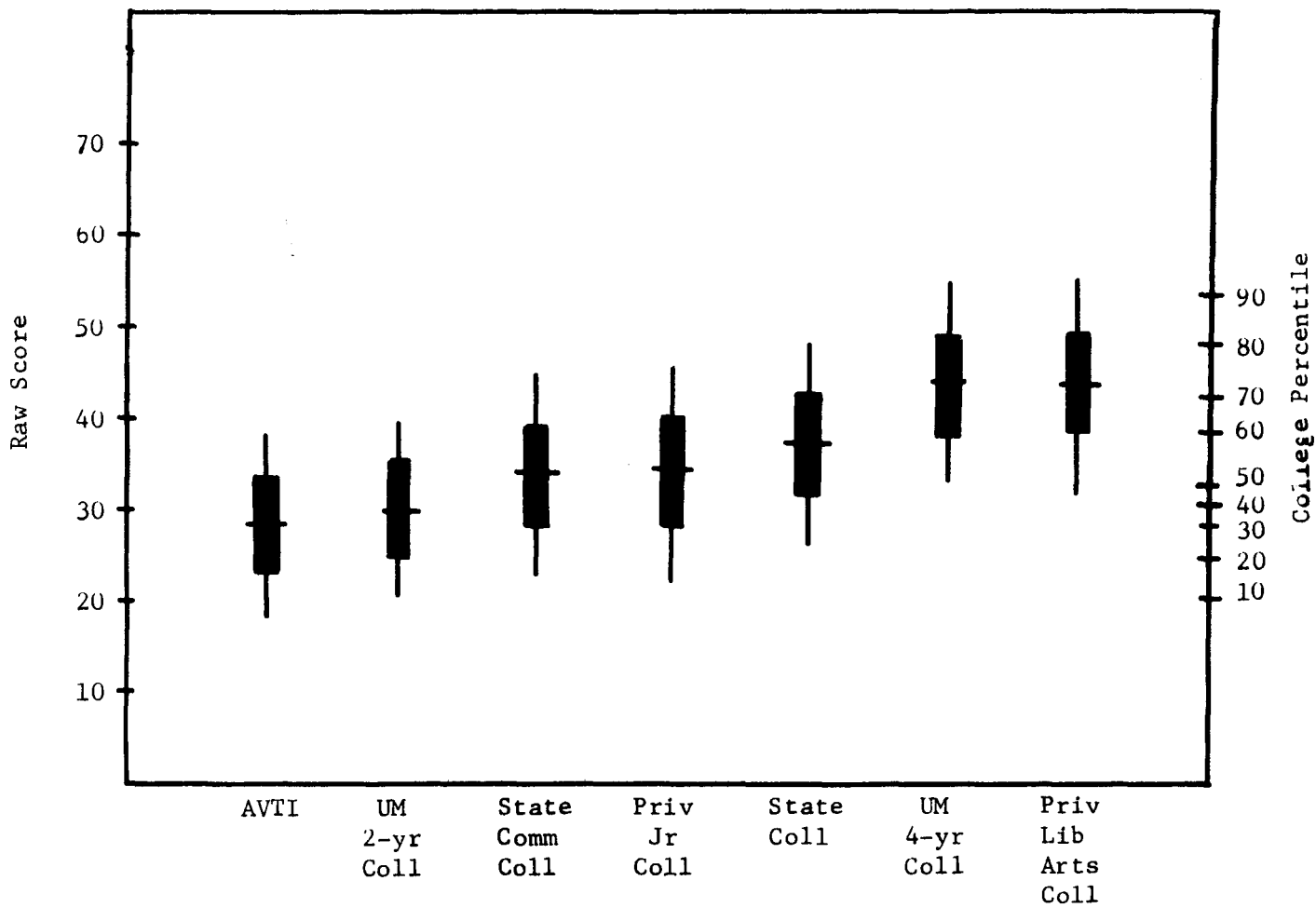


Table 3.1
Means and Standard Deviations
on High School Percentile Rank and MSAT-C Raw Score for
1973 Private Four-Year Liberal Arts College Freshmen by Sex

College Code	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males and Females						
1	334	75.07	20.17	350	43.91	11.14
2	344	65.72	25.17	344	40.55	10.82
3	534	84.17	13.62	522	45.77	10.24
4	400	76.86	19.20	332	41.29	11.38
5	334	79.68	18.70	316	45.90	10.77
6	21	59.76	28.18	20	40.05	12.17
7	394	85.05	15.44	355	48.81	11.36
8	454	77.85	18.98	418	43.96	11.11
9	403	79.60	19.51	379	44.45	11.57
10	186	68.85	25.29	186	40.75	11.43
11	88	77.89	21.85	89	41.57	11.83
12	109	65.35	22.76	109	36.16	12.71
13	81	69.63	22.33	78	38.35	11.61
14	219	74.69	20.21	223	41.94	11.30
15	115	92.04	8.55	133	55.82	9.74
16	33	55.18	27.46	36	37.50	13.09
17	75	69.61	25.52	74	40.70	12.46
18	23	60.70	27.87	24	37.46	14.04
19	90	67.57	23.34	89	37.08	11.62
TOTAL	4237	76.95	20.81	4077	43.74	11.76

Table continued on following page

Table 3.1, continued

College Code	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males						
1	334	75.07	20.17	350	43.91	11.14
2	344	65.72	25.17	344	40.55	10.82
3	233	80.77	15.44	228	44.60	9.24
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	3	54.33	30.99	3	42.33	4.62
7	198	80.46	18.49	176	47.09	11.14
8	202	70.81	20.87	189	42.67	10.63
9	184	75.33	20.92	176	42.98	11.54
10	49	53.00	24.50	49	38.57	10.05
11	38	71.53	25.50	38	40.16	11.04
12	38	59.11	21.96	38	38.03	12.32
13	41	64.34	24.34	40	36.90	12.21
14	83	68.71	22.28	86	40.09	10.90
15	56	89.84	10.26	68	55.81	9.78
16	17	50.65	25.32	18	35.50	13.42
17	49	61.25	25.49	49	37.25	11.19
18	8	42.88	26.63	9	36.33	14.93
19	6	51.83	18.65	6	39.50	15.85
TOTAL	1883	72.34	22.51	1867	42.92	11.41
Females						
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	301	86.81	11.38	294	46.68	10.89
4	400	76.86	19.20	332	41.29	11.38
5	334	79.68	18.70	316	45.90	10.77
6	18	60.67	28.56	17	39.65	13.12
7	196	89.69	9.60	179	50.49	11.35
8	252	83.49	15.15	229	45.02	11.41
9	219	83.18	17.50	203	45.72	11.48
10	137	74.52	23.14	137	41.53	11.82
11	50	82.72	17.36	51	42.63	12.39
12	71	68.69	22.62	71	35.16	12.88
13	40	75.05	18.85	38	39.87	10.89
14	136	78.33	17.97	137	43.10	11.43
15	59	94.14	5.87	65	55.83	9.78
16	16	60.00	29.61	18	39.50	12.83
17	26	85.39	16.88	25	47.48	12.21
18	15	70.20	24.25	15	38.13	13.96
19	84	68.69	23.32	83	36.90	11.37
TOTAL	2354	80.65	18.54	2210	44.43	12.00

Table 3.2

Means and Standard Deviations on
High School Percentile Rank and MSAT-C Raw Score
for 1973 University of Minnesota Freshmen by Sex

Campus	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males and Females						
Twin Cities						
Agriculture	191	78.58	16.18	186	42.09	10.41
Forestry	55	73.35	16.73	54	45.30	8.78
Home Economics	109	81.63	14.89	108	41.22	10.44
Liberal Arts	2693	76.68	17.92	2789	45.69	9.92
Technology	483	83.72	15.84	474	47.24	10.49
General College	488	38.30	21.44	530	28.90	8.75
Duluth	1245	68.16	23.39	1244	40.02	11.16
Morris	455	75.69	19.86	452	42.10	10.70
Crookston	296	47.76	26.16	298	30.23	10.00
Waseca	114	58.82	23.38	153	33.52	10.95
TOTAL ^a	6145	70.81	23.31	6305	41.82	11.68
Males						
Twin Cities						
Agriculture	127	75.94	16.38	124	40.68	93.30
Forestry	45	71.49	16.95	44	44.95	8.82
Home Economics	19	77.89	19.27	19	40.00	10.11
Liberal Arts	1548	74.38	18.76	1584	45.54	9.69
Technology	448	83.37	15.92	440	46.91	10.44
General College	265	34.38	18.68	299	28.34	8.91
Duluth	618	61.68	25.06	618	38.76	11.25
Morris	292	71.21	20.55	289	40.76	11.13
Crookston	213	43.34	24.51	214	30.13	9.74
Waseca	65	57.25	22.01	83	31.61	10.43
TOTAL ^a	3639	68.08	24.13	3713	41.42	11.74
Females						
Twin Cities						
Agriculture	64	83.80	14.41	62	44.92	11.79
Forestry	10	81.70	12.70	10	46.80	8.41
Home Economics	90	82.42	13.66	89	41.48	10.49
Liberal Arts	1145	79.78	16.20	1205	45.89	10.22
Technology	35	88.11	14.04	34	51.59	10.10
General College	223	42.96	23.48	231	29.63	8.48
Duluth	627	74.56	19.61	626	41.26	10.93
Morris	163	83.71	15.63	163	44.45	9.45
Crookston	83	59.08	26.85	84	30.50	10.62
Waseca	49	60.90	24.92	70	35.77	11.12
TOTAL ^a	2505	74.78	21.45	2591	42.39	11.57

^a Total Ns are based on all University data and include approximately 16 students who were not classified as freshmen in any of the 10 listed colleges; thus, the total N is slightly larger than the sum of the individual college Ns.

University's two-year colleges (General College and the technical colleges at Crookston and Waseca) than for the four-year colleges.

Table 3.3 presents similar data for the six Minnesota state colleges that admit freshmen. These colleges with very similar admissions criteria show very little variation in either mean HSR or mean MSAT-C scores. Only 4.3 HSR points and 1.5 MSAT-C raw score points separate the high and low colleges.

Data for the 18 community colleges are shown in Table 3.4. These, like the state colleges, are a relatively homogeneous group. The mean HSR ranges from 50 to 62 and mean MSAT-C from 31 to 39. There is a trend for schools with low mean HSRs to have low average MSAT-C scores as well.

Average HSRs and MSAT-C raw scores for the four private junior colleges in the study are given in Table 3.5. As the table shows, college B has only males and college D only females, so comparing averages across schools is slightly misleading because females tend to score higher on both measures, particularly on HSR. These four colleges appear to be about as similar to one another as the community colleges.

As noted in previous studies, females in each college tend to have higher average HSRs than males, with the difference ranging from 15 percentile points in the state colleges and AVTIs to about six points at the University. Only community college L shows a higher HSR for males.

Sex differences in MSAT raw score are in the same direction. In two community colleges (C and L) and three private arts colleges (6, 12, and 19), males have a slightly higher MSAT raw score. In three of these five instances the number of cases on which the male averages are based is fewer

Table 3.3

Means and Standard Deviations on
High School Percentile Rank and MSAT-C Raw Score
for 1973 Minnesota State College Freshmen by Sex

College Code	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males and Females						
1	1199	65.03	23.92	1242	36.61	11.58
2	1153	67.56	46.42	1204	36.76	10.59
3	741	63.27	25.81	622	36.58	10.76
4	903	67.41	22.87	847	38.06	11.36
5	531	66.89	22.60	524	37.48	10.90
6	358	64.02	23.98	341	36.79	11.11
TOTAL	4886	65.92	23.42	4779	37.02	11.09
Males						
1	500	57.70	24.93	516	36.04	11.30
2	480	62.88	22.42	501	36.66	10.30
3	353	55.27	26.60	290	35.00	10.40
4	410	60.55	24.11	386	37.75	11.01
5	172	58.53	23.48	170	36.21	10.54
6	204	58.16	23.87	200	35.15	10.53
TOTAL	2119	59.14	24.43	2062	36.30	10.79
Females						
1	699	70.28	21.71	726	37.01	11.76
2	673	70.89	20.25	703	36.83	10.79
3	388	70.55	22.74	332	37.96	10.89
4	494	72.98	20.26	460	38.39	11.57
5	358	70.93	21.04	353	38.11	11.03
6	154	71.90	21.71	142	39.07	11.46
TOTAL	2765	71.12	21.20	2715	37.56	11.29

Table 3.4

Means and Standard Deviations
on High School Percentile Rank and MSAT-C Raw Score
for 1973 Minnesota Community College Freshmen by Sex

College Code	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males and Females						
A	641	54.78	25.28	572	31.88	10.45
B	315	61.18	24.11	295	36.02	11.11
C	160	62.06	24.11	167	34.50	10.79
D	216	56.52	26.89	227	35.68	11.75
E	277	60.10	23.92	252	35.44	10.90
F	271	54.72	25.29	239	38.55	11.02
G	761	51.37	24.46	633	31.64	10.52
H	272	61.49	24.56	261	36.38	11.02
I	147	49.93	27.34	116	30.72	10.71
J	699	53.72	25.95	628	31.27	10.55
K	113	57.13	25.36	101	34.03	11.62
L	33	51.91	26.80	3	39.00	7.26
M	629	61.11	23.46	569	36.74	10.22
N	105	50.48	28.44	98	33.38	11.77
O	314	55.07	25.36	312	32.35	11.37
P	179	60.02	23.47	174	33.97	10.97
Q	1335	51.52	25.67	781	32.74	10.52
R	359	53.30	26.07	316	32.03	10.54
TOTAL	6826	55.18	25.47	5744	33.61	10.96

Table continued on following page

Table 3.4, continued

College Code	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males						
A	363	48.67	25.35	326	31.40	10.77
B	145	56.30	25.93	133	35.15	11.08
C	82	57.07	26.16	90	34.88	10.85
D	106	51.64	26.14	112	35.13	11.10
E	128	54.65	22.75	113	34.45	10.99
F	128	44.76	24.92	113	35.95	11.21
G	467	45.77	23.18	398	30.50	9.66
H	168	56.73	25.06	162	35.04	10.77
I	55	43.00	27.83	44	30.55	10.13
J	368	45.64	25.13	329	30.47	9.90
K	66	49.30	23.83	61	31.69	10.79
L	15	53.47	26.54	1	42.00	0.00
M	289	51.59	22.75	271	35.73	9.98
N	79	44.86	25.84	74	31.46	10.23
O	182	49.15	24.82	181	31.02	10.50
P	94	53.82	22.47	91	32.15	8.97
Q	737	43.42	24.16	454	31.33	10.21
R	188	46.15	25.28	161	31.39	10.00
TOTAL	3660	48.08	24.88	3114	32.41	10.52
Females						
A	278	63.07	22.68	246	32.61	9.92
B	170	65.34	21.58	162	36.74	11.09
C	78	67.31	20.47	77	34.07	10.70
D	110	61.23	26.76	115	36.21	12.33
E	149	64.79	23.90	139	36.25	10.76
F	143	63.63	22.09	126	40.88	10.30
G	294	60.27	23.79	235	33.56	11.57
H	104	69.17	21.61	99	38.56	11.08
I	92	54.07	26.18	72	30.83	11.05
J	331	62.71	23.79	299	32.16	11.16
K	47	68.13	23.27	40	37.60	11.93
L	18	50.61	26.94	2	37.50	8.50
M	340	69.19	20.87	298	37.65	10.34
N	26	67.54	29.18	24	39.29	14.02
O	132	63.24	23.78	131	34.20	12.24
P	85	66.88	22.62	83	35.96	12.51
Q	598	61.49	23.92	327	34.68	10.64
R	171	61.16	24.63	155	32.69	11.04
TOTAL	3166	63.39	23.60	2630	35.02	11.31

Table 3.5
Means and Standard Deviations
on High School Percentile Rank and MSAT-C Raw Score
for 1973 Minnesota Private Junior College Freshmen by Sex

College Code	HSR			MSAT-C		
	N	Mean	SD	N	Mean	SD
Males and Females						
A	54	62.13	22.40	47	38.45	14.56
B	16	58.19	30.35	16	44.06	11.95
C	157	55.06	25.17	158	32.51	10.99
D	172	62.21	22.34	137	33.53	10.78
TOTAL	399	59.22	24.00	358	34.20	11.78
Males						
A	21	62.91	21.58	16	38.31	10.82
B	16	58.19	30.35	16	44.06	11.95
C	87	46.52	23.02	85	29.44	9.86
D	-	-	-	-	-	-
TOTAL	124	50.80	24.57	117	32.65	11.58
Females						
A	33	61.64	23.23	31	38.52	16.32
B	-	-	-	-	-	-
C	70	65.67	23.78	73	36.10	11.22
D	172	62.21	22.34	137	33.53	10.78
TOTAL	275	63.02	22.79	241	34.95	11.84

than 7, which casts doubt on their reliability. Sex differences in MSAT, in general, are less pronounced than those seen with HSR and range with few exceptions from 1 to 4 raw score points. Considering that the magnitude of these average MSATs ranges from around 30 to 40, in junior percentile terms these sex differences amount to at most 4 percentile points.

These sex differences are most likely a reflection of the common finding that women in general have considerably higher HSRs and slightly higher MSATs than men rather than a reflection of admissions policies.

As this is the last scholastic aptitude survey to report MSAT scores, it is appropriate to examine trends in the ability and previous performance of students entering various types of Minnesota postsecondary institutions during the "MSAT period" of the program. These trends are shown in Figures 2.1 (HSR) and 2.2 (MSAT-C raw scores) for seven freshmen classes from 1959 to 1973. Average HSRs and MSATs are shown for four types of institutions: private liberal arts colleges, the University, state colleges, and junior/community colleges. The latter group combines data for both private and state junior colleges. Data for previous years are drawn from earlier scholastic aptitude surveys. For the MSAT table, all MSAT-A (Form A) means were equated to MSAT-C scores using the standard norm tables. Additionally, data on all high school juniors for the class from which most college freshmen came (e.g., 1957-8 juniors for contrast with fall 1959 freshmen) are presented (Swanson, 1973).

Analyzing trend data of this kind is difficult due to the complexity of the post-high school educational system, but some general conclusions can be drawn.

Figure 2.1

Average High School Percentile Ranks for Freshman Classes
in Minnesota Postsecondary Institutions: 1959-1973

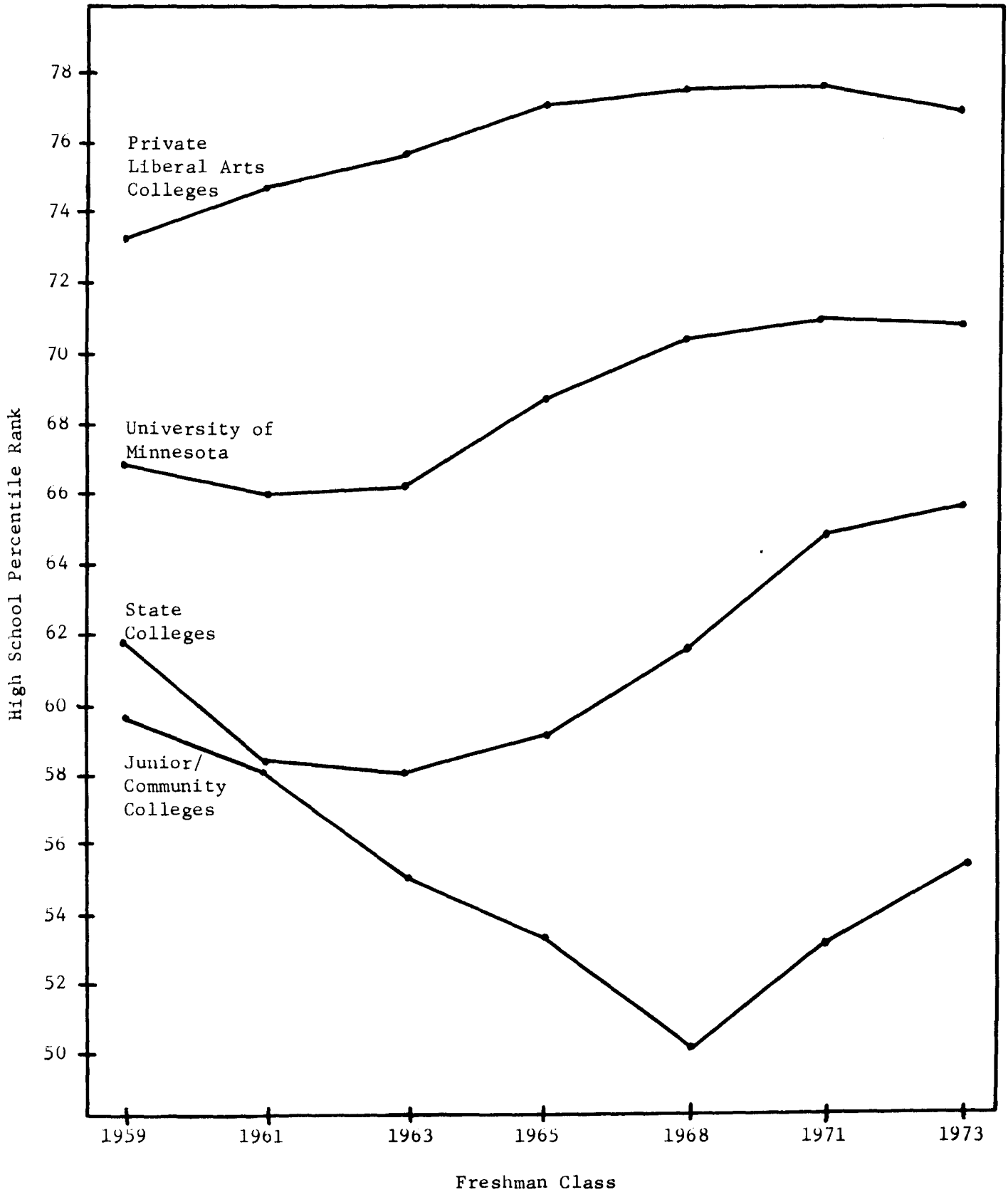
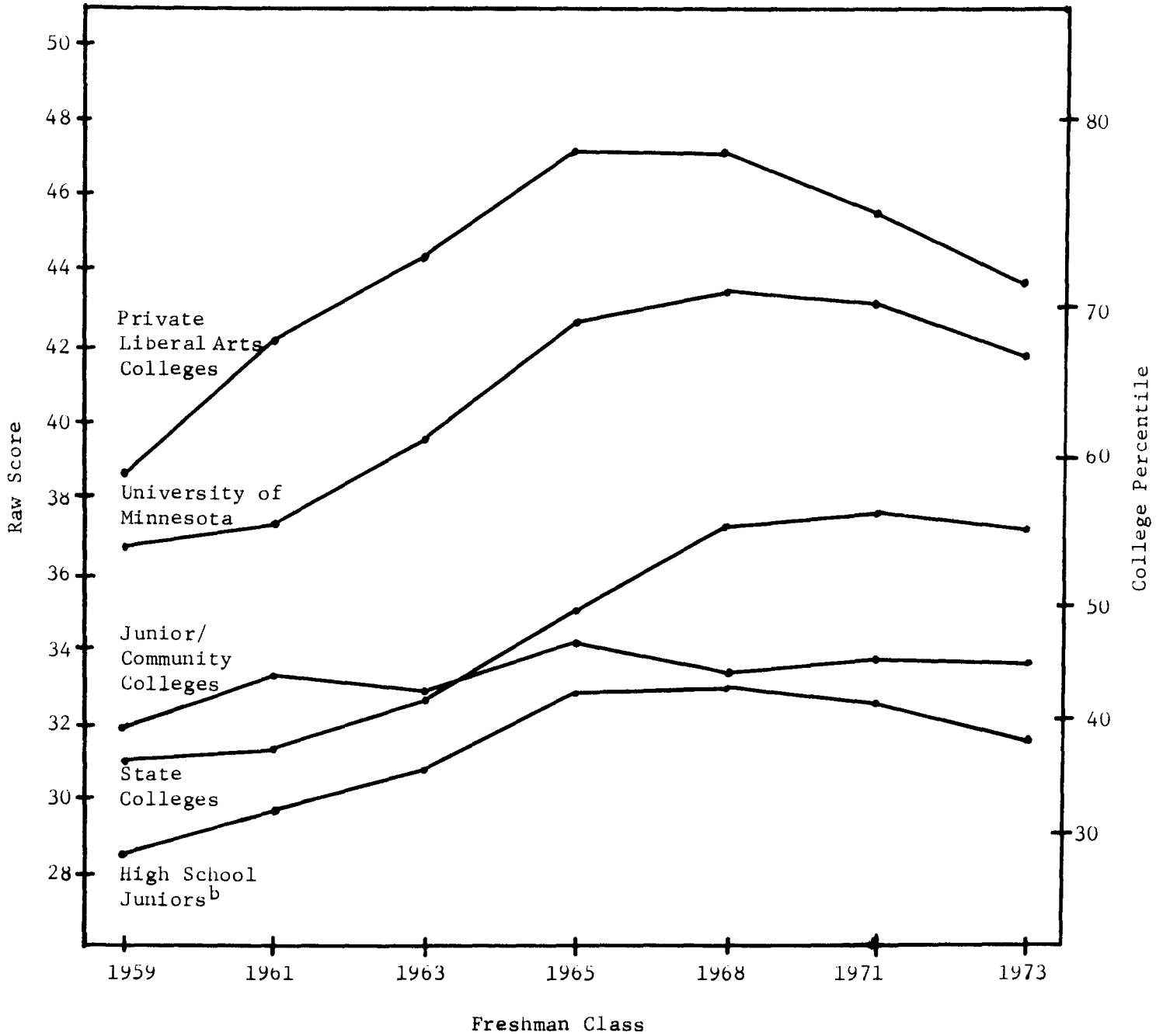


Figure 2.2

Average MSAT-C Raw Scores^a for Freshman Classes
in Minnesota Postsecondary Institutions: 1959-1973



^a MSAT-A Scores from 1959 - 1965 have been converted to the equivalent MSAT-C scores.

^b High School Junior data shown for comparison are for the graduating class from which most of the freshman group were drawn; thus, the 1959 juniors comparison figure is for 1957-1958 high school juniors.

For liberal arts colleges, state colleges, and the University, average HSRs have increased gradually from about 1961 to 1971. By 1971 this increase appears to have leveled off and for the University and private liberal arts colleges HSR appears to be declining slightly. The junior and community college data show a much different picture. From 1959 to 1968 there is a steady drop, amounting to a total of 10 points, in the mean HSRs of students entering this type of college. After 1968 average HSRs increase until they have regained over half the previous loss.

The picture for MSAT scores is rather different than for HSRs. For MSAT, a marked increase in average MSAT scores is seen in all groups, including the relevant junior comparison group, from 1959 to 1965, when the scores began to level off. From about 1968 the scores appear to be dropping significantly.

Explaining these changes in HSR and MSAT is not a simple matter. Complicating factors include changing college admissions standards, the sudden growth in new types of postsecondary institutions in the late 1960s, and fluctuating national "climate." One type of national factor, the interest in higher education and science training in particular which grew in the Sputnik era, has been invoked by many to explain the increase in test scores seen in the 1960s. This sort of increase was noted by many testing programs and involved a variety of verbal and mathematics aptitude tests. Perhaps later disillusionment with tests and education can explain the more recent drop. (In any case, the drop in scores appears in the high school as well as college population and does not appear to be caused by the failure of bright students to take the tests, as might be supposed. A more detailed discussion of the fluctuations in MSAT scores for Minnesota high school

students may be found in Swanson [1973].)

The sudden growth of state junior colleges in the late 1960s is possibly responsible for the uneven curves seen for MSAT and the drop and subsequent recovery in the HSR rank curves for this group. These colleges, whose concept of open admission was somewhat new to students, counselors, and educators, have been going through a period of self discovery, and as their role becomes clearer one might expect to see a more stable curve in both measures from year to year.

In addition, the growth in postsecondary technical training through area vocational-technical institutes has perhaps had some impact on the average abilities of college freshman classes; however, the exact relationship is by no means clear and must await further research.

The impact of changing college admissions standards on these trends is also unclear. It is possible that colleges would tighten up admissions policies during a time of enrollment increases and pressure on classrooms, either through publicized changes in admissions standards or through internal measures such as more strict review of marginal candidates. As the number of students going to college decreased, colleges might have loosened admissions policies once again.

The detailed analysis of such trends is, of course, beyond the scope of this paper; however, the topic is an interesting one and the author would welcome comments on it from readers.

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office for student affairs RESEARCH BULLETIN

U of M Student Attendance Patterns:
The Perspective of a Decade 1964-73

Glenn L. Hendricks

Student Life Studies

Abstract

An examination of attendance patterns of entering University of Minnesota freshmen over the past ten years indicates a remarkable stability in the percentage rates of student persistence. A comparison with other earlier data indicates that these rates have not changed in half a century even though the mission of the institution and the size of the student population has considerably altered.

U of M Student Attendance Patterns

The Perspective of a Decade 1964-73

Glenn L. Hendricks

Student Life Studies

University of Minnesota

Over the past half century, student attendance rates at the University of Minnesota have remained surprisingly stable (Hendricks, 1970) in spite of a marked change in the nature of students and the mission of the University in society. Attempts to systematically follow student attrition (or conversely persistence) rates at the University of Minnesota in the last half century have been hampered by the lack of truly comparable data.

The computerization of student records during the past decade, however, has allowed for a much closer monitoring of many measurable student characteristics including attendance patterns. One annual report generated by the Office of Admissions and Records examines attendance patterns of entering cohorts of freshmen over a five year span of time. The attached tables are a reordering and assemblage of these A & R reports over the past decade. They demonstrate the remarkable stability of attendance which other studies with less than total information have also indicated (see Table 2). Individual life histories cannot be accounted for in such conglomerate statistics, thus this information does not refute the claim that this generation of students tend to drop in and out of school with more frequency than previously.

However, in aggregate form the attendance pattern shown here does not indicate this.

The reader can see, for instance, that in the fall of 1964, 9081 new freshmen enrolled at all schools within the University of Minnesota system. Winter Quarter (the second registration of this cohort) eight percent did not return while one percent changed their colleges of registration. Spring Quarter of that first year 16% did not re-register (we have no way of determining from the data if some staying out the previous quarter did return and took the place of others staying out Spring Quarter). The beginning of the second (sophomore) year (fall of 1965), 30% of the original cohort did not attend, while 6% of those re-registering did so in a different college than the one originally chosen. The sorting out by students of their academic interests and choices has begun.

At the beginning of the third academic year, 46% did not return - at least for that quarter. By the beginning of year four in the fall of 1967 (nominally as seniors) 55% did not return and of the 45% re-registering, a different college has been chosen by 17%. This shift in college of registration usually represents a distinct change of academic choice. However, significant numbers have made changes of major within the original college (from psychology to economics, for example, all within CLA), changes which do not appear in the data. Five years later (fall 1969) after originally entering the University in what is usually

socially designated as a four year program, 22% of the original cohorts were still actively participating within the University system as a registered undergraduate student.

While data is available for all colleges within the system, we have selected to present only the four largest units. All figures represent percentages of the total individuals registering fall quarter of the years 1964 through 1973. Scanning the bottom line of each time unit, it is possible to see the rates of non-return at a similar point in a cohort's University career over this past decade.

Of great interest is the fact that 25% of the entrants are still registered at the beginning of the fifth year. Public decision makers, whether they be curriculum planners, financial aid givers or selective service officials, who would insist that a student undergraduate career is typically only of four years duration must become aware of the significant number who, for whatever reason, have a longer span of time in an undergraduate career.

A change of even a single percentage point in these data, as well as the dramatic drop in the total number of entering freshmen each year has for certain purposes significant implications for the institution. We do not purpose to denigrate the importance of such information. However, with a longer perspective and converting absolute numbers to relative percentages one detects what appears to be some homeostatic operation at work.

During the decade these figures cover, significant social, economic and political events took place which have been used at various times to explain differing attendance patterns in higher education. While they may be significant factors in shifts in percentage points at a particular period of time, these events seem to have only short run affects on the overall systemic rates.

This data is limited to the careers of those who remain within the University system as undergraduates. We have no way of knowing, for instance, how many of those listed as "not attending" have in reality transferred to other institutions. This table also does not indicate the number of those receiving baccalaureate degrees continuing as graduate or professional school registrants at the U of M or elsewhere.

In recent years a considerable number of students enter the University system as transfer students. An interesting and important piece of information would be a comparison of entering freshmen attrition rates with those of other than U of M tertiary school experience.

The University's computerized record system did not, until a few years ago, enter information of graduation into the computerized student record systems. Thus we do not know from existing computer data the attrition is due to graduation and that which is simply dropping out of the system.

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Table 1

COLLEGE	AFHE											GENERAL											IT										
	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73			
Freshmen	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73			
Fall (total number)	524	629	574	508	481	528	540	451	456	441	1648	1461	1369	1243	1086	1107	1084	881	829	788	905	970	766	780	702	826	894	586	468	577			
Winter (percentages)																																	
Same College	92	92	92	91	90	89	93	90	93	92	87	86	88	86	82	81	79	80	83	88	86	90	91	91	89	93	87	88	90	94			
Another	2	2	1	2	3	1	1	1	1	2							1	1			9	5	4	4	5	3	5	3	2	1			
Not Attend	7	6	7	7	7	9	6	9	6	6	13	14	12	14	17	19	21	19	17	12	6	5	5	5	5	4	8	9	8	5			
Spring																																	
Same College	77	82	84	87	83	80	86	82	87	84	75	77	77	77	73	71	70	69	75	77	71	76	80	80	83	82	80	80	84	87			
Another	1	1	2	2	4	2	3	1	2	3						1	1	1	1	1	13	10	9	10	9	8	9	5	5	3			
Not Attend	21	16	13	11	13	18	11	17	12	13	25	23	23	23	27	28	29	30	24	23	16	13	11	10	8	10	11	15	12	10			
Fall (2nd year)																																	
Same College	64	68	70	73	71	71	71	66	71	70	57	57	62	63	58	56	50	48	48	51	58	62	63	66	69	67	62	65	71	73			
Another	5	4	5	6	7	4	6	5	4	8	3	5	3	4	5	7	6	7	7	7	17	12	16	16	13	14	14	9	6	7			
Not Attend	31	28	25	21	22	25	22	29	25	22	40	38	35	33	37	37	44	45	45	41	25	26	21	18	16	19	24	26	23	20			
Fall (3rd year)																																	
Same College	47	51	49	54	50	51	52	50	52	26	26	27	22	23	23	23	18	23	41	43	48	52	56	50	46	51	57						
Another	10	9	11	11	14	9	10	10	16	8	11	14	18	16	17	14	15	14	22	19	23	20	17	22	19	15	13						
Not Attend	43	41	40	36	36	40	38	40	32	66	63	59	60	61	59	63	67	63	37	38	30	28	27	28	35	34	30						
Fall (4th year)																																	
Same College	40	40	41	43	44	40	38	39	4	4	4	7	9	7	8	11	34	38	40	46	47	41	40	45									
Another	11	12	11	12	15	13	14	17	10	13	16	17	14	19	19	15	22	19	21	21	19	22	22	18									
Not Attend	48	48	48	45	41	47	48	43	86	82	79	75	73	74	74	74	44	43	39	33	34	37	38	37									
Fall (5th year)																																	
Same College	20	17	14	15	15	13	15	3	3	3	3	4	3	4	12	14	16	16	16	18	17												
Another	10	10	10	9	10	12	12	7	9	11	12	11	14	14	15	14	13	17	15	19	18												
Not Attend	70	74	75	76	75	75	73	90	88	86	85	84	83	82	73	72	71	66	70	63	65												

COLLEGE	CLA											ALL UNIVERSITY										
	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73		
Freshmen	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73	1964	-65	-66	-67	-68	-69	-70	-71	-72	-73		
Fall (total number)	4253	4452	4483	4314	4353	3965	3810	3745	3406	3232	9081	9678	9101	8675	8550	8468	8403	7673	7637	7439		
Winter (percentages)																						
Same College	92	92	91	91	90	89	90	90	91	93	91	91	91	90	89	89	89	90	90	92		
Another	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Not Attend	7	7	8	8	9	9	9	9	9	7	8	8	8	9	10	10	9	10	9	7		
Spring																						
Same College	82	84	84	84	85	82	83	82	85	83	82	80	83	83	83	81	82	81	83	81		
Another	2	2	1	1	1	2	1	1	1	1	2	3	2	2	2	2	2	1	1	2		
Not Attend	17	14	15	14	14	16	16	16	14	15	16	18	15	15	15	17	16	18	16	17		
Fall (2nd year)																						
Same College	62	67	69	68	70	69	66	64	67	67	64	61	67	67	67	68	63	63	64	62		
Another	7	5	5	5	4	6	5	6	5	6	6	7	6	6	5	7	7	6	5	6		
Not Attend	31	27	26	27	26	26	29	31	27	27	30	32	27	27	27	26	30	31	30	31		
Fall (3rd year)																						
Same College	36	41	42	41	42	40	37	39	42	40	36	41	41	42	40	38	38	39				
Another	17	18	17	18	18	19	17	17	19	14	15	16	16	16	16	15	15	16				
Not attend	47	42	41	41	41	41	46	44	40	46	50	43	43	42	44	47	48	46				
Fall (4th year)																						
Same College	26	30	31	28	29	30	29	29	29	25	30	31	31	30	29	29						
Another	19	21	20	22	22	22	21	23	17	16	17	18	19	18	18	18						
Not Attend	55	49	49	49	48	48	50	48	55	59	53	51	51	52	53	53						
Fall (5th year)																						
Same College	11	12	13	13	12	13	14	12	10	12	12	12	12	12								
Another	11	12	12	11	13	14	14	10	10	11	11	11	13	13								
Not Attend	78	76	75	75	75	73	72	78	80	77	77	77	75	75								

Same College: registration in same college unit
 Another: registration in another college of U of M
 Not Attend: no registration at U of M, registration at some other institution possible
 CLA: College of Liberal Arts
 AFHE: College of Agriculture, Forestry, and Home Economics
 General: General College
 IT: Institute of Technology

Table 2

Variation in Graduation Rates According to
Selectivity of Institutions

Type of Institution	Percentage of students graduating within 4 years at initial institution	Percentage graduating within 10 years at some institution	Percentage of all 1st time, full-time enrollees, fall 1969
Fifteen most selective private universities	80-85	90-95	1
Large state universities	35-45	60-70	15
State colleges	15-25	35-50	21*

* a number of other categories, i.e. "less selective private", and junior colleges have been omitted from this table.

Source: Newman, Frank et al.

Report on Higher Education
U.S. Office of Education, 1971

TABLE II

Entering U of M Freshmen

Number	In all Colleges		In SLA	In (IT,SLA,Ag.Ed)	(Ag.Ed,IT,SLA)	(CLA	IT	AFHE	Gen.)*	Total
	Fall 1920	Fall 1932	Fall 1936	Fall 1937	Fall 1952	Fall 1966	Fall 1966	Fall 1966	Fall 1966	U of M
	1657	1662	1608	2144	2450	4483	766	574	1369	9101
Entering Percentage	100	100	100	100	100	100	100	100	100	100
1st yr Q2						92	95	93	88	92
Q3						85	89	86	77	85
all year II	63.5	69.5	79.3	67.2		74	79	75	65	73
all year III	51.4	59.6	59.6	55.9		59	71	60	43	57
all year IV	47.0	51.9		46.3		51	61	52	20	47
percentage granted degrees in 4 yrs or completion of 4 yrs of college in 4 yrs	24.6	27.3	23.1	27.8		*These figures represent total number remaining in the university system although they may have transferred to other colleges.				
enrolled end yr IV but not completing 4 yrs work	19.9	19.0								
graduated or continuing at end of 4 yrs	44.5	46.3			50.9					
percentage granted degrees end of 6 yrs			30.2	37.1						
all year V						25	29	24	14	23

Sources: Keller and Eckert (1950);
Darley, J. G. (1962);
U of M Office of Records and Admissions (n.d.)

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office for student affairs RESEARCH BULLETIN

STABILITY AND REALIZATION OF POST-HIGH SCHOOL PLANS

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Abstract

Post-high school plans expressed by 1971 Minnesota juniors were compared with the plans expressed by the same students as seniors and with what the students actually did after high school. The results show that:

1. Changes in plans from the junior year to the senior year are about as frequent as changes between junior-year plans and actual activities.
2. Junior-year plans are followed only slightly less often--by about three-fifths rather than two-thirds of students--than senior year plans a decade earlier.
3. About 80 per cent of students who say as juniors that they plan to attend college actually do so, and the proportion who attend is about the same as the proportion originally planning to do so.
4. Junior year plans to attend vocational and other non-collegiate schools are the least stable from junior to senior year, and the proportion of students with such plans decreases from the junior to the senior year while the proportion planning to get jobs goes up.
5. As was found in earlier studies the proportions of students who entered various post-high school activities conformed closely to the proportions of seniors with such plans.
6. More specific plans, such as choice of major field and choice of educational institution, were less stable and less predictive of what students actually did than general plans.
7. About 35 per cent of students entered the type of post-high school educational institution they chose as juniors and 27 per cent entered the specific institution they chose.
8. Plans to attend a state junior college were more frequently followed than other institutional choices.

Stability and Realization of Post-High School Plans¹

Each year Minnesota high school juniors report on their plans after high school as part of the Minnesota Statewide Testing Program. They indicate their general plans--college, job, military service, etc.--their choice of college or vocational-technical institute and major field of study if they plan further education, and their expected occupation. For many students the questions come before they have given them much thought. To what extent do the responses indicate what the post-high school activities of students--either specific individual students or overall proportions--will really be?

This question was investigated in two earlier follow-up studies of the plans of 1950 Minnesota high school seniors (Berdie, 1954) and 1961 Minnesota high school seniors (Berdie and Hood, 1965). They found that slightly more students in 1961 (67%) than in 1950 (64%) fulfilled their plans and that there was little difference between boys and girls in this regard. Significantly fewer farm students than nonfarm students fulfilled their plans, however. Even though only about two-thirds of the students actually followed their senior-year plans, the proportions of students who entered various activities conformed closely to the proportions who had planned to enter those activities.

A sample of Minnesota high school seniors of 1971 was surveyed with a questionnaire similar to the one used with 1950 and 1961 seniors. The questionnaire focused on post-high school plans and on student backgrounds and attitudes believed to be related to such plans (Perry, 1974). The actual post-high school activities of many of these students could be determined from information supplied by Minnesota colleges for the periodic survey of scholastic aptitude in Minnesota colleges conducted by the Statewide Testing Program (Swanson and Perry, 1974), or from the Vocational Follow-up System operated by the Trade and Industrial Education Department at the University of Minnesota. To supplement this information for students not included in either survey these students were sent a short post-card questionnaire requesting them to report their post-high school activity. Information was thus available at three points--junior year, senior year, and one year after high school--to answer such questions as: How stable are students' plans from 11th to 12th grade? To what extent do students realize their 11th grade plans? To what extent do students realize their 12th grade plans? How has the degree of realization of plans changed since 1961? The present report is concerned with the first two questions. The last two will be investigated in subsequent analyses.

Procedures

Half of Minnesota's high schools--every other one on an alphabetical list by district--were asked to participate in the survey of seniors' post-high school

¹Carol Swenson was responsible for much of the administration and data tabulation for this study. The assistance of Francis Alozie and Kin Lun also is greatly appreciated.

plans. Approximately 42 per cent administered the survey to a total of 24,581 students. The follow-up sample was drawn from the same schools that were asked to participate in the senior survey. Every fifth name was selected from the file of students in these schools who had participated in the Statewide Testing Program as juniors, regardless of whether they had completed the senior questionnaire. Selection of every fifth name from half the schools was intended to provide a 10 per cent sample. The procedure actually produced a total of 7,334 --slightly more than 10 per cent of 1971 Minnesota graduates. The sample was almost equally divided between boys and girls and, as the first four columns of Table 1 show, nearly identical to the tested population of juniors in percentage distribution of expressed post-high school plan.

Table 1

Composition of Population and Follow-Up Sample
by Sex and Junior-Year Plan

	<u>Population Percentage</u>		<u>Sample Percentage</u>		<u>Percentage of Post-Card Returns</u>		<u>Weighted Sample Percentages</u>	
	Male	Female	Male	Female	Male	Female	Male	Female
Attend College	39	40	39	39	40	45	39	39
Attend AVTI	17	12	16	11	29	32	16	11
Bus. or Trade School	4	6	4	5	25	31	4	5
Other School	1	7	1	7	19	30	1	7
Military Service	10	1	10	1	23	18	10	1
Get a Job	4	8	4	8	23	23	4	9
Other Plans	4	4	4	4	20	24	4	4
Unknown	21	22	22	24	26	30	22	24
Total %					30	34	51	52
Total N			3,685	3,649	767	876	1,870	1,898

From information available from Minnesota colleges and vocational-technical institutes about 1,100 boys and 1,000 girls were identified as enrollees in fall 1971. The post card questionnaire containing two items was sent to the remaining students. One item requested them to report their general type of post-high school activity--college, business or trade school, military service, etc.--using the same set of response options as used on the senior-year questionnaire; the second asked them to give the name of the post-high school educational institution, if any, they attended. No follow-up was attempted, and only about one-third of the questionnaires were returned. The response rate differed considerably by original plan--highest for those who had planned on college, lowest for boys who had planned "other school" or "other plans" and for girls who had planned military service. These percentages are given in the third pair of columns in Table 1. Students whose post-high school activities were determined from enrollment records had, in effect, a 100 per cent response rate. Direct combination of results from the two sources would therefore spuriously weight the results more heavily for those who had entered college or vocational school. To alleviate this problem the percentages of post card return by sex and by junior-year plan were used to estimate the response frequencies that would have been obtained if the response rate had been 100 per cent. These frequencies were then combined with those

obtained from enrollment records. The combined sources provided data on half the sample. As the last pair of columns in Table 1 indicate, the weighted representation of junior year plans in the final results is nearly identical to their representation in the original sample. Adjustment of response rates by original plan does not, of course, adjust for unequal response rates that may be associated with actual post-high school activity independent of original plan.

Stability of Plans from Junior to Senior Year

In Table 2 are shown the percentages of students with each junior-year plan who indicate various senior-year plans. Only students who expressed a plan in the senior year are included. About one-fifth of these expressed no plan as juniors. Among boys 57 per cent and among girls 60 per cent of the students who expressed a plan as juniors reported the same plan as seniors. The stability of different plans varied greatly: four out of five plans to attend college remained the same whereas only one in ten plans to attend business or trade school was unchanged. If plans for all types of non-collegiate post-secondary training are grouped together, 46 per cent of both boys and girls with such plans as juniors report the same plans as seniors. Although the percentages of students with each plan are quite similar in the junior and senior years, there is a shift away from all types of plans for further education to plans for getting a job.

Table 2

Stability of Post-High School Plan from Junior to Senior Year

Junior-Year Plan	Senior-Year Plan								Total N	%	Total % of Those with Plans
	College	AVTI	Bus. or Trade School	Other School	Military Service	Job	Other Plans				
	Males				Females						
Attend college	83	5	1	1	2	4	3	4,307	40	50	
Attend AVTI	13	45	4	1	7	21	9	1,984	18	23	
Bus. or Trade School	16	32	9	2	7	25	10	446	4	5	
Other School	42	11	3	14	10	16	5	102	1	1	
Military Service	13	15	2	1	29	30	10	987	9	11	
Get a Job	6	14	2	*	7	59	11	431	4	5	
Other Plans	13	17	2	1	8	26	34	437	4	5	
No Plans	45	16	2	1	6	19	10	2,172	20		
Total	N	5,153	1,884	249	110	767	1,827	876	10,866		
	%	47	17	2	1	7	17	8	100	100	
		Males				Females					
Attend College	78	6	2	5	*	6	3	4,437	41	53	
Attend AVTI	15	40	4	5	1	27	8	1,429	13	17	
Bus. or Trade School	20	27	10	4	*	32	7	573	5	7	
Other School	18	16	10	18	*	27	10	720	7	9	
Military Service	17	16	8	8	21	24	5	75	1	1	
Get a Job	7	12	2	2	1	58	17	804	8	10	
Other Plans	12	12	3	4	1	45	22	387	4	5	
No Plans	43	15	4	6	1	23	9	2,348	22		
Total	N	5,038	1,620	387	616	58	2,233	821	10,773		
	%	47	15	4	6	1	21	8	100	100	

* less than half of one percent

In addition to general post-high school plans, specific field of study was indicated by both juniors and seniors planning further education. A comparison of the choices in the two years is shown in Table 3. Business, education, and medicine were the most popular choices among juniors. In the senior year business and medicine increased in popularity, along with agriculture, conservation and biological science; whereas education, as well as engineering, declined in popularity. These changes most likely reflect the particular period in which the surveys were conducted, rather than representing typical changes from junior to senior years. Of the students who had expressed a choice as juniors 40 per cent expressed the same choice as seniors. The most stable choices were those that became more popular and the least stable were those that became less popular, except for the miscellaneous "other" category, which was the least stable of all. Among juniors the largest single group consisted of those who were uncertain of their field of study--nearly one in five. Only 10 per cent of the seniors (percentages are based on those who responded to the question) indicated that they were uncertain, and these included only one in five of those who were undecided as juniors.

Table 3
Consistency of Choice of Major Field of Study
from Junior to Senior Year

Major	<u>Percent Choosing</u>		Percent with Same Choice
	Juniors	Seniors	
Agric., conserv.	3.6	5.9	41
Arts	6.8	7.9	46
Biological Science	1.7	4.1	37
Business	11.0	15.3	52
Construction	2.6	3.6	30
Education	10.8	7.0	33
Electric	2.7	2.9	45
Engineering	5.1	2.7	27
Home economics	1.6	2.6	37
Law	1.7	2.6	45
Math., phys. science	3.5	2.4	36
Mechanics	6.1	5.5	43
Medicine	9.3	12.2	61
Personal service	3.1	2.1	32
Social science	3.6	3.0	25
Religion	0.5	0.7	34
Other	7.0	9.5	22
Uncertain	19.1	10.0	19
Total	N 19,201	18,683	6,201
	% 100	100	40

Realization of Junior-Year Plans

General plans. The percentage distributions of actual post-high school activity for students who expressed each type of plan in the junior year are shown in Table 4. Overall agreement between plan and actual activity is 60 per cent for boys and 57 per cent for girls. These figures are slightly lower than the 67 per cent of 1961 students who followed their senior-year plans, according to Berdie and Hood (1965). College-going plans were most likely to be fulfilled, getting a job next most likely, and attending business or trade school (private) least likely. This was true also of 1961 seniors, but the percentage of girls planning to get a job who actually did so was much higher then (80%) than in the present group. About 45 per cent of both boys and girls planning some form of non-collegiate post-high school training actually obtained it.

Table 4

Percentages of Students Entering Various Activities
after High School, by Sex and Junior-Year Plan

Junior-Year Plan	Post-High School Activity							Total		Total % of Those with Plans
	College	AVTI	Bus. or Trade School	Other School	Military Service	Job	Other	N	%	
<u>Boys</u>										
Attend College	83	4	1	*	4	5	2	727	39	50
Attend AVTI	12	40	5	1	9	27	7	293	16	20
Bus. or Trade Sch.	13	31	6	3	18	23	6	69	4	5
Other School	7	21	0	55	0	0	17	15	1	1
Military Service	14	17	0	0	33	31	5	191	10	13
Get a Job	8	8	*	0	19	63	2	82	4	6
Other Plans	8	10	3	0	20	33	26	77	4	5
Unknown	52	16	1	*	7	18	4	416	22	
Total	N	907	288	36	15	192	341	91	1,870	
	%	49	15	2	1	10	18	5	100	100
<u>Girls</u>										
Attend College	80	3	1	5	*	8	2	737	39	51
Attend AVTI	14	39	3	6	1	30	7	216	11	15
Bus. or Trade Sch.	24	22	9	4	0	40	2	103	5	7
Other School	25	11	6	29	0	26	3	127	7	9
Military Service	8	0	0	0	0	92	0	12	1	1
Get a Job	7	10	4	4	1	54	19	162	9	11
Other Plans	23	5	0	8	0	47	17	77	4	5
Unknown	54	10	3	4	1	19	9	464	24	
Total	N	957	214	51	119	9	424	124	1,898	
	%	50	11	3	6	*	22	7	100	100

Less than half of one per cent

When only those students who expressed a plan as juniors are considered, the percentage distribution of plans is quite similar to the percentage distribution of actual activities. The percentage who got jobs is higher than the percentage who planned to do so, and the increase comes at the expense of non-collegiate education and training plans. Nevertheless, the percentage of students who carry out their plans for such training, as well as the percentage making such plans, has increased substantially over the past decade as a result of the development of the public vocational-technical school system.

It is worth noting in Table 4 that the distributions of post-high school activities of students who did not indicate a plan in their junior year are nearly identical to the distributions of activities for all students. Furthermore, comparison of Tables 2 and 4 reveals that the proportions of students who entered each kind of activity were highly similar to the proportions who, as seniors, planned to enter such activities.

Institutional choice. The extent to which students realize their more specific plans was examined by determining the percentages of students who entered the type of post-high school institution and the specific post-high school institution that they listed as their first choice when they were juniors. As Table 5 indicates, about 35 per cent of the students entered the type of post-high school institution--Minnesota private college, state college, junior college, AVTI, university, or other school, or non-Minnesota college--represented by their college or vocational institute preference. The "other Minnesota school or college" plan was least likely to be followed, and junior college plans were most likely to be achieved. The junior college system was also the only one that enrolled a higher percentage of students than had planned, as juniors, to attend. The university and AVTI systems and "other schools" showed the largest drops from planned to actual attendance.

Table 5

Percentages of Students Choosing Various Types
of Post-High School Institutions Who Entered That Type of Institution

Junior-Year Institutional Choice	Post-High School Attendance								
	U of M	Minn Lib Arts	State College	Junior College	AVTI	Other Minn Sch	Non Minn College	None	Tota
U. of Minn.	<u>33</u>	9	12	15	5	2	6	18	21
Minn. Liberal Arts	<u>10</u>	<u>32</u>	11	10	1	1	21	14	9
Minn. State College	8	<u>6</u>	<u>40</u>	14	7	1	5	18	15
Minn. Jr. College	6	2	<u>7</u>	<u>45</u>	9	1	1	28	11
AVTI	2	1	2	<u>7</u>	<u>39</u>	4	2	44	23
Other Minn. School	4	1	6	10	<u>20</u>	<u>7</u>	1	51	9
Non-Minn. College	14	8	11	7	3	<u>0</u>	<u>38</u>	19	12
Total	12	7	12	14	15	2	9	28	100

Table 6 shows the percentage of students who entered the specific institution they chose in the junior year, and also the percentages of those entering each institution who had originally chosen it. For most systems the latter figures are higher because fewer students entered than originally chose the institutions. The exception is the junior colleges. Because they are primarily non-residential institutions that draw their students from defined service areas, the degree of loyalty to specific institutional choice is nearly as high as to the system in general. The same is not true of the AVTI's, which also are non-residential institutions. Although nearly 40 per cent of the students choosing an AVTI did enter one, only half as many entered the specific one they originally chose. This circumstance may reflect a greater diversity among the AVTI's in their program offerings, with the result that students, to obtain the programs they want, attend an institute other than the one first considered. The very low percentages of students who enter the specific college of the University of Minnesota that they originally indicated shows that the collegiate structure of the university is not well understood by high school juniors. If the Twin Cities campus is treated as a unit, the percentage of enrollment at the specific university campus initially chosen is nearly as high as the percentage for the system as a whole.

Table 6

Specific Institutional Choice and Attendance

Type of Institution	Students Entering Chosen Institution	
	As % of Those Choosing	As % of Those Entering
U. of Minn.	13	16
Minn. Liberal Arts	20	24
Minn. State College	27	31
Minn. Junior College	40	30
AVTI	20	30

More than 80 per cent of the juniors expressed a choice of post-high school educational institution even though only about 60 per cent indicated that their general plan was to enter college or vocational school, and 28 per cent of those who made an institutional choice entered none at all. The degree to which students follow-through on their junior-year preferences would undoubtedly be somewhat higher if the analysis were limited to students whose institutional choices were consistent with their general post-high school plan. Nevertheless, the choices, even though made in the middle of the junior year before the need for detailed post-high school planning is upon the students, are quite predictive of what students actually do. Of the students who chose a state junior college, for example, more enrolled in the specific college they selected than in all other post-high school institutions combined. Even among private liberal arts colleges, which showed the lowest agreement between junior-year preferences and enrollment, one-fourth of the Minnesota freshmen had as juniors selected the college in which they actually enrolled.

Summary and Conclusions

Post-high school plans expressed by 1971 Minnesota juniors were compared with the plans expressed by the same students as seniors and with what the students actually did after high school. The results show that:

1. Changes in plans from the junior year to the senior year are about as frequent as changes between junior-year plans and actual activities.
2. Junior-year plans are followed only slightly less often--by about three-fifths rather than two-thirds of students--than senior year plans a decade earlier.
3. About 80 per cent of students who say as juniors that they plan to attend college actually do so, and the proportion who attend is about the same as the proportion originally planning to do so.
4. Junior year plans to attend vocational and other non-collegiate schools are the least stable from junior to senior year, and the proportion of students with such plans decreases from the junior to the senior year while the proportion planning to get jobs goes up.
5. As was found in earlier studies the proportions of students who entered various post-high school activities conformed closely to the proportions of seniors with such plans.
6. More specific plans, such as choice of major field and choice of educational institution, were less stable and less predictive of what students actually did than general plans.
7. About 35 per cent of students entered the type of post-high school educational institution they chose as juniors and 27 per cent entered the specific institution they chose.
8. Plans to attend a state junior college were more frequently followed than other institutional choices.

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PSYCHOTHERAPY AS STOCHASTIC PROCESS:

FITTING A MARKOV CHAIN MODEL TO INTERVIEWS OF

ELLIS AND ROGERS¹

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Abstract

This investigation tested the hypothesis that the probabilistic structure underlying psychotherapy interviews is Markovian. The "goodness of fit" of a first-order Markov chain model to actual therapy interviews was assessed using a χ^2 test of homogeneity, and by generating by Monte Carlo methods empirical sampling distributions of selected characteristics of interaction processes against which the same characteristics in the actual interviews were compared. The model provided an adequate fit and should provide a useful tool for further investigations into the character and course of the therapy process.

PSYCHOTHERAPY AS STOCHASTIC PROCESS:
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Introduction

The malleability of verbal (vocal) behavior has been extensively demonstrated across a large number of different verbal response classes and subject-experimenter parameters (Greenspoon, 1962; Holz & Azrin, 1966; Kanfer, 1968; Krasner, 1958; Salzinger, 1959; Williams, 1964). An extrapolation and application of these research findings has been to the area of psychotherapy, and in both "clinical analogues" and actual therapy settings, therapist manipulation of client verbal behavior has been demonstrated (Heller & Marlatt, 1969; Krasner, 1965; Salzinger, 1969; Strong, 1964; Truax, 1966). The literature also supports the notion of therapist responses serving as discriminative stimuli for client verbalizations (Auld & White, 1959; Barnabei, 1973; Frank & Sweetland, 1962). Not only do therapist responses result in an increase in the frequency of certain client responses, but particular client responses are more or less probable following certain therapist responses. The paradigm depicting this verbal situation is presented in Figure 1.

Insert Figure 1 about here

As presented in Figure 1, each therapist response (R) "occasions" or serves as a discriminative stimulus (S^D) for the next client response as well as a reinforcing stimulus (S^R) for the previous response.

A literature also exists on client influence on therapist behavior (Alexik & Carkhuff, 1967; Auld & White, 1959; Bandura, Lipsher & Miller, 1960; Carkhuff & Alexik, 1967; Friel, Kratochvil & Carkhuff, 1968; Heller, Meyers & Kline, 1963). In these studies the paradigm implied reverses itself.

Insert Figure 2 about here

Here the client's verbal responses serve as discriminative stimuli for the next therapist response and reinforce the previous response.

The two paradigms are not in contradiction with each other, but taken alone they are incomplete. Both depict therapy as a sequence of discrete and unidirectional one-step contingencies of influence between therapist and client utterances. An alternative paradigm for the therapy process which is consistent with the literature cited above would acknowledge the mutual and interactive influence of both the therapist and client on each other's verbal behavior. Such an "interlocking paradigm" (Skinner, 1957; Strong, 1964) would depict each verbal response of therapist and client serving as a reinforcing stimulus (S^R) for the other's previous response and as a discriminative stimulus (S^D) occasioning the next response.

Insert Figure 3 about here

Within this paradigm the mutual and sequential dependencies of the verbal responses in the counseling interaction are incorporated.

The effect of any given S^R on a previous response is to increase the probability of occurrence of another response of the same response class, and the effect of any given S^D is an increase in the probability of occurrence of a response of the response class conditioned to it (Reynolds, 1968). The sequential interaction of the therapy process, therefore, can be viewed as a chain of probabilistic events--a stochastic process.

A finite first-order Markov chain model was proposed as a stochastic process model for psychotherapy. A Markov chain is a formal stochastic process model, and if appropriate to actual therapy interaction, it would provide a formal probabilistic description of the therapeutic process and offer a means of predicting the probable course and outcome of that interaction process.

Introduction to Markov Chains

In terms of the interlocking paradigm (Figure 3) the therapy process is viewed as a series of transitions from response to response--from $T \rightarrow C \rightarrow T$, etc. A transition is defined as a move between two events. The first event in the transition is the antecedent, and the second event is the consequent. In a sequence of transitions, each event, with the exception of the first and last responses in the sequence, serves a dual function as both antecedent and consequent.

An estimate of the probability of any given event (e.g. response class) being followed by any other specified event may be determined by dividing the number of occurrences of a particular event-event transition by the number of times its antecedent occurs as the antecedent of any transition in the sequence.

These transition probabilities (p_{ij}) may be organized into a transition matrix (P) [rows(i)=antecedents; columns(j)=consequents]. Figure 4 represents a transition matrix for a therapy interaction sequence in which four possible response classes have been distinguished for both therapist and client.

Insert Figure 4 about here

0 has been entered in the upper left and lower right quadrants of the matrix to indicate that T_i-T_j and C_i-C_j transitions can not occur under the interlocking paradigm.

The matrix summarizes the interaction sequence in terms of the probabilities of transition among the various response classes. If it may be assumed, however, that

- a) those transition probabilities are stationary, i.e. the matrix represents constant probabilities of transition within the sequence which do not depend on their place in the series of transitions, and
- b) the outcome of any transition (consequent) is dependent only on its antecedent, i.e. if the antecedent is known, no additional information is provided in the prediction by knowing the path of events leading to the antecedent (first-order dependency),

then the interaction sequence represented by the matrix is a Markov chain (Kemeny & Snell, 1960).

The particular advantage of being able to justifiably employ the two Markov assumptions to the therapy process is significant. Not only does the P matrix provide information as to the likely consequent of any possible response at any time in the interaction; but it can be shown that by raising the P matrix to the nth power using the rules of matrix multiplication one derives a matrix of probabilities of the process being in each of the possible response classes after n transitions given the initial response class (Kemeny & Snell, 1960; Howard, 1971). In such an n-step matrix the rows (i) again correspond to the antecedent responses and the columns (j) correspond to the consequents, but the probabilities (p_{ij}) are those of being in each of the possible consequent states, given the antecedent, in n transitions. This allows one to predict not only

the immediate consequent of each T and C response in terms of the other's likely response, but the course and eventual outcome of the interaction sequence as well.

It was, therefore, the purpose of this study to validate those Markov assumptions against actual therapy interviews. To the degree that the therapist-client interaction satisfied the assumptions of transition probability stationarity and 1-step dependence among response events, the Markov chain model might be considered a valid descriptive and predictive model of the therapy interaction process.

Methodology

The Markov model was tested individually against transcriptions of 6 psychotherapy interviews: 4 conducted by Albert Ellis and 2 conducted by Carl Rogers. For each interview, therapist and client verbal responses, defined as everything spoken by one participant between any two consecutive responses of the other (this in accord with the interlocking paradigm), were categorized by response class. Response classes were defined in terms of speaker (T or C) and the mode of communication expressed by the speaker. Four modes of communication were identified:

- a) Personal: personal, affective, self-disclosing statements which focus on and share personal reactions to things impinging upon the speaker.
- b) Descriptive: descriptive, impersonal, non-affective statements which, though they may be about either the speaker himself or things outside himself, reflect an objectivity or distance about them.
- c) Cognitive: cognitive or analytical statements displaying either overtly or covertly an integration or tying together of ideas, concepts or events.
- d) Directive: directive, leading, structuring or otherwise imperative statements which either explicitly or implicitly direct the attention or behavior of the other person, or which imply what the other person should or should not be thinking or doing.

The response classification scheme resulted in eight mutually exclusive interaction response classes (speaker crossed with mode). An Introductory state (from which the interaction began) and a Terminal state (in which the interaction ceased) were also included. The Introductory state had as its consequent the first actual interaction response; the Terminal state had as its antecedent the final interaction response. The two additional categories were defined so to delimit the interaction sequence. The sequence always began at the Introductory state, to which it was impossible to return. The Terminal state always concluded the interaction sequence; once it had been entered, transition from it was impossible. The addition of the Introductory and Terminal states resulted in a 10 x 10 transition matrix for each of the 6 interviews.

Insert Figure 5 about here

Each interview transcript was classified by two independent judges previously trained to a level of inter-rater agreement of $\kappa = .80$ (Cohen, 1960; Tinsley & Weiss, in press) on counseling interview material similar to the actual interviews used in this study. Rater disagreements were settled by re-rating and, if necessary, negotiation. Transition probabilities for each interview were computed and organized into their own transition matrix.

Testing stationarity

Stationarity of the transition probabilities was tested using a χ^2 test of homogeneity (Hertel, 1968; Suppes & Atkinson, 1960). Each

interview was divided in half and the frequencies of transitions in the first half were compared with the frequencies in the second to determine if the interview halves were significantly different ($p \leq .05$). Significantly large χ^2 values indicated unequal frequencies across the interview and suggested nonstationary transition probabilities across the interview sequence.

Testing dependency

First-order dependency was tested for each of the six interviews in the following manner. For each of the interviews two "process characteristics" were computed: the mean distance (i.e. average number of transitions) between response classes, and the standard deviations of the distances between classes (Hertel, 1968). Using the Markov assumptions of transition probability stability and first-order dependence among responses, a population of 1000 Markov sequences was generated using Monte Carlo methods. The transition probabilities of the actual interview served as parameters for the generated population. For each of the 1000 generated Markov sequences, the two process characteristics were computed, resulting in an empirical sampling distribution ($N=1000$) for both characteristics and against which was tested the hypothesis that the interview had been generated by a first-order Markov process. If 97.5% of the empirical sampling distribution of a process characteristic fell above or below the characteristic value for the actual interview, the hypothesis that the interview had been generated by the proposed Markov process was rejected in favor of a model specifying the complete independence of the responses.

Summary of Results

Interview 1

One row of the transition matrix displayed a significant χ^2 value, suggesting that row of transitions to be unstable. As a whole, however, the interview appeared to represent a stable process. Eighteen of the process characteristics were significant--7 among the 64 mean distances between response classes and 11 among the 64 standard deviations of those distances.

Interview 2

None of the rows of the transition matrix displayed a significant χ^2 value, suggesting stability of the individual transitions in the interview and of the interview as a whole. None of the process characteristics were significant.

Interview 3

As in interview 2, none of the rows of the transition matrix displayed a significant χ^2 value, again suggesting stability of the transitions and of the interview as a whole. Also as in interview 2, none of the process characteristics were significant.

Interview 4

None of the rows of the transition matrix displayed a significant χ^2 value, suggesting stability of the transitions in the interview and of the interview as a whole. However, two of the process characteristics

were significant--one among the 64 mean distances between response classes and one among the 64 standard deviations of those distances.

Interview 5

None of the rows of the transition matrix displayed a significant χ^2 value, suggesting stability of the transitions and of the interview as a whole. Three process characteristics were significant--one among the 81 mean distances between response classes and two among the 81 standard deviations of those distances.

Interview 6

One row of the transition matrix displayed a significant χ^2 value, suggesting that row of transitions to be unstable. As a whole, however, the interview appeared to represent a stable process. Among the process characteristics, 21 were significant--9 among the 81 mean distances between response classes and 12 among the standard deviations of those distances.

Discussion

Interpretation of the results is not as straight forward a task as is the case with classic randomized experiments and their analyses. While rejection of the statistical hypotheses suggests the failure of the Markov model to fit the therapist-client interaction, it does not rule out the possibility of some alternative Markov model (e.g. of second or third order) or of some other non-Markovian (albeit stochastic) model of the therapy process. At the same time, failure to reject the hypotheses does not conclusively prove the interviews to be Markovian, though it certainly offers support to this thesis. At this stage one must "interpret the retention of the null hypothesis" and do so without really knowing the power of the analysis to detect deviations from the hypothesized model. Until the state of the art advances, one must proceed cautiously in discussing the fit of the model to the data.

In light of the proposed interlocking paradigm for the therapy interaction process, the two Markov assumptions of stationarity of the transition probabilities and one-step dependence among responses do not seem unreasonable; it was for this reason that the particular Markov model was selected for testing and validation. However, in light of general theorizing about the counseling process, the assumptions may likely seem absurd. Therapeutic interaction is usually assumed to vary in style within the interview; indeed, therapy "stages" or process "phases" are commonly referenced in the literature (Bordin, 1955, 1974; Brammer & Shostrom, 1968; Cashdan, 1973). The assumption of probability stationarity suggests the converse. The responses made by both therapist

and client are generally assumed dependent upon the full course of the interview up to that point. The assumption of one-step dependency explicitly states that only the immediately preceding response need be considered in determining the next response.

Considering that approximately 28 percent of the tests on interview 1 were significant and that 26 percent were on interview 6, we feel that the appropriateness of the Markov model for these two interviews is at this point questionable. It appears to us that these percentages of significant tests are higher than one might reasonably expect given only chance deviation from the model and we must reject the Markov model on these two interviews.

However, the results of interviews 2, 3, 4 and 5 support the Markov model as a model for therapeutic interaction. The few significant tests for interviews 4 and 5 we believe can be understood in terms of the number expected to be significant due to chance deviation from the model. Interviews 2 and 3 displayed no significant deviations from the Markov model.

To be sure, even in those four interviews for which the Markov chain assumptions were satisfied, the Markov model cannot be assumed to account for all the variation in the therapy interaction process. But the model does suggest a lawfulness and possible probability structure for the process--and importantly, one which can permit the prediction of not only immediate, but also distant, consequences of interaction and interventions in that process.

The intent of this study was to explore the possibility and reasonability of employing a finite Markov chain model in the study of

the verbal interaction of the therapy process. More specific application of the model is yet to be conducted. But while the full potential of the model may yet to be realized, it is expected that the model will lead to the development of fruitful hypotheses relative to the therapy process. Can the stationary transition probabilities distinguish among the various therapeutic orientations (Fiedler, 1951; Zimmer & Cowles, 1972)? Can therapeutic and non-therapeutic interaction be discriminated in terms of those probabilities (Reusch, 1972, 1973)? Can client response style as expressed in the transition probabilities provide clues as to problem diagnosis (e.g. Bales, 1970; Carson, 1969)? How long might the therapy process be expected to continue until termination? Assuming the inclusion of appropriate response categories, is the process more likely to end in success or failure? How might interventions be selected to achieve improved, if not optimized, interaction? Application of the model to the therapy process may answer some of these questions and will hopefully raise additional ones. To date such questions, if asked, have generally had to rely on answers derived from investigations employing a multitude of variables external to the therapy process (e.g. sex, age, educational level). A finite Markov chain model of the therapy process proposes a self-contained system in which prediction for course and outcome of the process are the result of the lawfulness and dynamics of the process itself.

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Footnote

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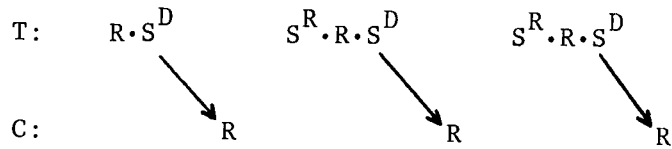


Figure 1. Paradigm in which the responses of the therapist (T:R) serve as discriminative stimuli (S^D) and reinforcing stimuli (S^R) for client responses (C:R).

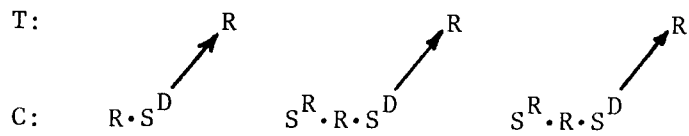


Figure 2. Paradigm in which the responses of the client (C:R) serve as discriminative stimuli (S^D) and reinforcing stimuli (S^R) for therapist responses (T:R).

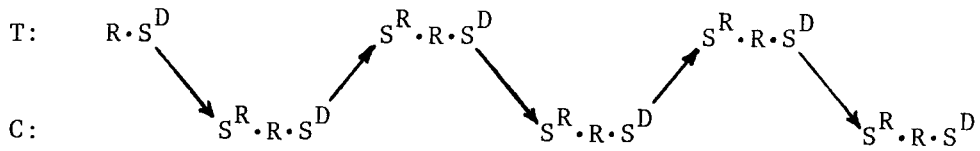


Figure 3. Interlocking paradigm in which the responses (R) of both therapist (T) and client (C) serve as discriminative stimuli (S^D) and reinforcing stimuli (S^R) for the other's responses.

		Consequent							
		T ₁	T ₂	T ₃	T ₄	C ₁	C ₂	C ₃	C ₄
Antecedent	T ₁								
	T ₂		0						
	T ₃							P _{ij}	
	T ₄								
	C ₁								
	C ₂								0
	C ₃			P _{ij}					
	C ₄								

Figure 4. An 8 x 8 therapy transition matrix in which 4 therapist and 4 client response classes have been distinguished.

		Consequent									
		Term	T ₁	T ₂	T ₃	T ₄	C ₁	C ₂	C ₃	C ₄	Intro
Antecedent	Term	1.0									
	T ₁						1.0	0	0	0	
	T ₂	.02					.23	.48	.24	.03	
	T ₃			X			.19	.62	.15	.04	
	T ₄						.05	.84	0	.1	
	C ₁		0	.50	.42	.08					
	C ₂		.03	.45	.33	.19			X		
	C ₃		0	.50	.50	0					
	C ₄		0	.66	.17	.17					
	Intro					1.0					

Figure 5. A 10 x 10 therapy transition matrix employed in this study (Interview 6).

MKC
5/14/75

Office for student affairs RESEARCH BULLETIN

STUDENT PERCEPTIONS OF UNIVERSITY

GOVERNANCE COMMITTEE EXPERIENCES

Joel Brown, Donald Biggs, & Ronald Matross
Student Life Studies
University of Minnesota

Abstract

A mailed survey was conducted of student experiences on governance committees at the University of Minnesota. Responses were received from 88 of the 118 student members of University Senate and Twin Cities Assembly committees. Key findings include: Student members of governance committees tended to come from more highly educated and more professional family backgrounds in comparison with the general student body; the most central reasons offered by student members for their participation in University governance were learning about the University and representing student views on campus issues; eighty-six percent of the student members expected their committee experiences would be useful in their careers; most student members reported satisfaction with their governance committee experiences even though they perceived themselves to have only moderate power to influence committee decisions.

STUDENT PERCEPTIONS OF UNIVERSITY GOVERNANCE COMMITTEE EXPERIENCES

Joel Brown, Donald Biggs, & Ronald Matross
Student Life Studies
University of Minnesota

The nature and extent of student participation in university governance at American colleges and universities has been changing in recent years. Prior to the late 1960s, student influence in governance tended to be limited to certain areas of university life and students often served only in consultative capacities without voting rights on final decisions. In a 1951 survey of seventy colleges and universities, the Commission on Student Personnel of the American Council on Education reported minimal student representation on university committees dealing with curriculum, academic affairs, fiscal policies and administrative procedures (Lunn, 1957). During the Fifties and early Sixties, students gradually gained substantial influence in the areas of student affairs and conduct, athletics, and university calendars (Lunn, 1957). In the late Sixties, student participation in governance became an object of student protest. In response to these protests, a number of universities reported changes in their governing structures to assure greater student participation in a wide variety of areas (Muston, 1970). At the University of Minnesota, a revision of the Constitution of the University Senate in 1969 provided for approximately one-third of the senators to be students with voting rights (Auerbach, 1969; U of M Task Force on Student Representation, 1969; Eckert & Hanson, 1973). Before Minnesota students gained voting rights in the University Senate, they often had been consulted in policy discussions, but according to Blackmore (1967) student opinion had a relatively small impact on final policy decisions.

A number of student personnel workers and educators have expressed reasons for the desirability of student participation in governance. Hodgkinson (1969) noted that some believed that better decisions would result from having student input while others said students were placed on committees "just to take the heat off." Joughin (1968) said that as "consumers" of institutional services, students should be heard on matters that concern them. Shoben (1969) also advocated student participation as representing student concerns and providing a channel for their contributions. Marchese (1969) and Lunn (1957) have called attention to student participation as an educational experience for students, providing training for democratic leadership and community participation. Although the benefits of student participation in university governance are frequently cited, little empirical data are available to assess the actual benefits of student governance to either the institution or the students involved. Very few studies have reported anything about the nature of student participants. One survey of the opinions of college and university deans reported that student representatives were equally as responsible as their faculty and administrator counterparts, and that those students who have asked for a larger share of institutional governance were moderately but significantly representative of the entire student body (College Management, 1969). In analyzing the composition of governance committees at the University of Minnesota, Eckert and Hanson (1973) found that students played a very minor role in leadership of the proceedings and had poor attendance records, with women having better records than men and with representatives from undergraduate colleges attending more often than those from the professional schools. There are virtually no data on student

perceptions of their experiences on university governance committees. Such data might prove useful for more effective recruiting, placing and training of students for roles in university governance and evaluating the part students play in the governance process. The purpose of this study is to explore some of the experiences of student members of governance committees. The study focuses on their socio-demographic and background characteristics, their reasons and expectations for participating in university governance through the committee structure, their perceptions of committee processes and of their power to influence committee decisions, and their satisfaction with committee performance.

Method

Sample

The sample included all 118 student members of University Senate and Twin Cities Assembly committees for the academic year 1973-74. This sample was chosen because the Senate and Assembly committees deal with issues affecting the total student body whereas governance committees at the college and department level affect only particular groups of students. The student member names for the sample were obtained from the official committee rosters maintained in the Office of the University President. The students were sent a pre-letter introducing the study and requesting their participation. Then questionnaires were mailed to them a week later. First follow-up and second follow-up letters were sent to non-respondents. Completed questionnaires were returned by 88 students for a response rate of 75%. Questionnaire responses were coded for keypunching onto data cards. A descriptive statistical analysis of the data was obtained using a computer program.

Questionnaire

Data were gathered through the use of a questionnaire titled "Inventory of Governance Committee Experiences," designed for this study. Items on the questionnaire covered three major areas: (a) socio-demographic characteristics and background experiences, (b) motives and expectations for participation, and (c) perceptions of group processes within the committee experience.

Assessed socio-demographic characteristics included sex, age, college major, type of residence, and amount of part-time employment. Background experiences of students were tapped by providing an extensive check list of school, community, and church organizations and activities. Other background information included parents' education and occupation and a check list for organizations and activities in which they participated.

The motives for participation items asked the respondents to rate the importance of a variety of reasons for joining a governance committee on a five-point scale from very important to very unimportant. For the items dealing with student expectations for their committee experiences, respondents were asked how true (definitely true, probably true, neither true nor false, probably false, definitely false) a number of statements were. For example, one item concerned whether or not they expected their committee experiences to be useful in their careers. Other items dealt with their expectancies about committee meetings.

In the group processes section of the questionnaire, respondents were asked to rate the importance of various activities of student members toward the effective functioning of a University governance committee. Students were also asked the degree to which they agreed (five-point scale

from strongly agree to strongly disagree) with some statements about their experiences with the committee. Two other indications of student perceptions of outcomes of their committee experience were how satisfied they were with the performance of committee members and to what degree students were able to influence the opinions of committee members on issues brought before the committee.

Results

Socio-demographic and Background Characteristics

Table 1 presents some comparisons between student members of University Senate and Twin Cities Campus Assembly committees and the student body at large. The comparative data describes the student body at large in the Fall, 1973. However, the data on parental education and occupation were obtained from entering freshmen in the Fall, 1972, but most likely these data are consistent with the data for the entire student body. All of the comparative data on the student body at large was taken from a Campus Assistance Center report (1974). The female to male ratio of the surveyed student members of committees closely approximates the female to male ratio for the general student body. For student members of committees, 44% are female and 56% are male in contrast to 40% female and 60% male in the general student body. These figures compare with the report of Eckert and Hanson (1973) that 35.9% of the student members of Senate committees in the 1970-73 period were females while females constituted 37% of the general student body. Ages of student members of committees range from 19 to 49 with a median age of 21. More upper classmen than lower classmen participate in the committees. Thirty-eight percent of the student members are seniors, 28% are juniors, 14% are sophomores, and 20% are in graduate school, one of the professional schools

or enrolled as adult special students.

Fewer of the student members of committees (22%) live at home with their parents or guardians than do members of the general student body (46%). A greater percentage of committee members (25%) live in University residence halls, fraternities or sororities, than do members of the general student body (9%). Approximately half of the student members of committees (49%) rent apartments or houses as compared to 39% of the general student body. Slightly more of the student members of committees (74%) are employed than are members of the general student body (65%). Twenty-five percent of the employed student members of committees work more than 20 hours a week, while 38% of them work 10-20 hours a week. In addition to their employment and school work, most student members of committees (84%) participate in some other campus activity or committee. Forty-nine percent of the student members of committees are involved in at least three campus organizations and activities.

Student members of the University Senate and Twin Cities Assembly have a background of participation in committee work and group activities at school, at church, and in the community. Ninety-seven percent of these students reported having participated in at least one organization and 55% have participated in five or more youth groups. A majority of the students (52%) have had prior experience in governance through their high school student governance groups, and 38% have belonged to high school political organizations. These students have also belonged to or participated in high school organizations outside of the political arena. Fifty-six percent of these students belonged to the National Honor Society. Sixty-six percent of these students reported having been members of church

youth groups. Fifty-eight percent of the student members have been Boy Scouts or Girl Scouts.

Student members come from families who are accustomed to participating in organizations. Ninety percent of the parents of student members hold or have held memberships in various groups. A majority of the parents have belonged to PTA or Mother's Clubs (70%) and to church clubs and groups (53%). About one-third of the parents have belonged to country clubs or golf clubs. No comparative data on patterns of participation in organizations and activities for parents of the general student body was available on parents' educational and occupational levels as shown in Table 1. Student members of committees tended to come from families with higher educational and occupational levels than those of the general student body. For student committee members, 45% of the fathers and 29% of the mothers were college graduates as compared with 32% of the fathers and 17% of the mothers of members of the general student body. Also 43% of the fathers of committee members in contrast to 24% of the fathers of students in the general student body were engaged in professional occupations. More fathers of committees members (44%) were engaged in business occupations than were fathers of general student body members (38%).

Motivations and Expectations

Table 2 presents students' ratings of the importance of eleven selected reasons for joining University governance committees. These data suggest that learning about the University and representing student views on campus issues are the most central reasons students offered for their participation in University governance. Ninety-four percent of

respondents rated the desire to learn more about the internal workings of the University as an important reason for participating in governance committee work. A further indication of students' desire to use campus governance as part of their education is that 87% of the student members responded that to learn what other students and faculty think about various campus problems was an important reason for their joining a governance committee. A desire to represent student views on campus issues is indicated by high endorsement of two other reasons. Eighty-eight percent of the respondents reported that to accomplish something of significance to students was an important reason for joining a governance committee, and 86% chose to influence decisions made by the committee as an important reason for participation. In contrast to learning about the University and representing student views as important reasons, being critical of people in authority and making friends received the lowest importance ratings. Only four percent of the respondents advocated to criticize some people in authority as an important reason, but 44% rated it in the neutral category. While 8% of the respondents said to associate with friends on the same committee was an important reason, 65% of the respondents said it was an unimportant reason. The situation was quite different for student associations with faculty members of the committee. Sixty-three percent of the student members reported that to associate with faculty outside of classes was an important reason for participation in governance committees.

Table 3 presents student role expectations for governance committee experiences, and Table 4 shows student ratings of activities for effective

committee functioning. Eighty-six percent of the student members expected their committee experiences would be useful in their careers. In general, students expected to work within the established governance system instead of against it. Eighty-six percent of the students expected to take on added responsibilities as committee members and 90% of the students expected to be successful in the committee tasks which they undertook. More than three-fourths of the students expected the committee chairman to plan and organize the committee work and to see that committee meetings were run smoothly and well organized.

Perceptions of Governance Committee Experience

Table 5 shows student committee members' level of satisfaction with the performance of committee members, and Table 6 presents student perceptions of power to influence committee members' decisions. In general, most student members reported satisfaction with their governance committee experiences, even though they perceived themselves to have only moderate power to influence committee decisions. More of the student members said they were satisfied with the performance of the committee chairperson (81%) and of faculty members of the committee (77%) than with the performance of ex-officio members (63%) and of other student members (59%). About two-thirds of the student members (65%) reported being satisfied with their own performance on the committee. Most student members felt that they had more power to influence committee decisions of other student members and of the committee chairperson than they did to influence decisions of faculty and ex-officio members of the committee.

Table 7 shows the degree to which student members of committees agree with some statements concerning their committee experiences. Sixty-nine

percent of the student members agreed that most issues that the committee dealt with were important to students. Most of the students (64%) agreed with the way committee decisions were made and very few students saw faculty members voting as a bloc (6%) or student members voting as a bloc (4%). Sixty-three percent of the student members reported that they have learned to be more effective group members as a result of their committee experiences. Perhaps one of the best indicators of student reactions to their committee experience is that 75% of the student members reported willingness to serve on other University governance committees and 94% of the student members said they would recommend joining a Senate or Assembly committee to other students.

Discussion

The data from this study suggest an image of the student members of governance committees, which is not the stereotype of the student activists of the late Sixties. Student members responded, for the most part, in socially desirable ways. While they want very much to represent student issues, they seem willing to work within the established system. They seemed to accept the leadership of the committee chairperson, expecting this person to take the lead in planning and organizing the committee's work. These students expected a smoothly run operation where their contributions would be acceptable to people whom they respected. Nearly all of the student members disavowed interests in using the committee as a place to be critical and outspoken against people in authority at the University. Most of these students portrayed themselves as not interested in capturing public attention for their participation and neither were they seeking personal gain. Instead they viewed their committee

work more in terms of learning experiences which would be useful to them in their careers.

The data from this study suggest that student members tended to come from better educated, more professional family backgrounds than those of the general student body. As compared with the general student body, fewer of the student members lived with parents or relatives while more lived in University housing or private apartments. Most of the student members had been active in a number of organizations prior to coming to the University and continued their pattern of participation both in governance and in other campus activities. These results raise the question as to whether student personnel workers should actively encourage greater student participation by all types of students. Perhaps those students with less experience in group activities could greatly increase their skill levels through participation and function as more responsible members of society.

A substantial parallel existed between what student personnel workers and educators have offered as reasons why students should participate in governance and what student members rated as important in their own decisions to join a governance committee. The two main themes for both groups are representing students' points of view and learning about governance processes in preparation for more responsible citizenship. Moreover, in reflecting on their committee experiences, most students reported that they had learned to be more effective group members and that most of the issues that the committee dealt with were of importance to students. At least in the eyes of the respondents to this survey, the positive educational effects attributed to student participation in governance were

realized in actuality.

Overall, most student members reported being well satisfied with their committee experiences, but it appears that they see room for improvement in students' performances on committee tasks. Approximately one-fourth of the student members were dissatisfied with their own performance on the committee. More of the members were satisfied with the performances of the committee chairperson, the faculty, and ex-officio members than with performances of other student members. Nevertheless, a rather large majority of the students expressed a willingness to serve on other University governance committees and would not hesitate to recommend joining to other students.

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Table 1

Comparison of Student Members of Governance Committees and the General Student Body^a

	Governance Committees Student Members	General ^b Student Body
Sex		
Male	56	60
Female	44	40
Type of residence		
University residence hall, fraternity, sorority	25	9
Living with parents or relatives	22	46
Apartment or house	49	39
Other	4	6
Employed during school term	74	65
Father's occupation		
Professional	34	24
Business	44	38
Skilled tradesman	7	24
Other	15	14
Father's Education		
College graduate	45	32
Some college, business or trade school	26	17
High school graduate	17	33
Other	12	18
Mother's education		
College graduate	29	17
Some college, business or trade school	35	22
High school graduate	26	50
Other	10	11

^a Data presented as percentages

^b Data taken from Campus Assistance Center memo on Information about University of Minnesota Students, 1974.

Table 2

Student Reasons for Participation in Governance Committees^a

Reason	Impt.	Neut.	Unimpt.
To learn more about the "internal workings" of the University	94	1	4
To accomplish something of significance to students	88	7	5
To learn what other students and faculty think about various campus problems	87	9	3
To influence decisions made by the committee	86	8	5
To persuade and influence others on important issues	70	20	11
To associate with faculty outside of classes	63	25	12
To form new friendships with other committee members	43	26	31
To accomplish committee tasks others would recognize as requiring skill and effort	38	31	31
To be recognized as a student leader on the committee	32	31	38
To associate with friends on same committee	8	28	65
To criticize some people in authority	4	44	51

^a Presented as percentage of students (N=88) rating each reason as very or somewhat important, neutral, or somewhat or very unimportant. Due to rounding, some row totals may not equal 100%.

Table 3

Student Role Expectations^a

Item	True	Neither	False
I expected to be successful in committee tasks which I undertook	90	10	0
I expected that my committee experiences would be useful to me in my career.	86	9	5
I expected to take on added responsibilities as a member of the committee.	86	10	3
I expected that my activities on the committee would be acceptable to people I respect.	82	18	0
I expected meetings to be smoothly run and well organized.	76	17	7
I expected the Chairperson to plan and organize details of the committee work.	76	18	6
I expected to be independent of other committee members in deciding about the issues brought before the committee.	62	16	22
I hoped others would notice and comment on my contributions to the committee.	40	40	20
Among my friends, it is customary to get involved in student activities and organizations	39	20	41
I expected others to make the decisions about what the committee was going to do.	20	32	48
When appropriate, I hoped to tell some amusing stories during committee meetings.	15	31	54
I hoped committee members would regard me as a witty person.	8	40	52

^a Presented as percentage of students (N=88) rating each item as definitely or probably true, neither true nor false, probably or definitely false. Due to rounding, some row totals may not equal 100%.

Table 4

Student Ratings of Activities for Effective Committee Functioning ^a

Activity	Impt.	Neut.	Unimpt.
Ask for information to clarify discussions	99	0	1
Suggest new ideas	98	2	0
Provide facts, information or personal experiences	98	1	1
Pull together ideas	95	5	0
Provide information about student views	93	4	4
Ask for members' opinions	92	6	2
Provide opinions about merits of issues	91	6	3
Point out when issues are not relevant	81	12	7
Mediate disagreements	75	20	5
Encourage other group members to participate	75	18	7
Lead discussions by providing expert knowledge	70	24	5
Offer praise	66	22	12
Try to go more than halfway in reconciling disagreements	60	25	15
Criticize effectiveness of committee	54	21	24
Express disapproval with group or issue	27	29	44
Make negative statements and oppose others	20	29	51

^a Presented as percentage of students (N=88) rating each activity as very or somewhat important, neutral, or somewhat or very unimportant. Due to rounding, some row totals may not equal 100%.

Table 5

Student Satisfaction with Committee Experiences ^a

	Satis.	Indiff.	Dissat.
Performance of the chairperson of the committee	81	9	10
Performance of faculty members of the committee	77	15	8
Purposes of the committee	74	11	15
Morale of the committee	68	27	5
Effectiveness with which the committee completed tasks	67	17	16
Your own performance on the committee	65	12	23
Performance of ex-officio members of the committee	63	26	11
Performance of other student members of the committee	59	21	20

^a Presented as percentage of student (N=88) who were completely satisfied or satisfied, indifferent, or dissatisfied or completely dissatisfied.

Table 6

Students' Perceived Power to Influence Decisions of Others ^a

	Much	Some	Little
Other student members of the committee	29	50	21
Committee chairperson	23	47	30
Committee as a whole	20	47	33
Faculty members of the committee	15	55	30
Ex-officio members of the committee	7	49	44

^a Presented as percentages of students (N=88) who responded a great deal or very much, to some degree, comparatively little or not at all.

Table 7

Student Perceptions of Governance Committee Experiences^a

Item	Agree	Neutral	Disag.
As a result of my experiences on the committee, I would be willing to serve on other University governance committees	75	17	9
Most faculty on the committee appreciated the contributions of the student members	69	19	11
Most issues the committee dealt with were important to students	69	19	11
Most students on the committee considered the work of the committee to be important	67	19	14
Most student members of the committee agreed with the way decisions were made	64	28	8
As a result of my experiences on the committee, I have learned to be a more effective group member	63	23	14
Faculty on the committee generally voted as a separate bloc	6	31	63
Students on the committee generally voted as a separate bloc	4	33	64

^a Presented as percentage of student (N=88) who strongly agree or disagree, are neutral, or disagree or strongly disagree with each item. Due to rounding, some row totals may not equal 100%.

mke/qstgr

Office for student affairs RESEARCH BULLETIN

STUDENT VETERAN SURVEY WINTER 1975

Gary B. Morey
Veterans Assistance & Outreach
University of Minnesota

Abstract

A telephone survey was conducted to obtain student veterans' attitudes and awareness of services available for them through the University. Two hundred four two (242), 63% of a random sample drawn from every tenth veteran registered at the University of Minnesota Twin Cities, were contacted. Key findings of the survey include: Most respondents were aware of the Veterans Assistance and Outreach Office and generally felt the University was doing a good job in providing services for student veterans. They however, were undecided whether the University was aware of their needs as student veterans. An almost unanimous majority said their academic advisor had never told them about special services for student veterans and they indicated that part or full-time employment or their spouse working were the most typical methods of supplementing their G.I. Bill income.

April 1, 1975

STUDENT VETERANS SURVEY, WINTER 1975

Gary B. Morey

Veterans Assistance & Outreach
University of Minnesota

During the 1974-75 school year the Admissions and Records Department asked the Veterans Assistance and Outreach Office (VAO) to conduct a survey of student veterans about various services available for them. VAO included questions on these items in a survey conducted from January 6 to January 31, 1975. The steps of the survey were:

1. Generation of Items and Pre-tests

During the latter part of Fall Quarter 1974, a pool of questions was generated by the Veterans Assistance & Outreach Office. The questions were presented to staff members in Student Life Studies and items judged to be most relevant and appropriate within the length limitations of a telephone interview were selected. The questions were pretested by Gary Morey, Communications Director, Veterans Programs-U of M, on November 24, and December 15, 1974.

2. Conducting the Survey

Members of the Veterans Assistance and Outreach staff called all the student veterans in the sample who had local phone numbers during the period of January 6 through January 31, 1975. Each number was attempted several times (a minimum of four times) at different hours of the day. Twelve percent of the respondents were contacted a second time as a validation check.

3. The Sample and Contact Rates

Admissions and Records generated a 10% random sample of student veterans from their listing of all veterans with an active file in the University Day School (Extension students were excluded). The final sample included 382 student veteran names which were selected by picking every tenth file from the records. Of the 382 names in the sample, 242, or 63% were contacted or had responded by January 31, 1975. When interpreting the results of the questionnaire, only differences between groups which are equal to or greater than ten percentage points should be considered significant.

4. Analysis of Results

The Vocational Psychological Testing Center punched the questionnaire results on data cards and the results were analyzed on the University's 6600 computer.

Results

The percentages of respondents choosing each alternative for every question are presented.

Percentages for some questions add to 99% or 101% due to rounding errors. The total number of respondents in the sample is 242. The results are presented in three sections. Section I gives the frequency distribution for each question and Section II reports statistical differences for each question (if there is any) by class and marital status. Section III gives a breakdown of the respondents demographically.

Section I

1. Are you presently attending school at the University of Minnesota?

	<u>% of sample</u>
A. Yes	96
B. No	5

2. How would you rate the University in providing services for student veterans?

	<u>% of sample</u>
A. Good	50
B. Average	40
C. Poor	10

3. How would you rate the Veterans Administration in providing services for you?

	<u>% of sample</u>
A. Good	69
B. Average	20
C. Poor	10

4. Have you heard of the University's Veterans Assistance and Outreach Office located in Morrill Hall?

	<u>% of sample</u>
A. Yes	77
B. No	23

5. Have you ever used the services of the Veterans Assistance and Outreach Office?

	<u>% of sample</u>
A. Yes	37
B. No	63

6. Was the Veterans Assistance and Outreach Office able to help you?
(Total of 82 respondents)

	<u>% of sample</u>
A. Yes	92
B. No	9

7. Have you ever heard of a service available to student veterans called the Reading and Study Skills Center?

	<u>% of sample</u>
A. Yes	43
B. No	57

8. Have you heard of Extension (or Evening) school counseling services for veterans?
- | | <u>% of sample</u> |
|--------|--------------------|
| A. Yes | 31 |
| B. No | 69 |
9. Have you been told about part-time job opportunities available for veterans through the University?
- | | <u>% of sample</u> |
|--------|--------------------|
| A. Yes | 47 |
| B. No | 53 |
10. From your experience, do you think the University administration is aware of your needs as a student veteran?
- | | <u>% of sample</u> |
|----------------------------|--------------------|
| A. Yes | 38 |
| B. No | 20 |
| C. Undecided or Don't Know | 42 |
11. Has your academic advisor ever told you about special services for student veterans?
- | | <u>% of sample</u> |
|--------|--------------------|
| A. Yes | 3 |
| B. No | 97 |
12. Will you be able to complete your degree program under the G.I. Bill?
- | | <u>% of sample</u> |
|--------|--------------------|
| A. Yes | 81 |
| B. No | 19 |
13. Are you currently using any of the following sources to supplement your G.I. Bill income?
- | | <u>Relative % of sample</u> |
|------------------------|-----------------------------|
| A. Employment | 51 |
| B. Loans | 13 |
| C. Savings | 36 |
| D. Scholarships | 6 |
| E. Spouse Working | 39 |
| F. Parental Assistance | 7 |
| G. Other | 0 |

(One or more yes responses could be given for this question.)

14. Have you heard of the G.I. Bill Tutorial Assistance Program that pays \$50 a month for a tutor?

	<u>% of sample</u>
A. Yes	69
B. No	31

15. How did you hear about the Tutorial Assistance Program?

	<u>% of sample</u>
A. Word of Mouth	26
B. Brochures/Bulletin Boards	8
C. Minnesota Daily	27
D. Veterans Assistance & Outreach Office	19
E. Other	19

16. Have you ever encountered VA certification problems when registering at Window 18 in the Bursar's office?

	<u>% of sample</u>
A. Yes	8
B. No	76
C. Don't Know	16

17. Were you referred to a "Vet Rep"?

	<u>% of sample</u>
A. Yes	52
B. No	48

(Total of 21 respondents)

18. Did the "Vet Rep" help solve your problems?

	<u>% of sample</u>
A. Yes	92
B. No	8

19. Do you think the University should provide any of the following services for veterans?
Answer Yes, No or Undecided.

Drug Counseling	<u>% of sample</u>
A. Yes	67
B. No	16
C. Undecided	17

Financial Counseling	<u>% of sample</u>
A. Yes	85
B. No	6
C. Undecided	8
Legal Assistance	<u>% of sample</u>
A. Yes	68
B. No	19
C. Undecided	13
Marital Counseling	<u>% of sample</u>
A. Yes	40
B. No	42
C. Undecided	18

Section II

Included in this section are only those questions which indicated a Chi-square significance of .06 or less.

1. Question #4, - Have you heard of the University's Veterans Assistance and Outreach Office located in Morrill Hall?

College class differences were significant ($p < .05$). More undergraduate than graduate or professional students (82% to 65%) had heard of Veterans Assistance & Outreach.

2. Question #8, - Have you heard of Extension (or Evening) school counseling services for veterans?

College class differences were significant ($p < .05$). More graduate or professional students than undergraduate veterans (81% to 65%) had not heard of Extension school counseling services.

3. Question #9, - Have you been told about part-time job opportunities available for veterans through the University?

College class differences were significant ($p < .06$). A higher percentage of graduate/professional student veterans than undergraduate (65% to 49%) were not aware of part-time job opportunities available for student veterans.

4. Question #12, - Will you be able to complete your degree program under the G.I. Bill?

College class differences were significant ($p < .06$). More undergraduate than graduate/professional student veterans (84% to 73%) said they would be able to complete their degree under the G.I. Bill.

5. Question #14, - Have you heard of the G.I. Bill Tutorial Assistance Program that pays \$60 a month for a tutor?

College class differences were significant ($p < .05$). More undergraduate than graduate/professional student veterans (74% to 57%) had heard of the Tutorial Assistance Program.

6. Question #19, - Do you think the University should provide any of the following services for veterans?

Under "Legal Assistance" differences attributable to college class were significant ($p < .05$). A higher percentage of undergraduate the graduate/professional student veterans (71% to 58%) felt that the University should provide them with legal help.

Section III

Demographically, the survey was broken into five different sections by the following percentages:

1. College Class	<u>% of sample</u>
A. CLA	26
B. IT	15
C. Business	12
D. Graduate	16
E. Dental	2
F. Medical	2
G. Law	5
H. Education	6
I. General College	10
J. Other	6

2. Class Standing	<u>% of sample</u>
A. Freshman	6
B. Sophomore	10
C. Junior	29
D. Senior	26
E. Graduate	17
F. Professional School	9
G. Other	3
3. Marital Status	<u>% of sample</u>
A. Married	59
B. Single	41
4. Number of Dependents	<u>% of sample</u>
A. Single	43
B. Wife Only	29
C. Wife & 1 Child	18
D. Wife & 2 Children	6
E. Wife & 3 Children	4
5. Sex	<u>% of sample</u>
A. Male	99
B. Female	1

(Nationally, women constitute just over 1% of the total number of veterans. Our random sample contained almost exactly the same percentage.)

Complete copies of the questionnaire employed in this survey and response percentages for each item are available upon request from the Veterans Assistance and Outreach Office, 7 Morrill Hall, University of Minnesota, Minneapolis, Minnesota 55455.

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office for student affairs RESEARCH BULLETIN

MINNESOTA STATEWIDE TEST NORMS:
V + M AND JUNIOR-SENIOR SCORE EQUIVALENCE

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Abstract

This report provides normative data on Minnesota verbal plus mathematics scores based on 43,899 Minnesota high school juniors tested in 1973-74. These norms may be used in conjunction with the separate Minnesota verbal and mathematics norm tables prepared earlier by Perry (1974). Equivalence tables for estimating Minnesota scores from junior SAT, senior SAT, and senior PSAT/NMSQT scores and for estimating junior SAT, senior SAT, and senior PSAT/NMSQT scores from Minnesota scores are also included.

Minnesota Statewide Test Norms:

V + M and Junior-Senior Score Equivalence

The Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) and the School and College Abilities Test (SCAT) replaced the Minnesota Scholastic Aptitude Test (MSAT) in the Minnesota Statewide Testing Program (MSTP) for 1973-74 high school juniors. Changing from a single familiar test to two less well known ones raised several important issues. An immediate need was for equivalence data. Most students would take one test but not the other, and the program was designed to provide equivalent interpretations of a student's performance regardless of which test was taken. Equivalence relations between the two tests were obtained from Educational Testing Service (ETS) and were also determined for students who had taken both PSAT/NMSQT and SCAT during the 1973-74 year as part of the MSTP. Scores on both tests were equated to one another using the equipercentile equating procedure, which assumes that a student achieving a PSAT/NMSQT score at any particular percentile would be expected to receive a SCAT score at the same percentile within this standardization sample. The ETS and MSTP equivalence relations were combined and used to assign both PSAT/NMSQT and SCAT scores to a common Minnesota score scale. This scale ranges from 10 to 80, and scores greater than 27 are identical to the PSAT/NMSQT scores reported by ETS. In the score range from 10 to 27, SCAT provides finer gradations of ability than can be obtained from the PSAT/NMSQT. Minnesota high school

The authors wish to thank Gary Joselyn and Edward Swanson of the Student Counseling Bureau staff for their many helpful comments during the preparation of this report.

junior norms were then developed for the verbal and mathematics Minnesota scores. More detailed information on the equating and norming process, and norm tables for Minnesota math scores and Minnesota verbal scores, are given by Perry (1974).

This report extends the normative data for the Minnesota score by providing norm tables for the sum of Minnesota verbal and mathematics scores and tables for obtaining Minnesota scores for PSAT/NMSQT or Scholastic Aptitude Test (SAT) scores obtained at times other than October of the junior year.

Norms for Minnesota Verbal Plus Mathematics Score

Students, counselors, and postsecondary institutions sometimes wish to assess a student's total performance on PSAT/NMSQT or SCAT, summing the verbal and mathematics subtests together. Therefore, norms were prepared for the Minnesota verbal plus mathematics (V + M) score total, using a sample of 43,899 juniors from schools which tested all or virtually all their juniors with either PSAT/NMSQT or SCAT in 1973-74. For this group, verbal and math scores correlated .70, indicating that while the two subtests share almost 50% of their variances, a considerable amount of difference exists between them. This suggests that consideration of the individual scores may be useful for predictive purposes because the tests are to a considerable extent measuring different abilities.

Norms for Minnesota V + M scores may be found in Table 1 and may be used in conjunction with the separate norm tables for Minnesota verbal and Minnesota math scores.

Table 1
 Junior Percentile Norms^a for
 Sum of Minnesota Verbal and Mathematics Scores^b

Minnesota V + M Score	Junior Percentile	Minnesota V + M Score	Junior Percentile
122-160	99	78	55
121	98	77	53
120	98	76	51
119	98	75	49
118	98	74	47
117	97	73	46
116	97	72	44
115	97	71	42
114	96	70	40
113	96	69	38
112	95	68	36
111	95	67	35
110	94	66	33
109	93	65	31
108	93	64	29
107	92	63	27
106	91	62	26
105	90	61	24
104	90	60	22
103	89	59	21
102	88	58	19
101	87	57	17
100	86	56	16
99	85	55	15
98	84	54	14
97	83	53	12
96	82	52	11
95	80	51	10
94	79	50	9
93	78	49	8
92	77	48	7
91	75	47	7
90	74	46	6
89	72	45	5
88	71	44	5
87	69	43	4
86	68	42	3
85	66	41	3
84	65	40	3
83	63	39	2
82	61	38	2
81	60	37	2
80	58	21-36	1
79	57		

^a Based on 43,899 Minnesota high school juniors tested in 1973-1974

^b $r_{vm} = .70$

The Relationship of Junior and Senior PSAT/NMSQT Scores

Most Minnesota students participate in the statewide testing program during the 11th grade, and normative, validity, and criterion data for interpreting and applying the test results are therefore based on 11th-grade Minnesota scores. However, some students take PSAT/NMSQT as high school seniors, either as a makeup because they did not take it as juniors, or as a retest because the junior scores seemed inconsistent with other evidence of their abilities. Other students, especially those from out of state, may present SAT scores. Because scores on aptitude tests generally show an increase over time, it is necessary to adjust the SAT or senior-year PSAT/NMSQT scores to equivalent junior-year Minnesota scores so that the Minnesota score interpretive data can be applied.

Procedure

To assist in the development of these junior-senior year equivalence tables, ETS provided the MSTP with data from their recent PSAT/SAT overlap study. Two groups were involved:

1. A national sample of 5077 students who had taken the PSAT/NMSQT as juniors in October of 1972 and the SAT as juniors in either March or April of 1973.
2. A national sample of 4221 students who took the PSAT/NMSQT as juniors in October of 1972 and the SAT as seniors in October, November, or December of 1973.¹

These two ETS samples could potentially yield four different equivalence relationships, which would relate fall junior-year PSAT/NMSQT scores to:

1. Spring junior-year SAT,
2. Spring junior-year PSAT,
3. Senior-year SAT, or
4. Senior-year PSAT/NMSQT.

¹ The assistance of the Educational Testing Service is gratefully acknowledged.

The second and fourth relationships are derived from the relationship between the PSAT/NMSQT and SAT score scales, i.e., $SAT\ score = 10 \times PSAT/NMSQT\ score$ (1974 PSAT/NMSQT Interpretive Manual). The second relationship is not of interest since PSAT/NMSQT is not given in the spring of the junior year. The other three equivalences are potentially useful. The first and third relationships are helpful to the counselor and student who wish to estimate PSAT/NMSQT or Minnesota scores from SAT scores or vice versa. The fourth relationship is of primary interest because it permits determination of Minnesota or junior-year PSAT/NMSQT scores from PSAT/NMSQT scores received in the senior year.

The development of equivalence tables showing relationships 1, 3, and 4 followed equipercentile equating procedures. This method, as indicated above, assumes that an individual achieving at any particular percentile on one test will score at the same percentile on the other test and is applicable here because each of the two ETS samples consisted of students who had taken both the PSAT/NMSQT and SAT. The following steps were followed in developing the equivalence tables. First, four cumulative percentage curves were plotted for each sample: PSAT/NMSQT verbal, PSAT/NMSQT math, SAT verbal, and SAT math. The plotted points for each subgroup were then connected by a smooth curve.² Tables were then compiled giving an exact percentile score for each test score. Finally, equivalent scores--those with the same percentile score or closest in percentile points--were identified from these tables.

² The assistance of Robin Carpenter, who prepared most of these graphs, is deeply appreciated.

Results

The resulting equivalent scores are given in Tables 2 and 3. Table 2 shows the equivalent Minnesota scores for SAT taken in the spring of the junior year, and Table 3 gives Minnesota scores for senior year PSAT/NMSQT or SAT. Because many institutions have normative data or established interpretations of SAT scores, the tables are designed to permit estimation of SAT scores from Minnesota scores as well as conversion of junior SAT, senior SAT, or senior PSAT/NMSQT scores to Minnesota scores.

Because there is not a one-to-one relationship of scores throughout the entire range, arrows are inserted in those parts of the tables where ambiguity could occur. For example, Table 2 shows that a SAT verbal score of 360 is the closest equivalent to Minnesota verbal scores of both 35 and 36; however the Minnesota score of 36 is the nearest equivalent to the SAT score of 360. Similarly, SAT math scores of 420 and 430 both have the Minnesota score of 42 as their nearest equivalent, but 420 is the SAT score most nearly equivalent to the Minnesota score of 42.

Table 2 is intended for use by counselors working with students who have taken the SAT as juniors and for whom an equivalent Minnesota score is desired. Converting to Minnesota score equivalents permits the student to use his or her SAT scores with the normative and validity information supplied by the MSTP. As Table 2 shows, no change in scores over about a six-month period is seen for students in the middle ability ranges on both the verbal and mathematics measures. For students at both the lower and higher ends of the ranges, however, some increase is seen in both verbal and mathematics scores.

Table 2

Minnesota Score Equivalents of Junior Year
Scholastic Aptitude Test (SAT) Scores

Minn- esota Score	SAT Score	Minn- esota Score	SAT Score	Minn- esota Score	SAT Score	Minn- esota Score	SAT Score
VERBAL							
78-80	→ 800	62	620	44	440	26	← 290
77	← 800	61	610	43	430	25	→ 290
76	790	60	600	42	420	24	280
75	780	59	590	41	410	23	270
74	770	58	580	40	400	22	← 270
73	760	57	570	39	390	21	→ 270
73	750	56	560	38	380	20	→ 260
72	740	55	550	37	370	19	← 260
71	730	54	540	36	← 360	18	→ 260
70	← 720	53	530	35	→ 360	17	→ 250
70	← 710	52	520	34	350	16	← 250
69	700	51	510	33	340	15	→ 250
68	← 690	50	500	32	330	14	→ 240
68	← 680	49	490	31	→ 320	13	← 240
67	670	48	480	30	← 320	12	230
66	660	47	470	29	310	11	220
65	650	46	460	28	300	10	← 210
64	640	45	450	27	→ 290	10	← 200
63	630						
MATH							
78-80	→ 800	63	630	45	460	28	→ 290
77	← 800	62	620	44	450	27	← 290
76	790	61	610	43	440	26	280
75	← 780	60	600	42	← 430	25	← 270
75	← 770	59	590	42	← 420	24	→ 270
74	760	58	580	41	410	23	← 260
73	750	57	570	40	400	22	→ 260
72	740	56	560	39	390	21	← 250
71	← 730	55	550	38	380	20	→ 250
71	← 720	54	540	37	370	19	← 240
70	710	53	530	36	← 360	18	→ 240
69	700	52	520	35	→ 360	17	→ 230
68	← 690	51	510	34	350	16	← 230
68	← 680	50	500	33	340	15	→ 220
67	670	49	← 490	32	330	14	← 220
66	660	48	→ 490	31	320	13	→ 220
65	650	47	480	30	310	12	210
64	640	46	470	29	300	11	200

For most students and counselors, the relationship between Minnesota scores and senior PSAT/NMSQT or SAT scores is of more interest. These equivalencies are given in Table 3.

As shown in Table 3, PSAT/NMSQT scores increase from the junior to senior years. For Minnesota verbal scores above 37, the increase from junior to senior year is about 2 PSAT/NMSQT points (or 20 SAT score points); below 36 the increases are somewhat greater. The gains in the Minnesota mathematics score from junior to senior year follow a slightly different pattern. Scores of 70 and above show an increase of about 3 points (30 points in SAT score terms) and those between 50 and 69 show a 2 point increase (20 points in SAT score terms). Although not clearly shown in the table because PSAT/NMSQT and Minnesota scores diverge below 27, PSAT/NMSQT scores between 25 and 49 show only a single point increase over the year, and scores below 24 show about a 2 point increase.

Minnesota Statewide Testing reports of senior-year PSAT/NMSQT results are presented in terms of Minnesota scores derived from Table 3. A given Minnesota score therefore has the same meaning whether it is based on a junior or a senior PSAT/NMSQT score.

Validity data and more specific normative data are in preparation for specific colleges in which sizable groups of freshmen had PSAT/NMSQT or SAT scores before the adoption of the former in the Statewide Testing Program. Eventually Minnesota score normative and validity data will be available for students entering Minnesota postsecondary education in the fall of 1975 (the first group with substantial numbers of PSAT/NMSQT scores).

Table 3

Minnesota Score Equivalents of Senior Year
Preliminary Scholastic Aptitude Test/
National Merit Scholarship Qualifying Test (PSAT/NMSQT) Scores or
Scholastic Aptitude Test (SAT) Scores^a

Minn- esota Score	PSAT/ NMSQT Score	Minn- esota Score	PSAT/ NMSQT Score	Minn- esota Score	PSAT/ NMSQT Score	Minn- esota Score	PSAT/ NMSQT Score
VERBAL							
78-80	→ 80	61	63	43	45	25	↔ 30
77	↔ 80	60	62	42	44	24	↔ 29
76	↔ 79	59	61	41	43	23	→ 29
75	↔ 78	58	60	40	42	22	↔ 28
74	↔ 77	57	59	39	41	21	→ 28
73	↔ 76	56	58	38	40	20	↔ 27
72	↔ 75	55	57	37	→ 39	19	→ 27
71	↔ 74	54	56	36	→ 39	18	↔ 26
70	← 73	53	55	35	↔ 38	17	→ 26
70	↔ 72	52	54	34	↔ 37	16	→ 26
69	↔ 71	51	53	33	↔ 36	15	↔ 25
68	↔ 70	50	52	32	↔ 35	14	→ 25
67	↔ 69	49	51	31	↔ 34	13	↔ 24
66	↔ 68	48	50	30	↔ 33	12	↔ 23
65	↔ 67	47	49	29	↔ 32	11	↔ 22
64	↔ 66	46	48	28	↔ 31	10	← 21
63	↔ 65	45	47	27	→ 31	10	↔ 20
62	↔ 64	44	46	26	→ 30		
MATH							
78-80	→ 80	61	63	44	45	26	↔ 28
77	↔ 80	60	62	43	44	25	→ 27
76	↔ 79	59	61	42	43	24	↔ 27
75	↔ 78	58	60	41	42	23	↔ 26
74	↔ 77	57	59	40	41	22	→ 26
73	↔ 76	56	58	39	40	21	→ 25
72	↔ 75	55	57	38	39	20	↔ 25
71	↔ 74	54	56	37	38	19	→ 24
70	← 73	53	55	36	37	18	↔ 24
70	↔ 72	52	54	35	36	17	→ 24
69	↔ 71	51	53	34	35	16	→ 23
68	↔ 70	50	↔ 52	33	34	15	→ 23
67	↔ 69	50	← 51	32	33	14	↔ 23
66	↔ 68	49	↔ 50	31	32	13	→ 23
65	↔ 67	48	↔ 49	30	31	12	→ 22
64	↔ 66	47	↔ 48	29	30	11	↔ 22
63	↔ 65	46	↔ 47	28	29	11	← 20-21
62	↔ 64	45	↔ 46	27	→ 28		

^a To use with SAT scores, let SAT equal 10 times PSAT/NMSQT score, e.g., SAT score of 680 is equivalent to PSAT/NMSQT of 68 and therefore to a Minnesota score of 66 for both verbal and math.

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office for student affairs RESEARCH BULLETIN

A SURVEY OF STUDENT OPINION TOWARD STUDENT SERVICES FEES AT THE UNIVERSITY OF MINNESOTA

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Abstract

The University Poll conducted a survey of the opinions of 740 randomly selected Twin Cities campus students toward 14 student services fees required by the University of Minnesota. Results from 624 students, 84% of the sample, are reported here. Key findings include: For no fee did a majority of students endorse an immediate reduction or elimination, but for only four fees (Health Service inpatient and outpatient care, Student Ombudsman Service, and Regents' Aid Fund) did a majority advocate an increase to maintain present programs in the face of inflation. Over three-quarters of the respondents were against having a regular telecommunications fee, although over two-fifths felt that they might be interested in using student telecommunications services in some fashion. Respondents were nearly evenly divided over a proposal to replace the Health Service inpatient fee with a health insurance requirement.

A SURVEY OF STUDENT OPINION TOWARD STUDENT FEES
AT THE UNIVERSITY OF MINNESOTA

Ronald Matross, Deborah Seaburg, & Patricia Hahn

Student Life Studies
University of Minnesota

For several years a number of student services at the University of Minnesota have been directly funded at least in part by students through mandatory fees paid at registration. Currently all full time students (those registered six or more credits per quarter) are required to pay fees totalling \$49 per quarter over and above their tuition. This amount is distributed among 13 programs and services, including the University Health Service, the Minnesota Union and the Twin Cities Student Assembly, the major unit of student government.

Recommendations regarding the levying and distribution of fees are made by the Student Services Fees Committee which reports to the Twin Cities Student Assembly which in turn makes fee policy recommendations to the Board of Regents. Final determination of fees policies is made by the Regents. Prior to the late 1960s, the Student Services Fees Committee was composed entirely of faculty and staff members with no formal student representation. However, by 1970, the composition of the committee began to change with the inclusion of non-voting student members. Once established, the trend toward student representation rapidly accelerated, with students first gaining equal representation and then completely reversing the original structure of the committee. In its present form, the twelve voting members of the committee are all students elected for two-year terms, with six members of the faculty and administration serving a non-voting, advisory capacity. As part of its charter, the Student Services Fees

Committee is charged with periodically assessing student opinion toward the student services fees.

The first survey of opinions toward student fees was conducted by the University Poll in Winter Quarter of the 1972-73 academic year. This initial survey asked a random sample of students whether each of the major recipients of student fees should continue to receive fee support and whether the student would pay the fee if it were optional. The results of the survey suggested that students were quite selective in their views of fee support for individual services. A majority of respondents favored required fees for individual services. A majority of respondents favored required fees for the Minnesota Daily (68%), the Minnesota Student Association (53%), and the Minnesota Union (52%), with majorities (52-75%) also responding that they would pay optional fees for these services. Fifty percent favored a required fee for the University Health Service, although 75% said they would pay it if it were optional. A majority of students were against requiring fees for the renovation and building of the Minnesota Union (53%), the construction of the Bierman Athletic Building, and the support of the intramural athletics program (72%).

The present survey was commissioned by the Student Services Fees Committee and was conducted by the University Poll during Winter and Spring Quarters of the 1974-75 academic year. The questions asked were expanded over those of the first survey in several ways. The previous survey asked for student opinions of fee requirements in an all or nothing fashion without consideration of the size of the fee received by each program. The economic trends of the past two years suggested that detailed information should be obtained about student views of the amount of money in the fee

supporting each program. Thus, for each fee, students were given the amount of the fee and asked whether the fee should be eliminated, reduced, frozen at its present level (meaning a gradual reduction of services due to inflation), increased as needed to maintain the present level of services, or increased enough to expand services. While the first survey considered only those programs which received the largest amounts of support, the present survey examined opinions toward all fee-supported programs. Additionally, two other kinds of questions were asked. One type asked students about the usage of some of the major fee supported programs in order to test the hypothesis that those who use the service might be more favorable toward supporting it than those who do not use the service. Finally, students were asked to evaluate two proposals currently of interest to the Student Services Fees Committee: A proposed change in the method of funding hospital care for students and a proposal to institute a regular fee for student-operated telecommunications services.

Method

The survey was conducted entirely by mail. Questionnaire items were developed by the staff of the University Poll to cover content areas prescribed by a subcommittee of the Student Services Fees Committee.

Sample: The survey was mailed to a random, computer-generated sample of 740 students from an Admissions and Records file of students registered during Winter Quarter. An additional 19 names were supplied with only out-of-state addresses and were not mailed questionnaires. The sample included both full-time and part-time students (part-time students not paying the fee) on the assumption that differences in opinion between those who paid the fee and those who did not could be analyzed statistically.

Mailing Procedures: Students selected for the sample were first contacted on March 4, 1975 through a pre-letter describing the study. The questionnaire with an accompanying cover letter was mailed three days later on March 7, 1975. Ten days later, immediately before the break between quarters, a postcard follow-up was mailed. On April 1 following the quarter break, non-respondents were mailed a second follow-up letter which included a second questionnaire. A final follow-up postcard to non-respondents was mailed on April 14.

Returns: By April 24, 1975 completed questionnaires had been received from 624 of the 740 students in the sample, for a response rate of 84%. The remaining 116 individuals included 21 with untraceable addresses and 95 who were presumably contacted but chose not to return the questionnaire.

Table 1 presents a comparison of the distribution of the sex, class, and college of the respondents compared to the distribution of these characteristics in the entire student population of the Twin Cities Campus. While the respondents include a somewhat greater proportion of women, seniors, and liberal arts students than in the total population, differences between the sample and population distributions did not approach statistical significance for any of the three characteristics. Comparative population figures were not available for the distribution of part-time versus full-time students. Within the sample, however, comparisons were made between the full-time fee-paying students and the part-time non-fee-paying students in their opinions toward the 14 existing student services fees. No significant differences were found for 10 of the fees. For three of the remaining four fees, the Regents' Aid, the Elections Committee, and the International Programs fees, part-time students favored an increase in the

fee significantly ($p \leq .01$) more than did full-time students. Part-time students were less favorable than were full-time students toward the Athletic Building fee. Even for these four fees the addition of the opinions of the 57 part-time students in the sample to those of the 567 full-time students would have little effect on the total results. Therefore the remainder of the findings presented here include the opinions of both groups combined. Overall, the sampled responses can be considered quite representative of the views of the total Twin Cities Campus student population.

Results

Table 2 presents respondents' opinions about possible actions for required student service fees. The fees receiving the strongest endorsement, with a majority favoring an increase at least to maintain current programs, were the Health Service outpatient care fee (60%), the Regents' Aid Fund fee (56%), and the Student Ombudsman Service fee (50%), and the Health Service inpatient care fee (50%). The required fees receiving the least support, with a plurality favoring the reduction or elimination of the fee, were the Twin Cities Student Assembly fee (44% favoring reduction or elimination), the athletic building fee (41%), the campus elections fee (40%), and the study-travel center (36%). The remainder of the fees received intermediate levels of support. An increase in the fee was the modal response (40-42%) for the fees supporting the Minnesota Daily, the intramural/extramural program, and the music fund, although a majority in each case advocated the freezing, reducing, or eliminating of the fee. Freezing the fee was the modal response for the International Programs fee (41%), the Minnesota Union fee (36%), and the college boards fee (44%).

Table 3 presents the distribution of responses to items concerning

current and proposed students telecommunications efforts. When asked about the development of a direct fee for student telecommunications, over three-quarters of the respondents (78%) responded that the fee should not be required, with 13% in favor of it, and 9% not sure. A somewhat larger percentage (22%) said they would pay an optional telecommunications fee than would support a required fee. Over two-fifths (44%) of the respondents indicated they might be interested in viewing student telecommunications productions or in using telecommunications facilities in some other way, although fewer than one-fifth had ever heard of the current student telecommunications service, the University Community Video Center. Those who were familiar with the present telecommunications center and its productions were significantly more likely to approve a required telecommunications fee and to pay an optional fee.

Table 4 shows responses to items related to the University Health Service. The respondents were almost evenly divided in their views toward a proposal to replace the Health Service inpatient care fee with a health insurance requirement. However, over four-fifths (86%) of the sample felt that any University insurance plan should be optional. Over half the respondents had used the Health Service at least once during the academic year, with 8% reporting that they had at some time (not just in the past year) been hospitalized at the Health Service. Usage of the Health Service was positively related to opinions toward the outpatient care fee. The more frequently the individual had used the Health Service, the more likely he was to advocate some increase in the outpatient care fee.

Table 5 displays distributions of usage of the student unions, the intramural/extramural programs, and the University's athletic facilities.

As for the Health Service outpatient fee and telecommunications fee proposal, those who used these services frequently were more likely to support increases in the fees than were those who used the services less frequently.

Discussion

Two somewhat conflicting trends were evident in students' attitudes toward their student services fees. First, in no case did a majority of respondents wish to eliminate or precipitously reduce any of the current fees. Despite the economic conditions of early 1975, students appear not to want to severely curtail their direct support of the institution's non-classroom activities. However, for only four of the fourteen programs supported by fees did a majority of students feel that the fee should be increased either to expand services or to maintain the current level of service and programming.

Quite clearly the mood of University of Minnesota students is to hold the line on expenditures for student services. While they are not ready to remove their direct support for student services, they are willing to accept gradual attrition in the scope of these programs from an inflationary economy. The four programs not fitting this pattern, the Student Health Service outpatient and inpatient programs, the Regents' Aid Scholarship Fund and the Student Ombudsman Service, can all be characterized as "problem-solving" services, programs directed toward the removal of deficits or difficulties encountered by students. Students seemed less willing to support programs aimed at development, growth or enrichment beyond their classroom experiences. While usage of major student services and support for their fees were positively related, student priorities cannot be explained simply by the conclusion that

students will support only those services which they use. For instance, a majority (51%) of those who did not use the Health Service at all during the previous two quarters still supported some increase in the outpatient care fee while a majority (56%) of those who had watched the programs, "Changing Channels" or "Everybody's TV Time," were still opposed to a proposed \$1.00 telecommunications fee.

The fiscal conservatism and selectivity of students may not be a new development. For example, in the first fee survey two years ago, four-fifths of the respondents were opposed to a 50¢ per quarter fee for a student-operated FM radio station, just as over three-quarters of the respondents in the present survey were opposed to the telecommunications fee proposal. The greatest discrepancy between the results of the present survey and those of two years ago is the difference in support for student government. In the first survey, small majorities of the respondents felt that a fee for the Minnesota Student Association should be required (53%) and would pay this fee if it were optional (59%). In the present survey, a plurality (44%) felt that the fee for the Twin Cities Student Assembly should be eliminated or cut back, with only 12% responding that it should be increased sufficiently to maintain the organization's present scope. It might be surmised that the Twin Cities Student Assembly is not seen as a problem solving organization in the way that the Student Ombudsman Service and the Health Service are.

The student priorities discernible in the present data raise questions about the emerging direction of student personnel work. A growing trend in the field in recent years has been to view the central focus of student personnel work as student development, fostered through innovative extra-classroom educational experiences, closely coordinated with classroom experiences (Williamson, and Biggs, 1975; Creamer, 1975). While

students may also endorse the concept of student development, the results of this survey suggest that they may not be enthusiastic about supporting growth-oriented services with their own money. When asked to pay, students are likely to be most receptive to funding traditional problem-solving or deficit-directed student services.

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Table 1

CHARACTERISTICS OF SAMPLE AND POPULATION

	<u>Respondents</u>		<u>Winter Quarter Totals^a</u>	
	5 or fewer	6 or more	Male	Female
Number of credits taken winter quarter.	9%	91%		
Sex.	Male	Female	Male	Female
	58%	42%	61%	39%
Class.				
	Freshman	<u>17%</u>		<u>16%</u>
	Sophomore	<u>17%</u>		<u>18%</u>
	Junior	<u>18%</u>		<u>18%</u>
	Senior	<u>22%</u>		<u>18%</u>
	Graduate or Adult Special	<u>26%</u>		<u>30%</u>
		N=602		
College.				
	CLA	<u>41%</u>		<u>38%</u>
	IT	<u>10%</u>		<u>9%</u>
	AFHE	<u>8%</u>		<u>8%</u>
	GC	<u>5%</u>		<u>6%</u>
	Ed	<u>6%</u>		<u>5%</u>
	Grad, Law, Med	<u>16%</u>		<u>21%</u>
	Other	<u>14%</u>		<u>13%</u>
		N=613		

^aExtrapolated from official winter quarter registration statistics.

Table 2
PERCENTAGE DISTRIBUTION OF RESPONSES
TO STUDENT SERVICES FEES OPTIONS^a

	N	Fee Eliminated	Fee Reduced	Fee Frozen	Fee Increased, maintain services	Fee Increased, expand services	No Opinion
1. Health Service outpatient care (\$21.50) supports doctors, staff, and facilities for student out-patient care.	621	6	9	24	54	6	2
2. Regents Aid fund (\$1.88) helps Student Financial Aid Office assist students.	614	8	5	29	42	14	2
3. Student Ombudsman Service (5c) funds a student operated service to answer bureaucratic questions, mediate academic problems, and make referrals to helping agencies.	613	8	6	35	39	11	2
4. Health Service inpatient care (\$5.00) entitles students to 70 days per quarter of hospitalization.	620	10	5	33	46	4	2
5. Board of Student Publications (\$1.80) supports 50 issues of Minnesota Daily per quarter and other student publications.	616	7	11	40	38	2	2
6. Intramural/extramural sports (\$2.41) pays for intramural/extramural sports activities and maintenance of facilities.	616	16	12	32	31	9	1
7. Music fund (31c) helps pay cost of University bands, chorus, and other student musical groups.	618	16	9	35	32	7	2
8. International programs (15c) helps fund student programs for foreign students and intercultural activities for all students.	613	14	12	41	25	6	2
9. Student Union fee (\$12.50) supports staff, maintenance, building programs of Coffman, St. Paul and West Bank Unions, and associated commons areas.	619	9	24	36	26	3	1
10. College boards (15c) funds activities of the University's college boards, the major unit of student government within each college.	613	14	14	44	24	2	3
11. Study-travel fund (10c) helps students who plan to travel or study abroad.	619	28	8	35	23	5	2
12. Athletic building fund (\$2.35) pays for construction of facilities for intercollegiate athletics, intramural sports and physical education classes.	619	23	18	30	24	6	1
13. Elections Committee (5c) funds production of ballots and supervision of campus elections.	613	27	13	41	16	1	2
14. Twin Cities Student Assembly (75c) pays for stipends, supplies and activities of TCSA, the major unit of student government.	619	24	20	40	12	1	3

^a Responses may sum to under or over 100% for each item due to rounding of decimals

Required student services fees currently total \$49.00 per quarter. These fees are distributed among a variety of organizations to provide services, activities, and facilities for all students. In a period of inflation, maintaining the current level of any one of these functions will require a gradual increase over the next few years in the fee supporting it. Freezing a fee at its current level would result in a gradual reduction in services. To add or expand a service either the total fees would have to be increased or other fee supported services cut back. Below is a list of the ways student fees are currently spent. Please circle what you think should be done with each fee.

Table 3^a

PERCENTAGE DISTRIBUTION OF RESPONSES TO TELECOMMUNICATIONS ITEMS

	No		
	<u>Yes</u>	<u>No</u>	<u>Opinion</u>
Should a \$1.00 telecommunications fee be one of the student services fees required of all students?	13%	78%	9%
Would you pay the \$1.00 telecommunications fee if it were optional?	22%	70%	8%
Which of the following student telecommunications services would you be interested in using? (Check all that you might be interested in)			
Watching or listening to video tapes, TV or radio programs (produced by students about student and community concerns)	<u>27%</u>	} 44% checked at least one interest	
Receiving instruction in filmmaking, radio or TV production	<u>25%</u>		
Being part of the center's staff, either paid or as a volunteer	<u>8%</u>		
Using the center's facilities to produce video tapes, radio programs or films	<u>18%</u>		
Using the center's facilities as a resource in your academic course-work (e.g. making a film instead of a term paper)	<u>25%</u>		
None	<u>47%</u>		
Checked no items	<u>9%</u>		
	<u>Yes</u>	<u>No</u>	
Have you ever listened to WMR, the student operated closed circuit radio station serving the residence halls?	19%	81%	
Have you ever watched "Changing Channels" (10 pm Wed.) or "Everybody's TV Time" (10:30 pm Wed.) on KTCA, Channel 2?	14%	86%	
	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Have you ever heard of the University Community Video Center, a student controlled video access and production center on the West Bank Campus?	18%	74%	8%
Have you ever taken a telecommunications-related course at the University?	9%	89%	2%
Respondents who had watched "Changing Channels" or "Everybody's TV Time", who had heard of the Community Video Center or who had taken a telecommunications course at the University were significantly ($p \leq .01$) more likely to support a required telecommunications fee than those who had not.			

^a Questions were prefaced with the following description of current and proposed telecommunications funding:

Currently students indirectly fund a student operated telecommunications center through money from the West Bank Union budget and a telecommunications fee collected from 1970-72. This indirect support totals about 75¢ per student per quarter. A proposal has been made to replace this indirect telecommunications support with a direct mandatory fee of \$1.00 per student per quarter. This fee would pay for a variety of telecommunications services to students, including training in video production, access to telecommunications equipment and the production of films, TV and radio programs.

Table 4^a

PERCENTAGE DISTRIBUTION OF RESPONSES TO
HEALTH SERVICE AND INSURANCE ITEMS

Should the health insurance requirement be substituted for the mandatory \$5.00 fee?	<u>Yes</u>	<u>No</u>	<u>No Opinion</u>
	45%	47%	8%
If the hospitalization fee is replaced, should the University's own health insurance policy be mandatory or optional?	<u>Manda- tory</u>	<u>Option- al</u>	<u>No Opinion</u>
	9%	86%	5%
How many times have you used the Health Service this past fall and winter quarters?		<u>None</u>	<u>45%</u>
		<u>1-5 times</u>	<u>45%</u>
		<u>Over 5 times</u>	<u>10%</u>
Have you ever been hospitalized as an inpatient (overnight or longer) in the Health Service Inpatient Facility?	<u>Yes</u>	<u>No</u>	
	8%	92%	
The Health Service fees give students a number of health care services. What other kind(s) of health insurance coverage do you have? (Check all that apply):			
No other coverage			<u>19%</u>
Covered by parents' health insurance			<u>41%</u>
Covered by the University's Supplementary Blue Cross plan			<u>19%</u>
Covered by insurance provided by an employer			<u>17%</u>
Covered by own private insurance policy			<u>14%</u>

Respondents who used the Health Service frequently were significantly ($p \leq .01$) more likely to favor some increase in the Health Service Outpatient Care fee than were those who did not.

^aThe Health Service fee opinion items were prefaced with the following:

A proposal has been made to replace the required \$5.00 per quarter hospitalization fee (covering 70 days of hospital care at the Health Service, but not physicians' fees) with a requirement that all students carry some form of health insurance. The University would offer a health insurance policy at \$15.00 per quarter which would pay physicians' and surgeons' fees and 70 days of care at any hospital.

Table 5
 PERCENTAGE DISTRIBUTION OF RESPONSES TO
 ATHLETICS AND UNION USAGE ITEMS

	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Did you participate in any intramural/extramural sports activities during fall or winter auarter?	25%	74%	1%
Have you ever used the Bierman Athletic Building? . . .	22%	77%	2%
Have you ever used Bierman Field?	25%	74%	1%
How often do you usually use one of the University's athletic facilities (either for team sports, individual sports or general recreation)?		Never	<u>43%</u>
		Less than once a month	<u>18%</u>
		Once a month	<u>7%</u>
		2-3 times a month	<u>13%</u>
		Once a week or more	<u>20%</u>

Respondents were significantly more likely ($p \leq .01$) to favor some increase in the Intramural/Extramural and Athletic Building fees if they had participated in intramural/extramural activities, if they frequently used the University's athletic facilities and if they had used the Bierman Building or Field. Also, significantly more men than women favored some increase in the intramural/extramural and Athletic Building fees.

How often do you usually use one of the student unions (Coffman, West Bank, St. Paul)?	6-7 days a week	<u>3%</u>
	4-5 days a week	<u>14%</u>
	2-3 days a week	<u>16%</u>
	About once a week	<u>14%</u>
	Less than once a week	<u>52%</u>

Respondents were significantly more likely ($p \leq .01$) to support some increase in the Minnesota Union fee if they used the student unions frequently than if they did not.

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ECONOMIC AND SOCIAL COPING STRATEGIES OF FOREIGN STUDENTS

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Abstract

The status of foreign student is shown to have both legal and social aspects which make definition of the subset difficult. Their legal status is that of holding a special position in immigration law which restricts their activities, especially in economic areas. That they are viewed socially as "outsiders" is reflected in the nature of their social relationships and activities. Because of the legal and social conditions of their presence in the U.S., foreign students can be viewed as utilizing distinctive social and economic strategies for coping with American society. A number of people function in roles as brokers between foreign students and the dominant society. Many of the financial arrangements of foreign students are shown to be inextricably tied to the legal prohibitions on employment which are a condition of their presence.

ECONOMIC AND SOCIAL COPING STRATEGIES OF FOREIGN STUDENTS

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FOREIGN STUDENTS: A DEFINITION

A visible and significant sub-set of the student body of most major American institutions of higher education is its foreign student population. The three decades of the post World War II era have seen a phenomenal growth in the numbers of these students present in the U.S., and in 1973 more than 146,000 foreign students were enrolled in post secondary schools in this country. The growth of the foreign student population on the University of Minnesota campuses is illustrated in Table I. Almost 1600 students were identified by the International Student Advisers Office in the academic year 1974-75.

Justification for the presence of foreign students is diverse, but one can trace a shift in the rationale that began in the early 1950s with an idealistic support for intercultural exchange and post World War II aid programs. This changed to a baldly economic and political argumentation in the 1960s, i.e. to teach Western technology and ideology. Throughout this time many voiced their concern about the "brain drain" said to result from the non-return of students to their economically less-developed and sometimes politically unstable homelands.

In the past few years, concerns have shifted from the economic and social implications of foreign study and of the non-return of the students to their home countries, to that of the impact their presence individually and collectively has for the receiving American society.

As the cost of American education has skyrocketed, institutions have been forced to examine their financial ability to service this group. In turn, as tuition and living costs have escalated, the financial press on individual students regardless of their nationality has been considerable. Competition for available economic resources, whether in the form of scholarships, assistantships or part-time jobs, is increasing among all students. The economic crunch for foreign students has been exacerbated by the legal restrictions which are conditions of their visa status.

A mounting national debate over U.S. immigration policy has led to arguments for severe limitations to be placed on the presence of foreigners, including students. Xenophobic fears based on varying rationales are revealed by calls for limiting immigration from such diverse groups as Zero Population Growth and some labor organizations. The increasing debate over constricting immigration and stemming the flow of illegal immigrants finds concrete expression in the administrative labyrinth of the bureaucracy concerned with U.S. immigration, the promulgation of their regulations and the manner of their interpretation.

As we hope to make clear, foreign students cannot remain aloof from this debate for a number of reasons. As institutionally based groups of individuals, they are far more easily recognizable than other categories of non-citizens and consequently are easily identifiable targets in the public as well as the bureaucracies' frustration about the immigration problem. In addition, it must be acknowledged that student status has proved to be a viable route of entrance into the United States for a significant number of individuals who would otherwise have found it more difficult, if not impossible, to enter legally.

The Problem: Coping Strategies

The immediate problem examined by our study of foreign students was two-fold in nature. First, we were interested in describing and, if possible, explaining the nature of social relationships within that social category labeled foreign students. Second, our focus has been on the economic aspects of their life, for the genesis of the study was in a number of actions taken in this area by the Legislature of the State of Minnesota, the U.S. Immigration and Naturalization Service, and the University's Financial Aid Office. More specifically, we were looking for coping strategies, primarily economic, employed by foreign students. As our study proceeded, the centrality of American immigration law, its detail, application and enforcement became apparent. This report focuses on a description of the foreign student population at the University of Minnesota and a description of the unique relationship this subset has to the University in particular and to American society in general.

Who is a Foreign Student?

Social categories, by definition, are agreed upon constructs and thus often lack clear-cut boundaries. Legal definitions, while apparently more precise, also lack absolute certainty, as is evidenced by the adjudication often necessary to determine such diverse statuses as spousehood, citizenship, studenthood and even a recent Supreme Court ruling as to who is a person. The construct, foreign students, also suffers from definitional problems. What is the basis of the descriptor "foreign?" Is it citizenship or nationality, cultural heritage, or the legal basis for a person's presence in the U.S.? As we shall see, for meaningful understanding of foreign student behavior, the interpreter

must remain aware of the basis for the lack of congruence between social and legal definitions of foreign studenthood in order to interpret much of the data presented here. And as we have shown elsewhere, the boundaries of studenthood are patently ill defined, and minimum requirements for qualification either legally or socially as a student vary enormously from situation to situation (Hendricks and Zimbrott, 1974).

A "common sense" definition of a foreign student would usually include such dimensions as non-U.S. citizenship, prior socialization in a cultural system external to that extant in the U.S., and generally the assumption that the individual's residence in the U.S. is temporary and primarily for the purpose of attending an educational institution.

A legalistic definition, however, is inextricably tied to U.S. immigration laws and the enforcement policies of the Immigration and Naturalization Service (INS). Because of this lack of congruence between the two definitions, those assigned roles of responsibility for dealing with foreign students on campuses have difficulty in establishing the boundaries of their constituencies. The researcher, in turn, is puzzled as to the inconsistencies of demographic data concerning foreign students. The outside observer, whether faculty member, legislator, or ordinary citizen, is even more confused by the seeming fuzziness of what seems to be a logically discrete category of people.

The statistical statements in this paper will concern individuals who are "foreign students" at a large mid-western urban university. For the purposes of this paper we will limit ourselves to a definition of foreign students as those individuals who hold "F", "J", or "H" visa statuses. Foreign nationals or resident alien students are those holding immigrant visas, and hyphenated-Americans (e.g., Asian-Americans) are

students who are U.S. citizens either by birth or naturalization but are ascribed and/or choose identification as members of a national or ethnic subset (e.g., Chinese-Americans).

The Legal Basis of Foreign Studenthood

In order to place the legal position of foreign students in proper perspective, a brief review of present U.S. immigration law is necessary. The entry of any foreign citizen into the U.S. is governed by a highly complicated set of laws, regulations, and administrative and judicial decisions. A legal textbook on immigration points out that

these immigration statutes are intricate and complex. They must be carefully consulted on each immigration problem to avoid error. It may never be assumed that the statute will contain a certain provision because logic so dictates. (Wildes 1968:26). Emphasis added.

Entry permits or visas fall into two basic categories: immigrant (sometimes called permanent residence) visas and non-immigrant (tourist, student, diplomatic) visas. From the point of view of the potential student the basic difference between the two is that the non-immigrant visa is normally only valid for a stated period of time and holders of this type of entry permit are limited, if not proscribed, in the type, place and amount of remunerative employment possible while in the United States. This distinction is important because it must be recognized that the legal basis for the presence of foreign nationals attending American schools and colleges is quite different for those on "F" (student), "J" (trainees) or "H" (specialists) visas from those here on immigrant visas. This distinction is often the crux of an understanding of seemingly paradoxical social behavior and coping strategies adopted by individual students who do not hold U.S. citizenship.

Most matters dealing with immigration policies and their enforcement are functions of the Immigration and Naturalization Service (INS), an agency of the Justice Department. But other agencies, notably the State and Labor Departments, are intimately involved in aspects of decisions regarding the issuance of visas. In foreign countries INS offices are often part of the physical facilities operated by the State Department. This overlapping of functions and facilities leads to much confusion of responsibility in matters covering the issuance and enforcement of visa policies. In the spring of 1974 when INS announced severe restrictions on summer employment of foreign students, this primarily affected students in the U.S. on "F" visas since permission to work for this group is handled by INS while summer employment of individuals on "J" visas is under the jurisdiction of the State Department.

Obtaining a Visa

Typically a prospective student applies to American consular officials in his native country requesting a visa to enter the U.S. for study purposes. Ordinarily the applicant for such a visa based upon student status must present to the American consular officials evidence indicating his acceptance at a U.S. educational institution (the I-20 or DSP-66 Form) as well as documents showing how he will be supported during the proposed study period. However, the guidelines and rules of necessity contain certain ambiguity as they must be interpreted in each case within a variety of individual and social contexts. Consequently, students report a wide gamut of experience in making applications, which from their point of view often suggests inconsistency and even favoritism within American governmental

officialdom.* In addition, changes in both law and regulations, of which the participants may be in ignorance, lead to false assumptions and consequent accusations about inconsistency and unfairness.

In some countries where the pressure for out migration is strong (Hong Kong, for example), the requirements for all types of visas seem to be much more rigidly enforced than in many other places. The local government may be indirectly influential in the manner in which U.S. visas are issued by policies they pursue concerning the issuance of exit permits. The Cameroons, as do some other countries, restrict overseas study by levying a heavy tax for permission to leave the country which in turn is reflected in the manner by which the applicant proceeds to apply for student status. In this case the individual may leave the country as a tourist without paying the tax and then apply for student status in the U.S. at the American consular office in some other country.

The varying nature of the prerequisites actually demanded by individual consulates is illustrated in reports about how students met demands for evidence of support during their proposed study period. The requirements reported varied both in the form in which the support had to be shown and the length of time the support was expected to cover. Thus, some were required to show support for only one year and

* Even within a given office much inconsistency can be found. One of the writers (Hendricks) once observed two INS officials working in the same office in Santo Domingo interviewing applicants for permanent U.S. immigrant status. One official's attitude was that she was the last arbiter before the coveted document was to be awarded and therefore her job was to make certain that no possible error was being made. At an adjacent desk was another person whose stated attitude and actions indicated he believed anyone who had arrived at this point in the application process was to be aided and abetted in fulfilling all requirements.

others had to indicate up to four years of support. Some offices required specific dollar amounts while others did not. Students reported demands of sums up to \$12,000 for a single year and up to \$50,000 for a four-year period.

Some offices required cash on deposit in the bank while others required only a letter from the parent's bank indicating they have sufficient funds. Other offices accept a statement of assets of the parents or even the expected parental income as sufficient support basis. Some cases were reported in which no request for support basis was ever made. It is clear, however, that in the past few years the requirement for financial support has been more rigorously enforced. The implications of such a change are enormous both in terms of the type of student recruited for study in the U.S. and the strategies applicants employ to meet the new situation.

The motivations of foreign students for being present on an American campus are as diverse as those of American students. One will find in any university student body individuals who are enrolled for varying reasons: intellectual curiosity, mate selection, employment certification, fulfillment of parental social needs. Foreign students, too, have a gamut of motivations for assuming the social and legal role of student in the United States. Like their American counterparts, many of their reasons may be somewhat peripheral to the expressed aims of the institution of higher education. Included in these motivations may be the use of the role as an immigration route into the United States, a time of political exile, the exploitation of available economic resources, a haven from political or military upheaval in their own country, or quite simply to search for new experiences. It must be

recognized that the legal status of student can sometimes be utilized by the institution for its own purposes to by-pass restrictive INS regulations. One individual interviewed was present on the campus on a student visa, but his international credentials as a researcher, the nature of his campus work activities and the scale of his remuneration in no way reflected what would ordinarily be considered the status of a student. He claimed surprise to find his name among the registered students. The recognition of these diverse motivations is not made for pejorative reasons, but rather to point out the difficulty in making statements about "the foreign students." Just as with their American counterparts, such recognition is also necessary to give context to the variety of ways they go about solving the problem of social and economic adaptation to their new environment.

As with the student population in general, it is intellectually dishonest to stereotype the "foreign student." Some are socially although not legally unrecognizable from American students. If for no other reason than their own, as well as the host nation's racial attitude, some never strive for nor can hope to achieve acceptance as Americans. Others for ideological and cultural reasons would be offended by such an inclusion. As we would hope this report makes obvious, the single shared attribute among foreign students is their lack of U.S. citizenship and consequent presence here holding visas containing restrictions on their activities. Admittedly, many, if not most, are also incompletely acculturated. However, the degree of acculturation varies from that of an indistinguishable Anglo-Saxon Canadian to the visibly "foreign" turbaned Indian. Or, from the internationalized daughter of the ambassador to Washington from an Asian

nation to her rural fellow countryman who has scarcely even visited the capital of his country prior to arrival in Minnesota.

Some Demographic Considerations

The legal basis for the presence of the 1676 foreign students reported to be enrolled in academic programs on the Twin Cities campus in 1973-74 is shown in Table II. The reader will note that the overwhelming number (68%) possess "F" or student visas. The International Student Adviser's Office (ISAO), the source of this data, assumes responsibility as the University of Minnesota's primary liaison between the foreign student, the institution and to some degree official and unofficial agencies dealing with international study programs. It has disclaimed responsibility for those individuals who are in possession of immigrant visas as they are legally and functionally in a very different position than those who are circumscribed by the limitations of non-immigrant status.

The number with immigrant status in the Table is deceptive. Student records held by Admissions and Records** indicate that 11% of the

** One data item of student information held by the central administration computer files concerns citizenship and residence. The accuracy of the information is open to question, partially because of the difficulty in updating any changes in visa status. Residence in this case refers to residence in the state of Minnesota for outstate/instate tuition calculation, although residence in terms of visa status refers to a specific visa category. Thus a Korean graduate student who arrived on a student "F" visa but subsequently received immigrant status did not bother to update this item on his student record because as a research assistant, he had always qualified for instate tuition status. (Foreign students generally are classified as "outstate students" for purposes of tuition calculation, although there are numerous exceptions to this rule.)

In the list of priorities of those maintaining the data file, this information was of no special consequence: "We have lots of other special groups on campus. Some would like for us to be able to identify athletes." The lack of urgency for accurate identification of foreign students in central administration files is undoubtedly a product of the slipperiness of the term, urgencies of priorities of keeping other items of student information and most importantly a reflection of the degree of incorporation of foreign students as an unremarkable category within the University.

non-U.S. citizens registered are resident aliens (with immigrant visas) which would add another 200 students if only resident alien status is the classificatory criteria. The difficulty of establishing a census of foreign students on the campus is then compounded by the definitions used. A Canadian citizen married to an American is so well enculturated that few are cognizant of her foreign origin, while a Chinese from Singapore who is also married to an American cannot as easily avoid being classified as a foreigner. Both possess immigrant visa status and neither is counted as a foreign student by ISAO. Curiously the Canadian is much more adamant in demanding her recognition as a non-U.S. citizen than is the Singapore student. Some individuals acquire immigrant visas with the legitimate desire to migrate to the U.S., while others do so for the purposes of circumventing the work restrictions of non-immigrant status. Therefore, the ISAO must arbitrarily decide those to be carried on their lists in what they refer to as "visas of convenience." It is our sense that the number so identified is underestimated. In addition, some in this category have applied for a change to resident visa status, and the transitional period leaves them technically as foreign students but in reality ready to assume legal responsibilities as immigrants.

Of special significance is that 65% are graduate or professional students as compared to 28% of the students on the campus in general. Foreign students made up 16% of the total graduate population in 1973-74. While there is a preponderance of graduate students within the total foreign student population, this does not hold for all national groups. Table III listing the top 17 groups shows the two leading nationalities (Hong Kong and Taiwan) with reversed proportions

of undergraduates to graduates. The reasons for the size and components of individual national grouping is complicated and reflect factors associated with historical, social, economic, and political events in both the sending country and the U.S. Withdrawal of American government financial support for study in the U.S. is reflected in decreased enrollment in at least one case. Overpopulation and limited economic and educational opportunities at home show up in increased overseas enrollments in another. Networks of social relations which functionally serve to recruit new students from the foreign nation to the University of Minnesota account for the growth of still other populations.

The preponderance of males (80%) among foreign students is in contrast to the all University enrollment figure of 60% males. Table IV indicates that at least 26% of the students are accompanied by a spouse. About half of these family units include children.

Foreign students, as defined by ISA0, represent 5.3% of the all University full-time enrollment on the Twin Cities campuses (by the definition of their legal status as foreign students they are certified to be "full-time students"). While this number may seem miniscule to the reader, part of our interest in examining the demographic issues is to account for the apparent greater visibility and numbers of foreign students than these figures exhibit. For example, over 50% of the foreign student group (850) come from Asian countries. For the past 40 years, at least, Indian and Chinese students have been present at this University in relatively large numbers (Tai Shick Kang, 1966). The first known foreign student Ph.D was awarded to a Japanese citizen in 1915. The current student body includes a small number of Asians who have become naturalized citizens as well as a large number of

American born citizens of Asian ethnic origin. In addition, an unknown number of Asian ethnics are present in the status of resident aliens and are not accounted for in either group. Thus certainly more than 2000 students meet superficial and obviously incorrect criteria of being classified Asians, i.e., "foreigners." The ability of some U.S. citizens and a larger number of resident aliens to choose or be ascribed a personal identification as either an American or as a foreign student, therefore, makes any enumeration of foreign national groups highly subjective.

Much to the consternation of concerned native Black students struggling to increase their numbers on the campus, the Black foreign student is often socially viewed as native American. Thus from certain perspectives the ratio and number of foreign oriental (Asian) to foreign Blacks (African and Caribbean) seems more disparate than is actually the case. The ability of the individual to choose or be assigned differing ethnic and social categories has significant implications for their patterns of behaviors. This is especially so for the Black foreign student caught up in the American Dilemma of racism (Odenyo 1970).

The concentration of foreign students in technical fields of study rather than in the liberal arts and their predominance as graduate students, as indicated in Table V, further distorts the casual observer's impression as to the size and nature of this population on the campus. A view limited to patrons utilizing the bio-medical or engineering libraries could lead one to make unwarranted inferences about the ethnic content of the University in general.

FOREIGN STUDENTS: THE SOCIAL SITUATION

A foreign student in the United States has both a legal status and a social status. Both of these statuses are defined for him by the society at whose educational institution he has chosen to study. In attempting to cope with his financial, legal, and social situations in the United States, the foreign student must operate from the position of these legal and social statuses ascribed to him and over which he has little control. As described above, the foreign student's legal status is determined by the Department of State and the Immigration and Naturalization Service, and this legal status ramifies into many crucial aspects of the student's activities, such as employment, university expenses, and financial assistance.

Legally, the foreign student is an "alien" - a classification which establishes that he is an "outsider." The legal classification of "alien" is supportive of the notion prevalent among most Americans that the foreign student "belongs" elsewhere, that he is extrinsic to the social system in which the Americans are involved, and that he is a "transient" in American society. Many Americans seem to interpret the foreign student's legal status as an indication that the foreign student is less involved in the ongoing social system than are Americans. The attitude seems to be that the foreign student's status as an "alien" reduces his commitment to and participation in the University and community. There is a sense then that the foreign student is somewhat superfluous to the University and its activities - and what is superfluous often can be ignored.

As we have shown, the number of foreign students registered at

the University of Minnesota makes it difficult to view foreign students as in any way superfluous. The number of courses which are conducted with foreign students as teaching assistants, the number of on-campus jobs which are performed by foreign students, the number of dormitory rooms and meals paid for by foreign students, the amount of patronage provided by foreign students to on- and off-campus businesses, the number of foreign students in large lecture classes which justify departmental budgets, and so forth, are sizable enough to make any view of foreign students as superfluous unsupportable.

Because about 20 per cent of the foreign student population resides in University dormitories and because they are largely restricted to on-campus employment during the school year, the foreign student in many ways is more "intrinsic" to the University than are the many American students who live and work off-campus. In a university it is difficult to consider the foreign students as any more transient than American students, for the university career of any student is essentially a temporary association with the institution - a student comes in, stays for the requisite length of time, then leaves. Where the student comes from or where he leaves to would seem to make no difference in the nature of the impermanence of the student's association with the University.

The social status of the foreign student is also that of an "alien." Despite the variety of views of foreign students that Americans may have, common to these views is the feeling that the foreign student is somehow different, a "they" and not a "we." Americans may regard foreign students as interesting, curious, insular, distant, quiet, abrasive, and so forth. But within any evaluation of a foreign student is a sense

that the foreign student is culturally different, though the exact nature of this difference escapes clear formulation - largely because of the lack of specific knowledge about the foreign student's cultural background. Therefore the concept of inherent difference becomes a residual explanatory device for reaching an understanding of foreign students' actions - a residual explanatory device which is not available for understanding fellow Americans.

The social status of being somehow different presents foreign students with a certain amount of ambiguity. On the one hand, the foreign student is not really seen as within the system and therefore often is not expected to understand what is going on within the University, is not expected to participate in all facets of the University, and is assumed to have difficulties in managing within the University and within American society in general. On the other hand, the foreign student is often expected to understand events, procedures, and social norms to the same degree that an American student does, is expected to participate adequately in all things that American students do, and is granted little recognition of his difficulties. The foreign student therefore finds that what is expected of him is imprecise and unpredictable - for he seldom knows when he is expected to act as if he were an American and when he is not. For example, at the same time that American society is telling the foreign student that the accepted norm is that students work while pursuing their studies, legal restrictions are placed on the foreign student to prevent him from doing just that.

Students from other countries who arrive in the United States possess differing capacities for adjusting to their new environment. Some find the transition from their own society to that of the United

States relatively easy and painless, others find the encounter with a new social and physical environment quite difficult or even traumatic. No simple correlation between ability to adapt and nationality can be made. It may be that Western Europeans find it fairly easy to adapt to American society, but it is difficult to say, for example, that Ethiopians adapt more easily than Japanese, or vice versa. An individual's personality, past experience, social background, and specific situation within the University seem to have greater bearing on his ability to adapt. Regardless of an individual's personal capacity to adapt to American society, no foreign student can manage without the advice and assistance of others. As is the case for anyone coming into a society other than his own, a foreign student cannot be aware of all the accepted patterns of action, the relevant cues, the norms, and the possible avenues for meeting needs that exist in American society. In his discussion of the "culture shock" often experienced by people while in another society, anthropologist Ward Goodenough (1963:399) says

It can be a very disturbing thing to have all the little things one has taken for granted suddenly removed. Some people react to this situation positively as an adventure; others are terrified and incapacitated. Few, however, do not find it stressful to be continually operating in ignorance of the meaning to others of their own actions or of the meanings they should attribute to the actions of others.

A person in this situation finds that it is impossible to master all the accepted patterns of behavior, information, and codes of interpersonal communication. He is unlikely to be aware of all the possibilities for action in order to meet certain needs, nor is he likely to know what the society's customary limits are with regard to certain actions.

Foreign students, therefore, must be selective about what they need

to know in order to function in their new environment. They need to be selective about what patterns of behavior within American society are valuable to adopt or to approximate. Because most foreign students are in the United States for a limited amount of time, during which they must be highly conscious of their academic, legal, and financial situations, there is a tendency to focus on patterns of behavior and information which are relevant to the needs arising out of these situations. Social contacts, sources of information, and patterns of behavior which are relevant to these needs are valued and tend to be incorporated in an individual's "strategy for coping" with the academic, legal, and financial demands made upon him. Those social contacts, sources of information, and patterns of behavior which are not similarly instrumental are less likely to be cultivated. Many foreign students, therefore, operate within a limited social field, and it is within this limited social field that they seek to develop some modicum of control and self-confidence and to meet the needs arising from their academic, legal, and financial situations.

Within a foreign student's social field will be a variety of people who in differing ways are instrumental in the student's "strategy for coping" and in his getting through the stay in the United States. Some of these people relate to the individual foreign student primarily in a social manner, providing comradeship, emotional support, and so forth. Others may relate to the foreign student primarily with regard to academic activities - people such as professors, advisers, teaching assistants, and classmates. Our interest is primarily in those people who are instrumental in helping the foreign student to operate within his legal position and with regard to his financial needs.

The foreign student population, though diverse, constitutes a distinct subset within the larger system of the University and American society. As shown above, this distinctiveness is based primarily on their common legal and social statuses. Though many social needs can be met within the foreign student population, each foreign student must enter into and accommodate himself to the larger system in order to work out his legal and financial requirements. Those people who may be of assistance to the foreign student in doing this can be viewed as "brokers," who, in Eric Wolf's (1956:1075) terms, "stand guard over the crucial junctures or synapses of relationships which connect the local system to the larger whole." The "broker" does not have the ability to meet the needs of an individual, for he is not in a position to control the means by which such needs can be met. He is not able to shape the "larger whole," but rather may possess information about the "larger whole" which can be of assistance to the individual, may be the keeper of certain channels through which actions must be directed in order to meet needs with regard to the "larger whole," or may have access to means which can be employed by the individual. Adrian Mayer (1967:168) has indicated that a "broker" also may be a "middleman attracting followers who believe him able to influence the person who controls the favours."

A "broker" may be instrumental in furthering the foreign student's endeavors to meet his needs, or the "broker" may simply be the conveyor of information and advice, which then may or may not be incorporated in the student's strategy and actions. Robert Paine (1971:20-21) has made distinctions among a "patron," a "go-between," and a "broker." A "patron" controls certain favors and can dispense them to individuals

completely according to his own designs. The "go-between" performs his role as link between two parties without altering or manipulating the interests, demands, values, or situation of either party. A "broker" on the other hand, may make changes, wittingly or unwittingly, in the emphasis or content of information regarding the parties in order to bring about some kind of accomodation between them. As Paine has indicated, one of the main characteristics of a "broker" is his function as a "processor" of information.

While a given individual may, at various times, occupy all three of these roles (although not simultaneously), the nature of the distinctly different social transactions in the patron-, broker-, and go-between-client relationships is more understandable when these distinctions are drawn. In American society, the government agent on an Indian reservation provided a classic example of the culture broker role (although in some settings he may have also functioned as a patron). In more recent times the labor contractor with migrant Chicano workers provides another example. In New York City the travel agent occupies a similar structural role for certain Latin-American groups (Hendricks 1974).

Among those groups or categories of people who act in these social structural roles for foreign students are the International Student Advisers Office, the established national groups, other nationals from a student's country, religious institutions, relatives residing in the United States, employers, host families, and academic advisers.

International Student Advisers Office

Within the University the unit with specific responsibility for handling the special needs of foreign students is the International

Student Advisers Office (ISAO). The developmental history of this unit in a large part reflects the growth and institutionalization of significant numbers of foreign national students within the University system. This office is only one of several which presently is responsible for the specific needs or is involved in the distribution of special resources allocated to foreign students, although it remains the most visible unit.

In addition, offices and units with activities directly and indirectly aimed at assisting foreign students can be found within academic units (International Agriculture Programs Office), at the central administrative level (Office of International Programs), in semi-autonomous external service organizations (International Center), and in subsidiary units to ISAO (English as a Second Language and Minnesota International Student Association).

The initial all-University office dealing specifically with foreign students was organized in 1941 as a part-time assignment to one student personnel worker and grew in size in response to the increasing number of foreign students attracted to the United States in the early post World War II years. However, even prior to this time, other agencies within and without the University had attempted informally to provide staff and facilities to deal with foreign students. In the 1930s the YMCA placed considerable emphasis on assisting this group.

At the present time (1975) the ISAO is a student service unit of considerable size with an operational budget of nearly \$200,000 a year. The staff of four full time academic professionals, three student personnel workers and a clerical staff of seven carry out counseling functions, orientation and activity programs, and activities related to

immigration status (the focus of our discussion).

The initial emphasis of the new office was on the more obvious language and communication problems, cultural and social adjustment problems and specific problems emanating from the student's lack of familiarity with American pedagogical procedures which it was felt were not being effectively dealt with. An additional task which the new agency assumed was that of responsibility for the assistance of students in obtaining special funds: scholarships, grants and loans - some of which had been specifically designated for aiding foreign students. Importantly, however, it assumed responsibility by both design and default for assisting the institution and the student in meeting requirements of immigration laws. This latter function became especially critical with a fundamental shift in U.S. immigration which became effective in 1968. The prospective student, for example, must produce evidence of acceptance by an accredited U.S. educational institution prior to the issuance of an "F" (student) visa or show admission, employment or training commitments in the case of "H" or "J" visa categories. Once in the U.S., it is necessary for the institution and the individual student to report periodically his continued status as a student or trainee. The functional result of this requirement has been to make the institution appear to be part and parcel of the bureaucracy administering and enforcing immigration laws. While the ultimate power of decision remains with other agencies (e.g., the Graduate School decides qualifications for admission to its programs, colleges set criteria for minimum performance in order to continue at the institution, the State Department and INS issue visas and control the length of stay), many of the functions of these agencies were delegated

(or assumed by default) to ISAO. The foreign student adviser thus often operates at the critical juncture of relationships between the student, the institution and the immigration bureaucracy.

While all of its programs are active, with varying numbers of students participating, the one exclusive ISAO activity which incorporates all students is the annual necessity of extension of stay. In addition, permission to seek employment on-campus year around and off-campus during the summer were delegated to the ISAO. Recently, summer off-campus permission has been retained by INS. Consequently, even though the list of activities and functions ascribed to this office is long, considerable time and resources is devoted directly or indirectly to meeting the needs of foreign students created by their special legal status.

The foreign student personnel worker's actions and the perception of these actions held by his student-clients may, with some utility, be examined from the conceptual framework we have laid out about "middleman" roles. In terms of our present discussion, the adviser would be considered a patron if he were able to unilaterally make crucial visa decisions or personally award student scholarship monies. In reality his role is that of assisting the student-client in making proper connections to those who do control a wanted resource. This may be in such diverse forms as contacting an official in the Housing Office and, on the basis of role, rank or personal friendship, persuading the official to delay the claims for payment by a delinquent foreign student; participating on committees which decide financial awards; or advising the student on procedural matters and mediating conflicts between the student and the immigration authorities. But, these services are not performed without at least implicit value judgments. The adviser operates within his own cultural frame of reference and is directly tied

to an institution with its special set of priorities. While he may well be more sensitive to cross-cultural conflicts, nevertheless the basis of his values are American and his definition of acceptable actions are drawn from the American sociocultural scene, most often expressly laid out by the University and government. "I'll push the rules as far as anyone, but I'll tell them I won't lie for them" was a normative, culturally value-laden statement when referring to an individual's request for aid in retaining visa status as a student when in reality he was employed full time. The student was working in order to remit money to bring a nephew to the U.S., a fact the ISAO adviser probably knew. However, the adviser abided by the norms of his own culture rather than those of his petitioner who was under great pressure from his own cultural norms to fulfill his avuncular role prescriptions. The adviser's counseling and advising role, then, was, strictly speaking, not neutral.

This status as a broker between the student and agencies administering immigration laws operates to produce irresolute relationships between the office and its foreign student constituency. On the one hand, the student, of necessity, must use the unit in order to maintain his legal identity as a student. However, this very relationship makes many students wary about too close an identification with it, especially if they are involved in any dubious activities potentially in violation of their visa status.

ISAO officials are not unaware of the pitfalls of their present position. One long time worker expressed the desire "to get us out of this immigration business altogether and give it back to the Government. Maybe we should never have gotten into it." However, it is unlikely

this will take place. Their intimate knowledge and experience with the labyrinth of law and practice as well as the pivotal position these activities carry within and without the institution mitigate against any such divorcing of function. In fact it would appear that the development of the office at the University of Minnesota, at least, is just the opposite. The removal of ISAO's direct control over the administration of financial aid for foreign students and the delegation of this authority to another unit within the University is but one illustration of the tendency to concentrate ISAO activities to those of a broker of immigration activities. Its role as a potent spokesman for foreign students was demonstrated by the successful campaign this office waged before the 1974 State Legislature to provide some relief from out-of-state tuition rates for foreign students. The loud protests voiced both locally and nationally by ISAO officials over the recent Immigration and Naturalization Services' actions to have decisions about summer work permits made by INS offices rather than by campus foreign student advisers is indicative of the degree they are committed to retain this key role of broker to the immigration bureaucracy.

Many of the service activities involved in assisting newly arrived students to adapt to their environment are provided by other agencies such as Minnesota International Center, a privately funded community volunteer organization, or student based nationality clubs such as the Hong Kong Student Association or the Thai Student Association and the Minnesota International Student Association. While the personnel of ISAO are to varying degrees involved in coordinating these autonomous collateral organizations, much of the activity takes place outside the context of the office. Part of this development is a reflection of the

ambiguous nature of the role of this unit as perceived by its constituency. We would speculate that the support of these groups external to ISAO is a realistic and functional response to the situation. Part of the success of the U of M advisers office has been decentralization of its functions, yet maintaining some degree of liaison, if not covert control, with these autonomous and semi-autonomous groups.

The American college student personnel movement, of which ISAO is a part, has a heavy commitment to provide counseling and guidance functions in addition to providing specific kinds of student services. Few foreign universities have developed (for both cultural as well as economic reasons) these kinds of student related services, especially in the counseling area. Consequently, most foreign students neither expect nor seek, and may even resent, what they perceive as interference in their lives. The distinctively American tendency to "counsel," with its attendant transparent psychological approaches, is in cultural conflict with the values and role perceptions held by many foreign students of the student-institution relationship. (This conflict is also unrecognized in many relationships between student personnel workers and American students as well.)

This does not mean foreign students do not frequently seek solution to their problems in the foreign student advisers office. But, depending upon the problem, most often the office is seen as but one of several potential guides or connections to help rather than the direct source of help. It is in this sense we have labeled the office's function as one of brokerage rather than patronage.

However, since much of its activities, including those subsumed under the rubric "counseling," attempts to change values (whether operating

implicitly by providing more information or explicitly through outright sanctioning of behavior), we believe the term brokerage aptly describes many of the social transactions between ISAO and its clients.

National Groups

There are more than twenty recognized national groups on campus; for example, the Hong Kong Students Association, Iranian Students Association, and Thai Students Association. Most of the national groups do not have long histories, having been established within the past ten or fifteen years. Because membership in these organizations tends to be limited to citizens and former citizens of one country, it is proper to call them national groups, though some of the organizations are composed of individuals from countries of a region, notably the Caribbean Students Association.

Membership in the national groups is not restricted to students on "F" or "J" visas. In fact, the national groups are not composed only of students. Though campus-based and officially recognized by the University as student organizations, the national groups include both students and non-students who are permanent residents or naturalized citizens of the United States. There are examples of national groups including native-born American citizens who claim ancestry in the same country as the membership. Many national groups include professionals, such as doctors and faculty members, who are working in the Twin Cities on permanent residence visas or as naturalized U.S. citizens. The Thai Student Association also includes a number of women who married American servicemen formally stationed in Thailand. Thus the national groups are often focal points for ethnic or national identification, with students providing the bulk of the membership.

Most of the national groups have as their stated purposes the following: to promote better understanding among the members, Americans, and other foreigners; to organize social, cultural, and educational programs; and to provide assistance and information for members. It is the third purpose which may place a national group in the role of "broker" for its members.

The national groups vary in the number of activities planned and meetings held. Groups may hold beginning-of-the-school-year parties, national holiday celebrations, and picnics. Some groups hold periodic meetings at which issues confronting the membership are discussed. These issues may pertain to the students' situations in the University, such as the recent tightening of restrictions on summer employment or efforts to mobilize support for a bill before the state legislature for allocation of financial assistance to foreign students. On the other hand, the issues discussed may concern events in the home countries. Recent examples are the meetings held by the Ethiopian Students Association at which the political events of the past year in that country have been discussed and information about the situation at home exchanged.

National emergencies in home countries have been responded to by national groups by solicitation of funds among members. In late 1973, for example, the Thai Student Association collected money to be sent to aid the students wounded during the street fighting that resulted in a change of government. The Ethiopian Students Association collected money from churches in the Twin Cities to aid in famine relief. The Pakistan International Students Association also collected funds to aid refugees on the sub-continent.

Some groups sponsor performances of national music and dance, films

about their countries, and speakers on subjects pertaining to their countries. Funds for the programs of the national groups generally come from yearly membership dues, though some funds for special projects can be obtained through the Minnesota International Students Association or other University sources.

Some national groups try to help recently-arrived students become oriented in their new situations - showing them how to register for classes, where to shop, how to get around town, and so forth. A few national groups, notably the Hong Kong Students Association, sponsor summer orientation meetings in the home country for those people admitted to the University. Members of a national group who plan to return home for the summer will obtain from the University lists of fellow nationals admitted and then will invite these people to a meeting prior to departure for Minnesota.

The permanent residents and citizens in the national groups, plus students who have been in the United States for an extended period of time, form a group of "Old American Hands" who in various ways have learned the ropes of making it in American society. The involvement of this group of people in the activities of the national groups provides the neophytes, especially those on student visas, with a reservoir of information and experience that can be readily tapped. One of the "latent" functions of the national group meetings and activities is therefore the bringing together of those who someday may require information and assistance in meeting legal and financial needs with those who have already been through similar processes. An individual who is attempting to formulate his own strategy can learn of the strategies employed by others, the diacritical elements which must be incorporated

in a strategy, and the factors which went into the success or failure of a variety of strategies.

Mojalinah is a junior in Business Administration. Until recently she had received full support from her parents. The combination of rising costs and her family's changed financial situation forced Mojalinah to look for a job. Fellow nationals directed her to a business which had employed other individuals from her country and which ignored the restrictions on off-campus work. Her friends informed her that no one working there had ever had any legal difficulties.

Sungkit and his friends have on-campus jobs during the school year. Sungkit receives no support from his parents, and therefore must work during the summers also in order to finance his education. Each summer he and his friends drive to the East Coast to get jobs, going to businesses which fellow nationals both in the Twin Cities and on the East Coast have informed them like to employ people from their country.

The permanent residents, naturalized citizens, and long-time students may advise the individual regarding courses of action - though sometimes the rendition of experiences takes the form of "war stories" about fights with the Immigration and Naturalization Service, attempted deportations, or the "unfairness" of the Financial Aids Office. Essentially, however, information about which strategies work and which ones do not work is being conveyed. What works are courses of action which permit the student to continue his pursuit of academic or career goals, which may include plans to remain in the United States.

A student seeking to develop a body of relevant information out of which he can formulate his own strategy finds that this information is shaped by the cumulative experiences of others in the national group who have gone before him. Therefore, the perception of the possible courses of action, of the possible responses of agencies involved, and of the range in which effective action may be taken varies from national group to national group. Our research has shown

that members of some national groups reveal a greater knowledge of the INS regulations, of the job opportunities available, and of the degree to which regulations may be stretched or circumvented. Part of their greater knowledge may be attributed to the fact that, as a group, they may have greater need to know these things. This greater need may be a result of the situations in their home countries. In some countries it is a common practice for students to embark for the United States to study with full expectation that they will be able to finance their education through employment. Some countries, such as India, Hong Kong, and Taiwan, have a history of emigration to the United States by persons seeking to establish themselves in professions here. Concomitant with these situations in the home countries is the need for a greater knowledge of United States immigration law, for by establishment of certain legal statuses the expense of one's education can be reduced.

Individuals in some national groups, on the other hand, reflect only basic knowledge about the regulations governing their statuses and about the possibilities for employment. These students are more likely to view the possibilities for action with regard to their financial and legal situations within a narrower range. That is, they are not in command of as extensive a knowledge of the various means by which employment can be secured or the regulations circumvented. Again, this may be conditioned by the situation in the home countries, for in some countries, going to the United States for higher education is not a common practice and may be limited to the very wealthy or to those on full government scholarships, thereby removing much of the incentive for developing extensive knowledge about

legal and financial matters. Experiences of "Old American Hands" in these national groups would be of a much different nature than those in the above-mentioned groups, thereby conditioning the kind of information conveyed to fellow nationals for formulation of strategies.

There is a tendency for long-time students, permanent residents, and naturalized citizens to be elected to leadership positions within national groups, largely because of their assumed greater experience in the United States and their age. In those national groups where legal and financial information is considered vital to the membership, officers may plan meetings for the dissemination of such information. Even in the absence of such meetings, the authority and knowledge which others associate with a person having held an elective position give to officers and former officers the role of central source of information. For the members of the national group, the officers and former officers are often the "persons to contact" when information, advice, and assistance are needed. One president of a national group found herself acting as a telephone switchboard operator, receiving calls from members needing information and then directing them to other people in the national group who could be of assistance. Whereas many students arrive in this country expecting assistance from University officials and advisers, they often perceive that they must turn to officers and members of national groups for practical assistance in getting started in their university experience. Some officers take it upon themselves to represent individual members to ISAO when visa problems arise, or will accompany individuals when they meet ISAO or INS personnel to discuss such problems.

Many people who are involved in the national groups expressed disappointment that a sizable number of their fellow nationals were not involved. Most of the national groups have a core group of participants, with other nationals participating irregularly. "Some people just come to the parties and meetings for the food," was a comment heard more than once.

When asked why they do not participate in national groups more than they do, students cited a variety of reasons. Many of them simply expressed disinterest, saying that their academic work load precluded involvement in the national group's activities. "Only people who like parties are active," was a common statement by those who do not involve themselves. Some students were critical of their national groups because they felt the organizations encouraged isolation from other University activities. Some people indicated that they do not go to the national group meetings because the discussions always degenerate into political posturing. This may be especially true in groups where permanent residents and naturalized citizens, because of their legal status, can speak against the government of the home country. It is not surprising that some individuals feel uncomfortable participating in a national group, when political, ethnic and class distinctions within the home country often are replicated among the members of the national groups.

One student association was split by ethnic divisions reflecting divisions within the home society. When one ethnic group attempted to gain control of the association, they were frustrated by the passage of a resolution stating that the president must be willing to assist any member in negotiations with immigration authorities. The effect of this was to force the withdrawal of this group's candidate who, as was known by his opponents, faced potential difficulties with INS and had no desire for this kind of visibility.

Some students reported that they consciously try to mask their political beliefs or their backgrounds so that they can operate socially within their national group's membership without creating tensions. Such tensions might exclude them from contact with fellow nationals with whom they may otherwise have more in common than they do with Americans or with other foreign students. Therefore, it is a mistake to think that foreign students are only engaged in a process of assimilation into American society, for they also must be sensitive to how they can fit into the microcosm of their home country's society which exists on campus.

Many national groups received their impetus or revitalization as a result of political issues arising in the home countries. While the particular issues remained in the forefront, the national groups served as vehicles for expressing solidarity and for disseminating political information. For example, the Hong Kong Students Association was quite active in the movement to reassert Chinese, rather than English, as the language of commerce and education in Hong Kong. During the controversy among China, Taiwan and Korea over the possession of the Tiaoyu Islands, both the Chinese Students Association and the Hong Kong Students Association rallied to promote the Taiwanese claim. Israeli and Arab students have been active in disseminating information about the war in the Middle East. During the war in Nigeria, the Nigerian Students Association split, the Ibo calling themselves the Biafran Students Association.

Most of the national groups, however, function largely as social groups rather than as political groups, partly because agreed political

stances are difficult to produce. Students who wish to express political positions often have found that they need to seek other vehicles outside of the national groups for doing so. For example, recently the China Studies Group has been formed in order to promote friendship between the people of the United States and the People's Republic of China. Also the Third World Caucus has been organized, with students from a variety of countries among its membership. Some graduate students and permanent residents working in the Twin Cities of one national group hold monthly study group meetings to discuss issues both of political and professional interest.

The evolution of some national groups from being politically-oriented to being socially-oriented may account for the irregular participation of many foreign students. Besides introducing students to certain individuals who can act as "brokers" by providing information and assistance, most national groups are only secondarily instrumental in helping their members operate within the legal restrictions or meet their financial needs. As legal restrictions are tightened by INS and as University costs continue to rise, it may be that national groups will involve themselves more and more in activities instrumental in meeting these changing demands.

Personal Networks

One of the recurrent themes emerging during the course of data gathering was the extent to which students indicated siblings, other relatives or acquaintances are or were students in the United States. At minimum, the student comes armed with a list of fellow countrymen whom he can contact. Consequently, it is the rare individual who arrives unknown or unknowing, an isolate without minimal social reference points and personal contacts.

Eric, a graduate student from England, arrived with introductions to friends of his English girlfriend who had studied the previous year in Minneapolis. Through them he found a place to live within a household made up of five American graduate students.

Ali arrived as part of a group from Morocco sent first to the University of Minnesota to learn English. Within a few days of his arrival he had contacted a Moroccan student already present in Minneapolis whose name he had been given by a returned student. While he was dependent on ISAO and the International Agricultural Programs Office at one level for help in negotiating with the governmental and institutional bureaucracy, the intimate knowledge necessary for dealing with day to day living was transmitted by his fellow countrymen.

Beginning with such initial contacts, each foreign student develops his own network of friends during his stay at the University. In general, most foreign students' closest friends are fellow nationals. Within a foreign student's circle of close friends may also be foreign students from other countries, though international conflicts and antipathies among nations contribute to prohibiting friendships among foreign students of certain countries. For example, we have observed that friendships are not formed among students from Pakistan and Bangla Desh, students from Israel and the Arab nations, students from Japan and Korea, or students from Nigeria and South Africa. Few foreign students indicated that they considered American students among their close friends. This is not surprising, given both the fact that the foreign student is in an unfamiliar environment which provides little escape and the fact that most Americans have little understanding of the legal, financial and academic situations of a foreign student. Because a foreign student and an American student do not share common legal and social statuses, they do not seem to have enough in common to forge close relationships. Also the foreign student expects of his close friendships a certain amount of instrumentality in helping him in his academic, legal and financial

situations. The foreign student expects to be able to discuss with his close friends his concerns, difficulties, and plans - and he expects an informed response from his listeners. Only another foreign student, and especially a fellow national, can provide both the emotional and instrumental elements of a close friendship. Many American students interpret foreign students' behavior as "cliquish" and "unfriendly" - without understanding that the foreign student's situation puts a premium on close friendships which can be emotionally and instrumentally supportive.

Suntagi is a graduate student in Pharmacy. For her first six months in the United States she felt very lonely and seldom left her dormitory room. She said she felt very uncomfortable outside of her home country, and admitted that it was only after she became acquainted with fellow nationals that she was able to function socially with some confidence. As she is finishing her two years in this country, she has become more and more aware that she does not "fit" here, that Americans view her as inferior, and that Americans she thought were friends sometimes unaccountably ignore her.

The factors which affect the composition of a foreign student's group of close friends vary from nationality to nationality. Friendship patterns of the home country tend to be replicated in the American situation. For example, the tendency among some nationalities is for graduate students to have only other graduate students as close friends, undergraduates only other undergraduates, while for some nationalities this distinction is unimportant. Groups of close friends among some nationalities will be primarily male or female, whereas among others both sexes are included. Some groups of close friends are studying in similar disciplines, others are based on common dormitory residence, and some are based on common political beliefs or graduation from the same university or secondary school. Age, language, marital status, and

ethnicity also may enter into the determination of friendship groups.

Because of the constant transmission of information among close friends, each foreign student acts as an information "broker" for his close friends. The information conveyed within a group, however, is conditioned by the experiences of the individuals arising from their particular situations - thereby limiting the scope of the information. When an unforeseen problem arises, however, a student may get on the phone to friends and associates, asking to be directed to other nationals who have particular expertise or who have experienced similar situations. Some students indicated that it is only after trying to exhaust the resources among fellow nationals that an individual would turn to ISAO or other people outside of the network of fellow nationals.

Religious Organizations, Kin, and Employers

Near the University are some religious institutions whose membership is composed primarily or totally of foreign students, some from the same region of the world. Accompanying their religious functions, these institutions also serve social functions similar to those of the national groups - introducing students with common interests and providing contacts with people who have already established themselves in the American environment. Some of these campus religious institutions can provide limited financial support and jobs to selected students, and on occasion a representative from the institution may act on a student's behalf in legal and financial matters.

The Chinese Christian Fellowship, while owning a parsonage and a house for students, holds its services in Luther Hall. The group plans to build their own church on property they presently own. Incorporated in 1958, the Chinese Christian Fellowship has grown to the point where over 150 persons, all born in Taiwan, Hong Kong or the mainland, attend its Sunday services. The

sermons are given in Mandarin, with Cantonese translation. American-born Chinese do not participate. Choir practice is held on Friday nights, with youth fellowship meetings on Saturday nights.

Active recruitment of Chinese students begins in the summer when the minister obtains from ISAO a list of new students from Hong Kong and Taiwan. Students are met at the airport, and if they wish housing can be provided for their first few days.

Members of the congregation frequently call upon the minister for assistance - in housing, academic, marital, financial, and legal problems. He often can be of assistance by referring individuals to people within his network of acquaintances, both Chinese and American.

Similar services are provided for foreign students by the Korean Christian groups, the Islam Center, and the Jewish Community Center, with the Islam Center including dormitory facilities for a small number of students.

As previously noted, a number of foreign students may have chosen to come to the United States to study because they have relatives already residing or studying here. When these relatives are located near the University, it is common that they act as "brokers" for an individual, orienting him to his new environment, providing a dependable source of advice and support, and reducing the student's sense of isolation and distance from his home country. If the student's relatives in this country, especially siblings or parents, are permanent residents or citizens, this can be of benefit should the student make application for permanent resident status. While not guaranteeing approval, having relatives in the United States at least seems to expedite consideration of the application.

A significant but undetermined number of foreign students have automatically qualified for a change to an immigrant visa status as a result of marriage to an American citizen. Because of the obvious advantages in terms of the removal of the legal proscriptions on economic activities,

we can assume that this new legal status may have entered into the amalgam of motivations for forming the marriage union. We never personally encountered informants whose marriage stemmed solely or peripherally from an open acknowledgement of such an instrumental usage of the marital relationship. It was, however, alluded to for others by some persons. Regardless of the motivations for entering into marriage, the functional result of the act in expanding the options open must be recognized.

Some foreign students reported employers, both on- and off-campus, who treated foreign students less favorably than they did American students. Others indicated that they felt their employers actually preferred foreign students as employees. To account for this, students said such things as "foreign students will accept the low pay," and "foreign students do not cause trouble for the employer." Some off-campus employers, therefore, ignore the foreign student's visa restriction on off-campus work. Because it is in the interest of the employer to hire the foreign student, he willingly becomes a "broker" for the foreign student by denying the relevance of the visa restriction.

Academic advisers are ill-equipped in terms of knowledge and capability to be of much assistance to the foreign student in his legal and financial situations. Some professors or departments may give preference to foreign students for teaching assistantships or research assistantships, but such preferential treatment is rare.

Though few students have American host families, the relationship between the host family and the foreign student seems to be primarily social, with most host families not involving themselves in the critical problems and needs of the foreign student.

FOREIGN STUDENTS: FINANCIAL IMPLICATIONS

We have so far discussed how the ascribed status of "foreign" limits the legally and socially acceptable adaptive modes of behavior possible for this category of student. We now turn to a discussion of the implication this categorization has for both the estimation of costs as well as some of the strategies employed to meet these costs.

Estimation of Costs.

As we have noted, immigration regulations require that consular and immigration officials be satisfied that the student has the necessary resources to pursue his contemplated program. However, certain assumptions and expectations are made in connection with any type of financial arrangement. For example, it is assumed that family fortunes will remain intact, that governments will not topple, and that regulations will not change. While for some students these assumptions have been accurate, in the case of many others, they have not been, and the student has been faced with entirely unexpected financial difficulties. The necessity of finding some other means of support than was originally intended is created out of a variety of circumstances.

Foreign student advisers themselves are critical of institutional catalogues which fail to make accurate statements of total costs of attending a university. While these sometimes patently deceptive advertising practices also make for difficulties for all students regardless of citizenship, the foreign student is at a greater disadvantage because of the restrictions placed on employment by his visa status.

Unrealistic estimates of costs as well as expectations about the ultimate availability of either supplemental scholarship money or

other assistance sometimes contributes to the financial plights of foreign students after they have been present for a period of time. Inflationary factors in the world economy seldom are explicitly considered in the planning process, and in recent years this problem has been important in contributing to the plight of foreign students. (Curiously, however, the INS has been reluctant to accept spiraling costs due to inflationary factors as unforeseen circumstances constituting grounds for permission to gain a work permit.)

In theory, the foreign student has assured the U.S. Government that he has adequate financial resources for his proposed period of study at out-of-state tuition rates. In reality, the need (either real or perceived) for self-contribution through remunerative employment may be as great for the foreign student as it is for the American student. This becomes especially pertinent for the individual after his first year in the U.S. The sources for the need to work are diverse - unrealistic original estimates of cost and available American resources, unanticipated changes in plans, inflationary factors, and socialization into American norms of work and consumption. Obviously the longer the period of time for which projected costs must be made, the less accurate the projection will be.

One source of the unrealistic first estimates can be found in the actions of U.S. officials, both public and private, who suggest the possibility of employment or aid that, for a variety of reasons, never materializes.

Vincent was the son of a local national employee in an American-owned overseas firm. The American owner, a resident of Minnesota, encouraged Vincent to study in the U.S. at the U of M and cavalierly signed the documents required by the immigration authorities that he would assume financial responsibility for Vincent. He evidently

did so, naively assuming that he could provide employment for Vincent in his Minneapolis plant. However, Vincent was unable to be hired as his visa status precluded legal employment by the firm.

While both parties in the above example were participants in an attempt to circumvent immigration regulations, the point here is that financial arrangements made prior to arrival in the U.S. were not viable once the student had arrived at the University. While alternatives were eventually found, the number of options that could be considered were circumscribed by the student visa status.

A foreign student's learning about the host culture, an often cited reason for study in a foreign country, can significantly change a student's financial demands, if not his financial needs. Students may arrive accepting their dependence upon home resources for the period of study in the United States. After a time, however, observation of the value placed in U.S. society on economic independence does not go unnoticed. (Close to 80% of U of M undergraduates are employed during the academic year, with 85% employed during summers.) Employment for foreign students can provide significant psychological as well as material bases for the loosening of this dependence upon home resources. In addition, students are influenced by what many perceive to be the greater materialism prevalent in the United States. Most students when discussing contrasts between their own and the host culture cited examples of what they term America's greater materialism and expenditures on recreation. One of the first things Americans seem willing to talk about, they report, is a new car, a new stereo, a vacation, or some other non-essential expense. If this emphasis on the acquisition of material things and expenditures for recreation is so pronounced, it would be naive to suppose that a foreign student would not acquire a similar

desire for material goods or would be satisfied to live as a social recluse.

A concern expressed by some critics of foreign students in the United States is the amount of money which is sent or remitted by them to their home countries. While some students reported remitting money, this was a very small number. Of those doing so, very few did so on a regular basis. Foreign money transfers of the largest bank located near the center of the campus were examined in an attempt to document this information. Persons known by bank personnel to hold student accounts transferred over \$100,000 overseas in a six month period. However, the greater proportion of this money was that of American students going overseas to study. While other routes of transfer may well be employed, it is obvious that if it does take place, it is not done through the traditional banking practices. Some students did report remitting money for the purpose of support for family members in the home country. Far more common (though still a minor number) was the practice of remitting money for the purpose of assisting other family members, especially siblings, to come to the United States to study.

Types of Financial Arrangements

It is clear that we cannot deal with the particular financial situation of each foreign student contacted in the course of this research. However, a patterning does exist which provides a framework for viewing their various situations. For our purposes here, the support arrangements can be laid out on a continuum with ideal types as polar opposites. At one end would be those who are fully supported, thus making any employment or request for additional aid unnecessary (although as we shall see not necessarily undesirable). Some students are members of wealthy families who can easily provide the needed financial assistance while

others receive complete assistance from institutions within their own country or some international agency. At the other end would be those absolutely dependent upon employment or assistance while in the U.S. to support their presence here as students. Many students receive no aid, indeed in a few cases they are expected to remit sums of money to their families. Typically the entering foreign student begins his stay at the externally supported end of the theoretical continuum and over time progresses towards the self-supporting end. Thus, an important factor in discussing financial coping strategies has to do with the span of time he or she has been in the U.S. Actually the majority of students whom we contacted combines a variety of sources and thus could be placed somewhere in between either extreme.

By far the most desirable form of financial support is that of full support, either from one's home government, employer or academic institution, or from one's own family. Ideally, the amount which the student receives will be based on an accurate estimate of what his expenses are in this country. It is assumed that the transfer of money will be handled expeditiously so that the student actually has access to the money when it is needed. For some fully funded students, delayed transfers of funds pose a continuous problem.

Full support from either their home government or employer, while often called a scholarship, in some instances might be more accurately regarded as an investment loan from which the granting institution or benefactor expects to get a reasonable return. In accepting support of this type, whether in the form of scholarship or paid leave from a job, the student incurs certain obligations. The granting institution usually expects the student to return to his home country, at least for

a stated period of time, after completing his degree. The government or employer may also expect that the student repay the money, either in full or in part. If the student chooses not to return to the home country after getting his degree, in view of the loss of his services he will usually have to repay the lender the entire sum, often with interest which was reported to range from 50% to as much as 400%.

Kamariah is a second year graduate student in Education. After instructing in a teachers' college for three years, she came to the United States on paid leave from the Ministry of Education. She is obligated to return to her home country and to work for the Ministry of Education for twice as long as she was in this country. If she reneges on her obligation, she will have to pay back four times the amount of paid leave she received while in the United States.

The family which intends to provide full support for educating a child in the U.S. also may make unspoken demands, either that some of the money paid out be gradually repaid or that the student prepare himself to assume moral and economic responsibility for the family unit. At the same time a student who believes his family to be making great sacrifices in order to support his study in the U.S. is often reluctant to ask for more money. A request for more money may be met with disbelief by those at home because of a distorted view of American resources.

A graduate student from Africa reports, "It is very difficult for anyone in my country to think it is necessary to send more money to their children in the rich U.S. The daughter of a very wealthy man from my country is going to school here and was literally starving [for lack of funds]. She did not want her parents to know this and to think that she was not doing the right thing because she was unable to live on what they sent." (Because the informant reported the situation to the parents on a trip home, she was sent more money.) Subsequent to this interview, a violent revolution took place in the homeland and family members lost both life and property. The daughter was left stranded with no family support and had to convince the INS of "extenuating circumstances" in order to obtain a work permit.

"Full support" as we are using the term here usually comes in the form of a fixed monetary amount intended to cover a specified period of

time. However, for both bureaucratic as well as individual personal reasons, it may be difficult to make the necessary adaptation to any change in a student's economic needs. This is especially true in cases where expected timetables are not met. The assumption made in granting aid to a student is often that he will thus be able to devote all of his energies to his studies and consequently at the end of the predictable period of time the benefactors may receive some return on their investments. Thus an additional year to write a dissertation may leave the student not only without financial support, but under great social and even legal pressure to complete his program.

Students who come with substantial support from their home countries are most often upper-classmen or graduate students and have some academic or professional achievement behind them. Therefore, they may have expected to have no difficulty in getting through a degree curriculum in the U.S. fairly easily and quickly, taking no longer than an average U.S. student. However, after arriving on campus, some students find that the course contents and/or curriculum requirements are markedly different from the equivalent courses or curricula in their own countries. They may have to repeat course work or take additional courses. We encountered at least three students who had obtained degrees equivalent to Masters in their own countries, but had to repeat up to two years of course work before going into the Ph.D program. In such cases, their courses of "full support" will have expired two years before they complete their degree requirements.

Madron has a degree equivalent to an MA from his country and is a faculty member of a university in his home country. On a Ph.D program at the U of M he has a research assistantship and is also receiving partial support from the university where he has been teaching. He is expected to return in two years to resume his

teaching duties. However, he found when he entered the program here that the curriculum is different from that in his country, and his doctoral program will require four years rather than two years of work. He does not know whether his university will continue to support him for two additional years or not.

A more common type of financial arrangement is that of partial support from a home source accompanied by the expectation that the student will work in the U.S. to cover additional expenses. It has been common for applicants to obtain "F" visas by showing proof of sufficient resources for the first year with the expectation that the student will find work after that time. This original support may actually have covered only the first nine or ten months with the students' expecting to be able to work beginning with their first summer in the U.S. This assumption is based to a great extent on experiences of fellow countrymen, often family members, who have preceded them in studying in the U.S.

Another source of financial aid is that to be found in the form of scholarships and loans administered by the Office of Student Financial Aid. Table VI indicates the amounts available in FY 1973-74. While more than half a million dollars of such aid was available, it was restricted to less than a quarter of the foreign students, and 60-70 percent was in the form of loan funds, roughly half of which could be forgiven when and if the student returns to his home country. However, the bulk of the total sum of financial aid available to students in the form of loans, scholarships and work study programs requires the recipient to hold U.S. citizenship or immigrant visa status. Foreign students, consequently, do not qualify for most of these forms of student aid.

The distinction between immigrant and student visa status is

important to note here. Most of the significant amounts of student aid available from the public treasury are not available to those in a student visa status. The legislation setting up these aid forms - loans, scholarships, and work study programs - usually specifically states that the recipient must be a U.S. citizen (and as sometimes interpreted by the courts, this includes those holding resident alien status). In addition, welfare programs of all types, including food stamps, are legally unavailable to foreign students, although in a few cases some have received such aid. Increasingly, however, the administrators of such programs are under pressure to insist that the recipients are qualified applicants and social welfare benefits will become even less available to the few foreign students who presently receive assistance in this form.

Employment Patterns

A commonly held belief among those with previous and present experience as foreign students, however, is that anyone who really wants to can make enough to support himself while in the United States. The student visa and its restrictions on working is not regarded as an inhibiting factor since, until recent years, students could fairly easily obtain permission or even change their visa status. It is only recently that this option has been significantly curtailed, especially for persons who do not already have training or backing by an employer. The basic shift in regulations and reinterpretations of U.S. laws beginning in 1971 have changed the rules of the game drastically and new strategies have had to be worked out by immigration authorities as well as student visa recipients.

The most frequently encountered modes of self-support include (a) University assistantships (teaching, research), (b) other on-campus employment, (c) off-campus employment, and (d) loans and grants from sources in the United States. The latter type is one which the student may believe to be available, but at least in the beginning does not expect to use. Although a few students are able to remain for long periods supporting themselves through only one of the types of arrangements described above, we found that most must use a combination of these modes. It would seem that students who have the most difficult economic problems are those who, for whatever reason, are limited in the range of strategies they may employ. Thus, while summer employment may not be attempted by a major proportion of the students, even if there were no restrictions, the circumscription of this option during the summer of 1974 actually created major problems only for a few, although it appeared to be a problem for the majority. From a research standpoint, the alarm among foreign students in the spring of 1974 over the INS announcement of severe limitations on summer work permits was fortuitous. The events surrounding this not unexpected decision made many features under examination stand out in bold relief.

Attempts to quantify numbers and types of jobs held by foreign students are phantasmal and illusory at best. This is partly a result of the lack of concreteness of the category and partly because of a reluctance on the part of many students to accurately report their employment. The former problem is illustrated in the case of a campus unit which employed three resident alien students, citizens of Egypt, Spain, and Ecuador respectively. Their supervisor reported them as

foreign students in his employ, yet all three held immigrant visas and consequently were not legally classified as foreign students. One of these students was also misclassified as a citizen in the files of the Office of Admissions and Records.

The problem of accurate reporting is accentuated by the sometimes marginally legal basis of their employment. An understandable reluctance to discuss and record potentially self-incriminating work activities hinders data collection of the type which most satisfies those who insist upon knowing answers to questions of how much and of what kind. In addition, many are from societies in which a public statement of personal details of finance and employment is considered an invasion of privacy.

For the purposes of this study, it was not the intent of the research to make a census of jobs held but rather to explore some of the systems of social action involved in finding employment and the perceptions held of the employment situation. Jobs held by foreign students range in diversity as much as do those held by American students. Teaching and research assistantships are common, especially among graduate students. It is estimated that in 1973-74, foreign students held 662 academic or professional positions within the University. These ranged from full-time resident physicians in the University hospitals through departmental teaching assistants and researchers to that of leader of a project to develop China curriculum materials for use in local schools. The majority of these on-campus jobs (90%) were half or less time positions. In addition,

25% (212) of the on-campus jobs held by foreign students were clerical or custodial in nature.

We attempted to gain some sense of the degree of non-citizen student employment by comparing total University payroll lists for the fiscal year 1973 with a list of individuals enrolled at the University during this same period who were identified as aliens. Table VII indicates that \$2,388,530 was paid from all University sources for remuneration (primarily as employment) to this category of students (25% earned less than \$1,000 and 52% earned less than \$2,500). However, a further analysis of these figures indicates that some individuals with earnings as much as \$20,000 for the year were recorded, thus distorting the total. Although it was not possible to identify all such individuals, it would appear that in most cases those persons earning more than \$7,500 a year were affiliated with the various health sciences departments of the University. For the most part, they were foreign physicians or medical researchers taking advanced residencies and paid accordingly. They are, like their American counterparts, considered to be students and their legal presence in the United States is based upon qualification as students or trainees. In a few other cases that came to our attention, student status was conferred by the institution upon foreign individuals as a way of circumventing restrictive immigration regulations preventing the employment of non-immigrant non-citizens.

Off-campus employment practices are difficult to characterize. Typically such jobs involve few technical skills and tend to be manual and menial, e.g. busing and washing dishes in hotels and restaurants,

sweeping in factories, custodial duties in hospitals. The inclusion of individuals present as trainees (i.e., a student who has finished his academic training may remain in the United States for up to 18 months to work on a job in a related occupation) adds to the confusion of attempting to delineate foreign student employment patterns. The inclusion of such trainees makes it appear that large numbers of foreign students hold full-time jobs.

Patterns of off-campus employment in terms of either job categories or job sites are not randomly distributed. A number of factors influence this distribution, some more salient than others depending on individual exigencies. A few are noted below.

Social Networks: The typical foreign student has a number of opportunities for formal and informal associational ties with other foreign students in groupings that are based on national or ethnic identity (e.g. the Iranian Students Association), interests (e.g. soccer clubs), political ideology (e.g. the China Study Group), religions (e.g. the Chinese Christian Fellowship), or informal eating groups. Here much information is exchanged and individuals incidentally learn of employment situations. The consequence of such communication links is the development of nodes of foreign students concentrated in a given factory, restaurant or hotel.

Ethnic Identity: Ethnically oriented establishments, especially restaurants, often seek workers with specific ethnic and cultural backgrounds. Students often form the only available pool of workers in this category. One Chinese restaurant hires a large number of Oriental students; another features Middle Eastern food and is hard pressed to find enough student workers to fill its needs.

This can lead to such anomalies as a Dominican serving tacos in a Mexican restaurant and a Chinese student employed as head waiter in a well-known Japanese restaurant. American racial categories also are a factor in some instances. One important hotel prefers to employ Caribbean and African black students because they often "have an educated speech", i.e. a British accent.

Part-time Employment: As we have indicated elsewhere, American higher education is characterized by its acceptance, if not expectation, of student self-assistance through part-time employment. To a far greater degree than most other societies, patterns of economic organization and employment practices have developed which cater to this kind of employee. Some job situations are more adaptable to such practices than others and therefore tend to attract primarily student employees (McDonald's for example). For any number of reasons, i.e. social linkages, ethnic and racial categorizations of the dominant culture or ease of employment, foreign students may end up seemingly concentrated within certain job categories or at specific job locations. While examples of conscious exploitations of individual foreign students in specific employment situations can be found, it would not seem, as some would charge, that this state of affairs is widespread. Very often the problem is one faced by all students rather than limited to a single segment of the student population. As in many exploitative situations, the advantages may well be reciprocal to both parties involved.

Visa Status: As previously indicated, permission to authorize employment, while technically held by INS, has often by fiat and

practice been delegated to University officials. On-campus employment has not been questioned and in some cases a formal work permit is not required (e.g. teaching and research assistantships). Off-campus employment always requires such a permit, and in the case of summer employment up to the summer of 1974 it was routinely authorized by ISA0. Some students and their spouses (the spouses of students on "F" visas are proscribed from any kind of employment, whereas spouses of students on "J" visas may be authorized by INS to be employed) opt to work off-campus illegally, i.e. without permission, because such jobs usually pay more than on campus and sometimes may be more interesting and more closely related to their academic training. The possibility of deportation if they are caught working illegally is seen largely as only a threat. Probably every foreign student has heard of individuals who have violated their visa status by working illegally and have been deported. However, few students are personally knowledgeable of specific cases. In fact, very few actually are - we were unable to ascertain the exact number who have been deported in the recent past. More commonly, persons found with visa violations are allowed to leave before formal proceedings are instituted. By doing so, re-entry into the U.S. is possible at a later date.

Some job situations are more vulnerable to exposure of illegal employment than others. In the past, since employers were not penalized for employing aliens illegally, an individual's status has been seldom questioned. Criticism has often been leveled at employers who take advantage of this situation by offering only marginal pay and other conditions of employment. On the other hand, non-citizens, including persons in the status of student, have often been less

than forthright about revealing the legality of their employability. The recognition of a somewhat symbiotic relationship in these situations was recently publicly displayed in a Minnesota Daily advertisement seeking domestic help which described the job situation as "good job for foreign student, payment in cash." If passed, current congressional and administration proposals to hold employers responsible for ascertaining the legality of an individual worker's eligibility to be employed will have serious implications for many foreign students. However, this is a response to a larger national problem of illegal migrants, and such legislation, while affecting the foreign student, is not specifically aimed at this category of aliens residing in the United States.

There appears to be a number, although far from the majority, of students who quietly work in violation of their visa status without repercussions. This fact must be considered in the wider social context of the fact that it is estimated 6 to 7 million illegal aliens are present in the U.S., most of whom are employed. The ease with which illegal aliens are able to work is facilitated by the fact that employers are rarely cognizant of the visa status of prospective employees. Recent changes in a variety of regulations concerning tax collection procedures, issuance of Social Security numbers, and employer liability will undoubtedly make it increasingly difficult for all aliens, including foreign students, to accept employment. The "fairness" of these actions is not an issue here. However, the impact these actions will have on the economic situation of a great many foreign students is predictable. In some cases, it will limit the number of students able to study in the U.S. to the economic

elite of a country. In other cases, such changes will undoubtedly serve to drive the students further underground in their social behavior. Illegal workers will, of necessity, restrict their social contacts to those who are known to be trustworthy.

CONCLUSION

In this paper we have described a particular sub-set of the University's constituency, foreign students, with emphasis on explicating how their legal and social characteristics ramify in both the nature of their social relations and the modes of economic coping strategies they adopt.

The status of foreign student was shown to have both legal and social aspects which make definition of the group difficult. From a legal standpoint the single common denominator of their status is that of holding a special position in immigration law which restricts their activities, especially in economic areas. Because they are socially viewed as "outsiders" by most persons, the nature of their social relations both within and outside the University setting tends to reflect this "we" versus "they" dichotomy. As a consequence of the legal and social conditions of their presence, reliance on fellow nationals and other foreign students indicates not so much an insularity as it does an effective coping strategy. We have described a number of agents, both official and unofficial, who function in roles as social brokers between foreign students and the dominant society. We demonstrated that the activities of the official and most visible campus unit servicing foreign students, the International Students Advisers Office, is largely dominated by brokering of the legal aspects of the student's status while social relationships tend to be brokered by others. The manner in which the student solves his economic problems was demonstrated to be a function of both the legal prohibitions which are a condition of a foreign student's presence in the United States as well as the particular individual's articulation with American society.

TABLE I

TOTAL FOREIGN STUDENTS

1941	86
1945	268
1950	561
1955	823
1960	1594
1965	1810
1970	1661*
1975	1584*

* Twin Cities Campus Only

TABLE IIFOREIGN STUDENTS ON THE TWIN CITIES CAMPUSES
1973 - 74

Visa Status \ Student Classification	Under-Graduate	Advanced Professional and Graduate	Other	Total No.
F-Visa	455	788	24	1267
J-Visa	21	270	29	320
Other Non-Immigrant	25	18	10	53
Immigrant (Resident Alien or Applicant)	13	21	2	36
Total	514	1097	65	1676

Includes only the Twin Cities Campuses

TABLE III

COUNTRIES WITH LARGEST FOREIGN STUDENT ENROLLMENT

Number of Students Country	1970-71	1973-74			1974-75
	Total	Total	Undergrad	Graduate	Total
Hong Kong	158	251	158	93	251
China (Taiwan)	214	176	13	161	150
India	234	145	18	124	120
Nigeria	27	78	53	24	98
Korea	102	110	8	97	96
Canada	152	95	84	8	81
Iran	28	56	30	18	58
Japan	58	40	10	30	49
Israel	30	44	13	31	46
Thailand	39	35	8	27	39
Greece	19	31	9	21	29
Mexico	18	30	6	19	28
Great Britain	27	35	11	21	27
Turkey	20	31	5	25	24
Chile	27	27	4	22	20
Philippines	46	22	4	17	20

The figures given for graduates and undergraduates may not equal the total for 1973-74 because some students hold other classifications.

TABLE IV

DISTRIBUTION BY VISA STATUS, SEX, AND MARITAL STATUS

1973 - 74

Sex and Marital Status Visa Status	Single		Married/w. Dependent Spouse Accomp.		Married/w. De- pendent Spouse & Children Ac- companying*		Married/w. De- pendent Spouse &/or Child in Home Country		Total No.	
	M	F	M	F	M	F	M	F	M	F
F-Visa	750	209	192	39	12	3	55	7	1009	258
J-Visa	112	29	118	17	14	1	28	1	272	48
Other Non- Immigrant	17	4	8	18		5	1		26	27
Immigrant resi- dent alien or applicant	17	3	12	4					29	7
Total	396	245	330	78	26	9	84	8	1336	340

* These figures are probably low since it is hard to keep them up-to-date.
ISA0 estimates the presence of about 150 families with children.

TABLE VFOREIGN STUDENT MAJORS (PERCENTAGES)
TWIN CITIES CAMPUS
1973 - 74

	Undergraduate	Graduate	Total
Agriculture, Forestry and Home Economics	07	10	09
Business	12	16	15
Education	04	08	07
Engineering, Mathematics and Architecture (IT)	36	08	17
Fine and Applied Arts	05	07	06
Health Professions	15	15	15
Physical Life Sciences	13	13	15
Social Science	05	10	09
Unclassified	03	10	08

TABLE VIU OF M STUDENT FINANCIAL AID OFFICE ASSISTANCE
TO FOREIGN STUDENTS 1973-74Source

University Development Fund	\$164,833	
University Scholarships	49,210	
Other Scholarships	48,405	
Regents Student Aid Grant	20,050	
Student Bookstore Scholarships	8,270	
Minnesota International Students Association	6,820	
Colonial Dames	7,550	
Julia Marshall	<u>350</u>	
Total Scholarships and Grants	\$305,488	
University Trust Fund Loans	167,068	
Foreign Student Work Opportunity Program	<u>59,938</u>	
Total Loans	\$227,006	
Grand Total		\$532,494
Total number of recipients	393	

TABLE VII

FOREIGN STUDENTS PAYROLL - U OF M FISCAL 1973

Gross Earnings	N	%
0 - 500	120	14
501 - 1000	96	11
1001 - 1500	97	11
1501 - 2000	62	07
2001 - 2500	75	09
2501 - 3000	50	06
3001 - 3500	53	06
3501 - 4000	57	07
4001 - 4500	55	06
4501 - 5000	73	09
5001 - 5500	25	03
5501 - 6000	22	03
6001 - 6500	12	01
6501 - 7000	11	01
7001 - 7500	5	01
7501 - 8000	5	01
8001 - 9000	2	
9001 - 10,000	14	02
10,001 - 11,000	7	01
11,001 - 12,000	3	> 01
12,001 - 13,000	3	> 01
15,001 - 15,500	1	> 01
20,001 - 20,500	1	> 01

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Office for student affairs RESEARCH BULLETIN

IS STUDENT DISSENT ALL OVER?

A LOOK AT THE BRITISH SCENE

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Student Life Studies

University of Minnesota

Abstract

This paper presents a brief overview of student dissent in British Further and Higher Education. Then research findings concerning the characteristics of contemporary student dissenters are described and finally some social and political explanations of dissent are provided. Questions are raised concerning the assumptions underlying the research and theory about contemporary British student dissent.

IS STUDENT DISSENT ALL OVER?

A LOOK AT THE BRITISH SCENE¹

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Student dissent in Great Britain is a topic which does not lend itself to a simple clear-cut analysis or to sweeping generalizations, because obviously no one has yet provided either a theory or empirical data about dissent which can be universally applied to all situations. Student dissent in Britain involves complex relationships about which a variety of hypotheses could be appropriate.

Although academic discussion of dissent may no longer be fashionable in some circles, the issue is neither unimportant nor outdated. The Counselor and Student Personnel Worker in colleges and universities in the United States were virtually caught "sleeping" by the intensity of dissent in the 1960s. And it is no wonder that some of them may want to forget those "troubled times." Yet, there is much to be said for continued rational dialogue now since the temperature of many campuses has been lowered. This paper describes a brief overview of dissent in British Further and Higher Education with particular reference to present incidents. Then the paper reviews examples of British empirical research and theoretical explorations of factors related to dissent. It is hoped that this examination of British student dissent may stimulate

1 Paper delivered at the University of Aston, December 12, 1974.

2 Professor Biggs is attached to the University of Aston in Birmingham for the 1974-75 academic year on a Fulbright Fellowship.

research and theory about the still ambiguous factors surrounding student dissent in the United States and Britain.

A Brief Overview

Although there has been a long history of student protest in British universities (Fletcher, 1972), recent incidents of student dissent in British universities may represent a break with tradition. British student politics in the twentieth century have been notably peaceful. Although there was quite publicized student radical activities in the 1930s, the radical undergraduates were conventionally radical in their affiliation to adult "left wing" parties (Shils, 1969). Furthermore, even the new left movement which emerged after 1956 in some British universities was largely concerned with cultural critiques of the larger society rather than demonstrations (Lipset, 1971). Halsey and Marks (1969) have argued that presently an unfamiliar type of student movement may be emerging in British higher education.

1967 was a significant year for student protest in Great Britain. A group of Labor, Liberal and Communist students from the National Union of Students formed the Radical Student Alliance. The issue between this new group and the National Union was primarily over political methods. The Radical Student Alliance wanted to mobilize student support through demonstrations and petitions. At the first Radical Student Alliance Convention, held in January 1967, the Vice-Chairman of the Liberal Students' Union from the chair called for fundamental changes in the economic system, foreign policy and the way we govern ourselves. In an interview on September 18, 1966 in the London Sunday Telegraph, he was quoted as saying, "It's quite simple, we want to get rid of capitalism." These new student radicals appeared to

define their conflicts with the University authority as a part of the larger question of the legitimacy of the total British social system.

Other radical student organizations sprang up: The Revolutionary Socialist Students' Federation was formed at the London School of Economics in June 1968, and after the demise of the Radical Student Alliance, the Maoist Vietnam Front came into existence. At the Liverpool Conference in 1969, the National Union recommended changing a clause of their constitution which prohibited their discussion of political issues, and in 1970 at the Margate Conference, the change was ratified.

Radical students in the late 1960s were particularly angry about what they described as the Binary System of British Higher Education. Anthony Crosland, then Secretary of State for Education and Science, enunciated this (reputed) government policy in April 1965. The system appeared to segregate British universities into an autonomous sector financed from the University Grants Committee and the rest of the collegiate institutions (the public sector) which received their money from local education authorities. According to David Adelstein (1969), a former president of the London School of Economics' Unions, "Underlying the Binary System is the fundamental gulf between theoretical and applied subjects, between the abstract and the practical, such that the one side veers toward dilettantism and the other towards mechanical specialism. This is the profound cultural schism that the Binary System creates and reinforces."

The next significant event in 1967 concerned the London School of Economics. In autumn 1966, the appointment of the new principal of the London School of Economics was being debated among students and

academic staff. The Student Union later clashed with school authorities about a rule which limited their freedom to write to the press about the issue. Early in January 1967, students called a meeting to consider direct action to stop the appointment of the new director. At this time they tried to enter an auditorium which had been banned for their use and in the confusion a porter died. The Board of Discipline was convened and although they dismissed the charges against most students involved in the incident, the Board found the President of the Student Union and the President of the Graduate Students' Association guilty.

Later in the year the suspensions of the two students were eventually dropped by the Board of Governors. Before this action was taken, the London School of Economics had become the scene of the "first major student strike Britain had ever known" (Blackstone, Gales, Hadley, & Lewis, 1970).

Finally, about the same time as the London School of Economics' student strike, four thousand students lobbied at Parliament against a decision by the Government to raise the fees charged to overseas students in universities and colleges. Students saw this government decision as a "dress rehearsal" for the introduction of loans as a partial substitute for, or alternative to, grants, and as a sign of an increasingly "Vocationalist" spirit in the Government's policies about higher education (Halsey and Marks 1969). Students were resisting, according to one Radical Student Alliance spokesman, a conversion of institutions of higher education into "battery farms for broiler technicians."

Warwick University in February 1970 was the scene of a rather

highly publicized protest. Students occupied the Registry, ostensibly because a University Building Committee had resisted a series of demands from students and academic staff concerning among other things, desegregation of the informal life of students and academic staff, and giving students increased control over their Union building. During the occupation, students opened the files and found apparent evidence of political discrimination in the confidential files of individual students. Since then, Thompson (1970) has edited a series of papers concerning Warwick University and the information found in the files during the occupation.

In March 1974 there were a number of British universities in which were emerging various patterns of student unrest. At Oxford University, hearings against eighteen undergraduates had been subject to constant interruption and obstruction. Oxford militants were demanding a single Students' Union. These disruptions also included an anti-demonstration called by the Oxford University Conservative Association. At the same time as the anti-demonstration, 350 militant and moderate left-wing students from Oxford and other institutions marched around Oxford and there were some incidents of destruction.

About the same time, Thames Polytechnic was temporarily closed down following an occupation of campus buildings by students. All academic and administrative staff were withdrawn, and all teaching, laboratory work, examinations and welfare services were abandoned. The Director called for national level guidelines as to what were the responsibilities of Student Unions.

In Kent University disturbances, the major issue involved a third year Philosophy student who had been sent down for not working.

Later a large number of academic staff at Kent refused to teach the students unless they ended the occupation. The National Union of Public Employees refused to do overtime for student sports and societies and catering staff threatened to refuse to provide meals. The incidents at Kent were reputed to include:

1. Use of alarm clocks to disrupt a lecture.
2. Forceful picketing of lectures to prevent lecturers and students from attending.
3. Breaking into a staff member's office and ordering him to leave during the occupation of Elliott College.
4. Using a blind student as a ruse to enter the Registry and then opening a window for students to storm the building.

In fall 1974 Kent University was still in the midst of unrest. Students held a "sit-in" protesting against the University's handling of the examinations procedure. They were angered by the way the University was "removing" some students after their examinations at the end of their first year. Professor Guy Chilver (1974), former Dean of Humanities at Kent University, called for a stand against campus militants, "A great and difficult duty therefore rests with the University authorities, who ought (more quickly than has happened in some places), to issue a clear decisive and honest statement to all students directly the militants look like trying something on." He pleaded-- "What is needed quickly is for some responsible body - presumably the Committee of Vice-Chancellors and Principals - to put on paper, after advice from lawyers expert in this branch of law, what they think universities could do that they have not done, and what they ought to have been enabled to do if the law of a reasonable society allowed it."

In contrast, Professor Harry Rajack, a lecturer in law at King's College London (1974), argued against Professor Chilver, "Legal remedies are available, but there are also needed procedural requirements to preserve some minimal rights of those in occupation who may have a satisfactory answer to the allegations." He admitted that probably some students might have no intelligible or socially desirable objectives for their militancy. However, he went on, "The possibility that the nature of the institution may itself give rise to grievance, that (Heaven forbid) the authorities themselves may bear some responsibility, that a more appropriate approach than resort to the souring effect of legal remedy may be discussion of differences is not considered by Professor Chilver."

On April 30, 1974, the National Front, which is a political group of the extreme Right, booked a room in Conway Hall, Red Lion Square (London) for a meeting to take place on June 15th. This group was protesting against the Government's decision to grant an amnesty to illegal immigrants and to allow them to bring their relatives into Britain. After hearing of the proposed meeting, a left-wing group, the London Area Council of Liberation, booked a small room in Conway Hall for the same date. In the light of these developments, the National Union of Students became anxious and urged the Liberation demonstration to be cancelled. However, the International Marxist Group joined in with the Liberation group as part of a march on June 15th. The Marxist group led a charge into a police cordon positioned in front of Conway Hall. Later there was a confrontation between the National Front and the Marxist and Liberation marchers. During these Red Lion Square riots, a student from Warwick University died.

The National Union of Students in fall 1974 reported that government cuts in educational spending had "provoked widespread student militancy" with an "unprecedented level of militant action" at fourteen higher educational institutions. At Sussex University, students were protesting about rent increases; at Newcastle Polytechnic, they were protesting about inadequate housing; at Bristol University, they protested about a student who was refused a sabbatical because of his allegedly poor academic performance.

Sussex University authorities closed the Main Refectory when student leaders began deducting ten percent from the price of meals. These student activists had also occupied the University's telephone switchboard and blocked calls in protest at rising rent and food prices.

Militants invaded a meeting of the Academic Board at North London Polytechnic, and they disrupted a meeting of the Board of Governors, at which time the Director received a black eye! These militants were trying to prevent the administration from implementing a decision to cut student representation on academic and other boards.

Essex University

In fall 1974, Essex University provided students with a ballroom and several committee rooms which could be used exclusively by students until a proper student union could be built. This move appears to have been a significant policy change following a year of constant campus havoc.

In November 1973, Essex students were demonstrating for higher maintenance grants and there were some incidents in picket lines. A few days later students occupied the administrative offices and issued three "non-negotiable" demands. The University applied to the

High Court for a possession order which was granted but not enforced. The occupation ended in early December. However, the University would not accede to a student demand that no disciplinary action should be taken against any of the students involved in the occupation which caused just over £4,000 damage.

University disciplinary hearings were held in February 1974 and one student was expelled for one year. Pickets were then mounted and later barricades erected to close the main entrance of the University. In the middle of March, the maintenance staff, with the help of the police, removed these barriers. That day, 85 Essex University students were arrested and the next day, 200 students, mostly from other universities, forced their way into the Vice-Chancellor's office and held him under duress for two hours.

Toward the end of April, the National Union of Students organized a demonstration at the University. Three hundred and fifty militants, some of whom were visitors from other campuses, occupied a building preventing classes from taking place and forced the disciplinary committee to suspend its hearings. They also invaded the Vice-Chancellor's office and subjected him to questions. In early May, a University Appeal Committee suspended the expulsions and lessened the fines against two students who had been expelled.

Laura Kaufman (1974) analyzed the Essex situation and suggested that the setting of the Essex campus involved considerable physical concentration so that students could rather easily blockade the campus. She described the Essex governance structure as complex. Even though student representation was high, the committees were generally regarded as ineffective and slow and the Vice-Chancellor appeared to

make all decisions! Finally, she thought that since Essex University had no vocational schools, there was a preponderance of arts and social science students who were more prone to become militants.

Lord Annan, in his analysis of the Essex situation (1974) concluded that the University's Vice-Chancellor had been right when he took disciplinary action against students and he was right not to have suspended it when they began a picket. However, the Vice-Chancellor was criticized because he did not address students on the day 90 were arrested, and because he should have been more accessible to students... "A few informal contacts, a walk about, a visit to chat with students in a department, half an hour in the bar is worth dozens of formal meetings." Lord Annan also castigated militant students, "No one would doubt their sincerity; but equally the University authorities must regard them for what they are - wreckers." Also staff sympathizers were criticized for giving militant students information which, by their own account, was designed to harden opinion against the Vice-Chancellor's efforts to negotiate.

The Annan Report (1974) acknowledged that Essex students had a legitimate sense of grievance on three points. The first being the inadequacy of their grants, the second the relevancy of the curriculum, and the third being their claim that "academic staff were responsible for the design of the buildings and the living conditions on campus. They have made a mess of it and don't share those conditions because only a handful live on the campus. So let us, the students, take over the running of the place." The Report suggests that in the end the question at Essex which has to be resolved is that of campus governance.

The Annan Report recommended the provision of a separate students' union, and that discussions should be held on the relationships of staff to students and the style of these relationships. "It is vital to convey to students that to discuss outside the lecture room the subjects they are studying is part of a university education, and student societies - to which academic staff must give their time in the evenings after classes are over - are one way of doing so." Lord Annan also thought that many academic and social problems which affect good order in the university ought to be discussed openly in small groups.

Additionally, the Annan Report recommended that disciplinary procedures should be simplified and shortened. The Students' Handbook section on discipline was described as "singularly inadequate" for nowhere does it state succinctly what the University considers offenses. He suggested that the University consider having entering students sign a document stating that they know the disciplinary rules and would abide by them.

In an editorial in *The Times Higher Education Supplement* (1974), it was suggested that the Essex saga raised the wider question, "Has the whole Robbins' expansion produced a system of student conscripts and careerist faculty who see no real purpose in what they are doing?" The extent of this editorial generalization about Essex seems unwarranted. The May 28, 1974 *Manchester Guardian* reports that use of the University library for prolonged study was found to have remained as high as usual throughout the most disruptive episodes, and on most days it was higher than at the same time the year before. The figures revealed no sign that the pattern of study in the library was affected

by the peaks of action and tension "supposedly" being experienced by the student community. Furthermore, the December 8, 1975 London Times reported that after a year of troubles, only two of the students' five general meetings during fall 1974 had managed to reach a quorum. Only 12% of the students voted in the Student Council elections, and nine of the 31 seats were won by conservative student candidates.

The Characteristics of Students and Dissent

The February 1967 demonstration at the London School of Economics (LSE) was the focus of a study by Blackstone, Gales, Hadley and Lewis (1970). What follows is a brief summary of their findings.

Seventy-nine percent of all the students regarded the London School of Economics' sit-in and boycott as either wholly or partly justified. Differences between undergraduates and postgraduates, and between Home and Overseas students' attitudes about the sit-in and boycott were slight. Between 69% and 80% of all students at LSE regarded petitions, protest meetings and the lobbying of members of staff as wholly justified; between 42% and 54% viewed protest marches, a sit-in without immobilizing the school, a boycott of lectures and classes and picketing as wholly justified; and 22% would have regarded a sit-in immobilizing the school as wholly justified.

Forty-nine percent of all students participated in the boycott, and thirty-six percent of all students participated in the sit-in on one or more days. Younger students were more likely to have regarded the boycott and the sit-in as wholly justified and to have participated in each.

Among British students, support showed only slight variations with fathers' occupations, and school background of the British undergraduates bore slight relationship to support for the protest. Academic

achievement also showed no significant relationship with support. Political party allegiance was found to be related to level of students' support. Only 19% of the Conservatives regarded the sit-in as wholly justified. Among undergraduates, 61% of the Sociologists compared with 32% of the Statisticians and Accountants, and 25% of the Geographers took part in the sit-in. Among postgraduates, the figures were 44%, 24% and 14% respectively. Year of school showed a small relationship with support. Frequency of attendance at Union meetings was very strongly related to support.

Dissatisfaction with various aspects of the School was related to support for the protest. The strongest relationship concerned dissatisfaction with staff contacts. For example, 56% of the undergraduates who were very dissatisfied with staff contacts, compared with 28% of those who were very satisfied, regarded the sit-in as wholly justified. Support for the protest was also related to attitudes toward student representation on school committees. Seventy-seven percent of those wanting a student majority on disciplinary committees, compared with 5% of those wanting neither consultation nor representation, regarded the sit-in as wholly justified.

The London School of Economics' survey presented no evidence that extreme activists or all participators in the protest came disproportionately within the School from students of above-average ability.

A similar study of students at a London Technical College was completed about the same time as the LSE research (Mott and Goldie, 1970). These students had been involved in a series of confrontations with the authorities over the formation of an autonomous Students' Union and study facilities.

Two hundred and twenty students at this college were surveyed and an index of militancy was constructed; four factors were obtained from an analysis of the responses, and one of these factors was used to give students a militancy rating. Three groups were compared: The "most militant" 20% of the sample, the "most militant" 10% and the most "anti-militant" 20%.

Most militant students described themselves as working class or lower middle class and did not expect upward social mobility. Social class was inversely related to level of militancy. Students with fathers in higher or lower professions, or fathers in clerical occupations tended to be less militant. The militant student was more likely to acknowledge working class parents and not accept a "meritocratic ideology." The more militant students generally claimed to be indifferent or opposed to career ambitions and many hoped to be academics or social workers. Although a relationship between militancy and membership in the Social Sciences Course versus Engineering Course was found, the authors also identified Engineering militants and Social Sciences anti-militants.

The most militant students claimed to have got on best with their mother, or to a lesser extent, not to have got on well with either parent. Female and male militancy were roughly at the same level. Militant students were likely to describe themselves as agnostics. Militancy was associated with consistency in parental political outlook. But 56% of the most militant supported the three main political parties.

The most militant students expressed more dissatisfaction with their education and contacts with the staff than the others. Thirty-two percent of the "most militant," as contrasted with 66% of the "most anti-militant," were satisfied with the education they had

received at the College. Mott and Goldie concluded "Our findings seem to offer little support to the theory of student militancy as symbolic parricide although a surprisingly large proportion of militant students expressed a preference for an autocratic family system.

Salter (1974) argues that the early and mid-sixties saw the growth of two separate student subcultures called "hippie" and "radical." The former was retreatist while the latter addressed itself to the problem of political activism. Salter thinks we are witnessing a re-approachment between these two groups and they are merging to produce an alternative culture with a self-sustained identity.

In order to test this theory, he administered a questionnaire to all first year students at Enfield College of Technology (now part of Middlesex Polytechnic). Respondents indicated how much representation they thought students should have (majority, equality, minority consultation, none at all) in five areas of college decision-making. Militants and non-militants were then characterized by the consistency of their attitudes towards the students' role in college decision-making.

Neither standard socio-economic variables nor the party preference of parents had any significant relationship to the political stance of students. Student militancy was highly related to the types of secondary schools attended. Non-militants were twice as likely as militants to come from a public school and nearly three times as likely to have attended a secondary modern school. Militants were six times more likely than non-militants to have come from a comprehensive school.

The relationship between militancy and "A" level subjects studied at school was significant, but the results were not always in the expected directions. Even though liberal arts and social studies pupils

were more likely to be militants and science pupils non-militants, those who took social studies "A" levels (geography, economics, history, accountancy, constitution general studies) were equally represented among militants and non-militants.

First year militants tended to enter the faculty of Social Science; the non-militants were dispersed through the three faculties (Social Science, Engineering, Business Studies). Non-militants were twice as likely as the militants to intend to devote their time predominantly to study. Drug use (except heroin) of every kind increased as militancy increased. Even though no statistically significant differences in the amount of drinking done by the three groups were found, militants were likely to get completely drunk more often.

Second year students at a provincial British university who were more likely to hold Reforming Views were described in another study (Startup 1974). A sample of students was asked whether they thought the present structure of their university and universities in general should be changed. Six categories of students ranging from "Reformers", those who see radical change as desirable and those who indicate the type of change required, to those who express no view on change were identified.

Students in the Social Sciences faculty included the largest proportion of reformers and those in the Applied Science faculty had the lowest. Relatively more men than women were found within each. Overall, and within every faculty, partial fulfillment or non-fulfillment of men's occupational expectations is correlated with the wish to see reforms. In the Arts faculty, a strong tendency was found for those whose intellectual expectations were partly fulfilled or unfulfilled

to include relatively more reformers. Dissatisfaction with the range of courses was strongly related to the tendency to favor reform. For men, dissatisfaction with personal contacts between students and staff was also associated with the tendency to hold reforming views.

Some evidence about the extent of support for protest among British students in 1969 and the characteristics of students who support and oppose protest was presented in another report (Hatch, 1972). Students in three universities were surveyed in February 1969. These institutions exemplified three different positions in regard to protest: No protest, direct actions by a minority, and protest through legitimate channels by a majority. Students were categorized in terms of their support for protest - those strongly supporting protest, those moderately supporting protest, and those opposed to protest. Only 14% of the total sample were strongly supporting protest, but half of the students moderately supported protest.

Surprisingly, the technological university in the sample, where a peaceful consensual protest had been held, showed the highest level of support. Within each faculty, the students at the technological university tended to be somewhat more inclined to protest, but overall the social scientists showed a distinctly higher level of support than the technologists. Still, at each university, the relationship between protest attitudes and student membership in a particular faculty was a weak one. Further, protestors and non-protestors were not significantly different as regards sex, age, schooling and social background. Generally speaking, the social background and ability levels of British students who were supporters and non-supporters of protest were not found to be different.

Protestors saw themselves as politically Left, but this perceived "Leftness" was not so clearly identified with support for any one political party. Most support for protest came from atheists and Jews while those who were uncertain or agnostic occupied a midway position. Protestors showed more tolerant racial attitudes, greater moral permissiveness and a higher valuation for ideas and culture.

A majority of the protestors were dissatisfied about the role students played in decision making, the amount of contact students had with academic staff, and the amount of university concern for the welfare of individual students. On these three issues, a considerably smaller percentage of non-protestors expressed dissatisfaction. More of the protestors put greater value upon education and ideas as ends in themselves, whereas more of the opponents of protest were likely to see a university education as a means towards certain vocational ends.

Hatch (1972) perceived a large place for symbolic issues in student movements and the absence of rationally utilitarian programs that embody a clear analysis of and distinction between ends and means. Radical students are attacking universities for not living up to professed values and are concerned with the gap between ideals and practice. Protestors criticize universities on the grounds of principles and ideals rather than usefulness or effectiveness!

Student Dissent Is a Social Political Process

The various social psychological explanations of Student Unrest have been criticized because too often radicals appear to be "explained away" in socio-psychological terms dissipating the worth of their protest largely by refusing to consider the ideological content of their

revolt or its criticisms of society (Salter, 1973). Several explanations of student unrest have been described as exercises in devaluation: Multiversity, Adolescence, Conspiracy, Permissive Family Socialization and Issues explanations.

The Multiversity argument proposes that the structural characteristics, particularly increased bureaucratization and routinization of universities, is a cause of student unrest; the Adolescence argument proposes that student militancy is little more than a glorified panty raid; while the Conspiracy argument proposes that the "Reds" are on the move again; the Permissive Family Socialization argument proposes that Activist students are attempting to "act out" the political values of their family; and the Issues argument proposes that student radicalism is an essentially superficial movement responding to immediate stimuli.

Salter (1973) holds that most of these analyses of student unrest are inadequate because they do not attempt to "understand" student action in Weber's terms. The ideas of the student movement have been implicitly labelled invalid by the supposed demonstration of how they were arrived at. He proposes that the social history of the politically active student has been such as to provide him with the opportunity of becoming aware of society's problems and the awareness has provided the motivation for political action. Student militancy involves an interaction between an individual's predisposition and his political environment.

Jones (1969), at that time a member of the New Left Review Editorial Committee, advanced the theory that student militancy is an overdetermined phenomenon. Three major forces have produced the contemporary

structure of the student movement: The sociological growth of intellectual labor, the political reversal of values, and the cultural acceleration of the generation gap. Students are not a class but a temporary occupation, apprentice intellectual workers who often experience higher education as an immediate alienation of themselves. The student situation itself has over-riding priority in understanding the student movement. The student movement has also been influenced by the fact that the liberal "pluralist" democracy which was so "celebrated by patriotic apologists" during the Cold War revealed itself as the "military juggernaut" responsible for untold death and destruction in Vietnam. The hysteria of the Cold War had previously smothered radical politics, but with International Detente, students were free to become a political force and the consequence was student strikes, sit-ins and riots. These events were expressions of a conviction that such protests would oblige the authoritarian institutions of advanced capitalism to reveal themselves and then show the true nature of repressive tolerance. A major factor in student unrest is the growing gap between generations, triggered off by the acceleration of scientific and technical change. Jones thinks that "each new generation travels through a different mental universe en route to adulthood." He suggests that a moral and aesthetic upheaval in the 1960s transformed the life styles of youth and these changes in mores have forced generations apart, creating an important precondition for an ~~upurge~~ upsurge of student radicalism.

Wilson (1972) also thinks that student unrest is a manifestation of the generational struggle, and that a youth culture has largely been created by the entertainment industry. Another factor contributing

to campus dissent is the political philosophy that expansion in education is justified as a contribution to national productivity - Wilson states "The promise of governments that universities were a national investment has been quickly falsified by the disruption of universities by student protest." Public pronouncements about education have seriously weakened those traditional academic values which were far more effective in eliciting student commitment. Wilson thinks students do not start with ideological positions on issues. Issues are in most instances trivial! Student unrest is not a cause but a symptom of the latest malaise - dilution of the universities' traditional mission. In general, Wilson thinks that student disturbances are prompted by recent university failings, militant agitators, inherent tensions of the student condition, and a generational division which is promoted in the youth culture. He concludes "relative deprivation" is a widely invoked sociological theory to explain "deviant" and "compensatory" behavior. Perhaps it applies to student movements; perhaps behind the nebulous, self-contradictory idealism there lurks interest and wounded hopes for personal advantage as well as confusion and the search for meaning and identity."

Adelstein (1969) proposes that three contradictions within the British system of higher education have influenced student militancy. These contradictions are (1) the contradiction between the economically necessary expenditure to insure output of trained personnel and the government's persistent failure to meet its responsibility for the investment; (2) the contradiction between the stratifying functions of the educational system and the need to make opportunity really quick; (3) the contradiction between the collective and autonomous

nature of productive work and the individualist structure of contemporary education.

The British student revolt has been characterized in terms of issues, modes of action, the particular balance between local situations and wider politics that it achieves, and the relation of these activities to a party or ideological position (Crouch, 1972). Crouch thinks that contemporary British student protest has concerned itself with three themes: Authority, community, and the relationship between the university and society. However, the selection of issues which achieve any degree of success depends upon their potential for incorporation into the particular concerns of the "new Left." The history of student revolt has to a large extent involved particular problems, blunders or abuses of an authority on a campus which are the source of resentment among a wide circle of students, and then once a protest begins, the strategy is to try to relate these local concerns to global ideological ones.

Protest issues have involved student demands to be involved in decisions made by university authorities. However, many militant Left students want to be independent of university administrative machinery so that they can raise demands to which the university cannot accede and then possibly create the basis for a movement. Other issues have concerned a general complaint about an absence of community in the modern university. However, the activity of Left on this issue has more to do with developing a form of social relationships which might be described as communion not community. Communion is the spontaneous and deeply felt expression of untrammelled, unchanneled sentiment!

Protest issues have dealt with the relationship between the university and wider society. To the Left, some protest issues show how the university in modern society has become a slave to the interests of capital and state. Crouch thinks that every university conflict can be seen in part as an attempt by the Left to gain support for their perspectives on the incidents concerned.

Student protest can also involve economic factors. Johnson (1968) suggests that underlying British student protest are deep seated factors which generate and maintain dissatisfaction. These factors include the democratization of university education, the assumption of governmental responsibility for providing most of the cost of university education, the bureaucratic character of the university, and the increasing affluence of contemporary society, especially the rising value of people's time. Johnson explains that students and faculty expect of the other more than they can deliver. In technical economic terms, there is a "dynamic disequilibrium" between expectations and realizations. This dynamic disequilibrium is reflected in the students' efforts to use political power to force the university staff to deliver more and in the staff's response that students are getting at least as much as they are entitled to. Johnson makes two other observations about student protest. First, the rhythm of the academic year is a feudal survival, geared inversely to the rhythm of agricultural production. This calendar tends to produce a maximum of anxiety and a minimum of organized effort about the end of the second and the beginning of the third term. Examinations at the end of each term might increase the economic cost of student protest and reduce psychological incentives. Second, the geography of universities

frequently reduces the cost of protest to the students by channelling academic traffic through restricted areas which can be blocked by a small number of students. Universities might invest in opening more doorways in university buildings and laying more and wider pathways which would make it more difficult for students to protest.

Current student discontent has been examined in terms of "the politics of the knowable" (Holmes, 1972). Militant students are seen as rejecting the past in relationships. This is a rejection of formalism, "formalism with all its strengths and weaknesses is what the protest is all about" (Holmes, 1972). The "old look" assumes there to be three parties to any statement of fact and these parties are independent. The first party is the knower, the second is the known, and the third is the past's imported formalism which are all definitions, measures and categorizations that are derived elsewhere. Students are attacking the "old look" by rejecting the integrity of the "third party" of lawful authority and rejecting the independence of the first two parties. The knower is not independent of the known nor are fellow knowers independent of each other. The "new look" involves an interfusion of the knower and the known in which the knower and the known crystallize out of their interaction. Detachment is illusory! Holmes thinks that both students and academic staff overstate their cases about these issues: "The staff in their aspirations to scientific respectability all too frequently exhibit parochialism in their assumption of what 'must be,' the students with their dislike of 'authority' in any form, see such presumptions as but the intellectual rationalization of those that are attempting to maintain the inviolability of a political status quo."

Discussion and Conclusion

The history of British colleges and universities reveals many forms of protest (Fletcher, 1972 & Scott, 1973). Yet it is somewhat naive to generalize about this history, concluding that recent incidents of dissent are just another example of a historical phenomenon. The social situation surrounding dissent at Oxford in 1400 and the social situation at Oxford in 1974 are obviously not the same! To consider contemporary campus dissent as simply a historical recurrence is to focus on social and political symptoms without grasping underlying factors. For example, Fletcher's chronology of events extending from the 12th century to the 20th century is misleading if it is assumed that all of these events represent a similar phenomenon - student dissent!

Histories of student dissent are misleading when they lead to theories of causality. Because certain dissent events which in some ways are similar to present dissent events have happened periodically for the last 700 years, one need not conclude that dissent is either a natural phenomenon or a reflection of rapid social change. Those who read histories of student dissent may also fall into the trap of thinking there is nothing new about student dissent, it is just a painful, historical process which needs to be gone through periodically. Student dissent just does not go away. I would like to second Lipset (1971) when he states "A completely inactive student body is a much more curious phenomenon historically than one which is involved in some degree of activism. Any efforts to analyze the future of politics whether on the domestic or international scene will ignore the students at the peril of being in error."

Yet, it is possible to perceive some similarities in the social dynamics of the various instances of dissent which have occurred over the last 700 years in British universities. Bakke (1966) thinks that student activism is a function of the universal search of adolescent youth for an adult role in society, for self identity and social integration, and Lipset (1971) examines campus unrest in the wider context of social reform movements of past and present days.

An examination of the history of student dissent in British universities does reveal recurring tensions involving social change and higher education. Institutions of higher education in Britain have experienced challenges at various times in history, and the resulting campus dissent may be viewed as forms of institutional anxiety resulting from such challenges. For example, Sir Eric Ashby (1972) suggests that when forces in the social environment press for changes in a higher education system, they are likely to encounter two kinds of hereditary resistance - the inertia of the system to any change and the belief in the purpose of the system which is held by those engaged in it. He goes on - "a higher education system has its own articles of faith by which its practitioners live and these are not always consistent with the demands which society makes on the system." Dissent may be the result of changes in society which cause new demands on higher education.

This paper also examined research concerned with the relationship between characteristics of British students and their level of activism. These research findings do not lend themselves to any clear generalizations about student unrest. More important, this research can implicitly define the "Problem of Student Unrest" as person-centered.

Caplan and Nelson (1973) have described how the way "problems" defined in psychological research can determine whether attempts are made at remediation. Problem definitions, i.e. a study of the characteristics of student activists can influence the kinds of change strategies which either might or might not be developed. These authors (Caplan and Nelson, 1973) have clearly demonstrated a person-centered preoccupation and causal attribution bias in psychological research which often disregards the possible influence of external forces.

Various writers have espoused social, political and economic notions about student dissent based on surprisingly little empirical research. For example, several writers think that student unrest is a function of a generation gap resulting from rapid social change. However, the idea that the "generation gap" causes student dissent suffers under careful analysis. Research by Troll, Neugarten and Kraines (1969) reveals that two generations in a family have more similarity in basic values than do college students in the same generation. Furthermore, Lipset (1971) after examining various surveys of youth opinions conducted in the United States between 1965 and 1971, concluded that there are generation units among American youth who have highly disparate sentiments. Startup (1972) found no evidence that a British university experience leads to a closer identification with an age group which possesses a youth culture setting it off against older people. In contrast, the university experience seems to lead to a movement away from identification with people of the same age who lack a university experience. (See also Richard Flacks' Student activists: Result not revolt, Psychology Today, October 1967.)

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Office for student affairs RESEARCH BULLETIN

RECENT RESEARCH ABOUT BRITISH STUDENTS:

A BRIEF SURVEY

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Abstract

This paper discusses the status of recent research about British students. It is suggested that such research provides a resource of social comparison data which is potentially useful to individuals involved in institutional decision-making. A sample of research studies is organized into three categories:

- (1) descriptions of present student behaviors or traits;
- (2) descriptions of different groups of students; and
- (3) descriptions of the relationships between present and future student behaviors or traits.

RECENT RESEARCH ABOUT BRITISH STUDENTS:

A BRIEF SURVEY ¹

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Since 1965, there has been an increasing amount of research about British students. Some would applaud this phenomenon, others would be neutral, still others would criticize it. Many in the academic community applaud any research about any topic merely because they think "doing" research is a good thing. Barzun (1960) said, "The very way in which we use the phrase 'do research' implies that it is the act, not the goal, that matters and although few think of research as a pilgrimage for saving their souls, modern society does believe there is salvation in it." Another group of academics are neutral about this increased research claiming that such activities are harmless. Still, others are quite hostile about this increasing amount of research about students, claiming that such findings lead to labeling and stereotyping of students.

A simple and apparently obvious justification for the increased research about students is that the results provide facts which can be used in finding "answers." Although the concept of facts is useful in scientific inquiry, this kind of argument tends to imbue "facts" with a pseudo-objectivity that may breed false distinctions between facts and opinions. Further, facts about students are usually facts about groups of students and, as such, involve bothersome concepts like standard

¹ Paper delivered at the Society for Research into Higher Education at Aston University in Birmingham on Tuesday, March 25, 1975.

² Professor Biggs was attached to the University of Aston in Birmingham for the 1974-75 academic year on a Fulbright Fellowship.

deviation, standard error and probability. Slovenko (1967) has said, "Scientific theory is not a mere collection of facts. Science is not a mechanical record, but a creative activity - 'hard facts' upon examination turn out to be 'soft'." Every statement resolves itself into a matter of opinion. The contention that opinion is inference and that fact is original perception cannot be sustained since the process of knowledge is the same for both. Thus it is not necessarily true that research about British students is justified and valuable simply because it provides facts which are a certain improvement on opinions.

Yet, we are still faced with the situation that accurate information about students is of interest to many of those who make decisions affecting further and higher education in Great Britain. For example, administrators, students and members of academic staff are involved in decisions about present and future policies in their institutions, and one wonders how this growing amount of research on British students could contribute to improving their institutional decisions. Still, to be realistic, if this research is going to have any substantial impact on institutional decision-making, serious efforts have to be directed at the issue of the utility of these findings. Of what use are these research findings? The answer is not obvious to many and researchers need to do more than add short paragraphs at the end of articles which state a few practical implications.

Researchers may need to stop "doing" research about students for a while and attempt to organize this burgeoning amount of research so that findings can be evaluated within some logical framework. A first task would be to clarify how these research findings are related to institutional decision-making. Similarly, Berdie (1972) has said that American

research on students has not contributed to the management and administration of universities because those responsible for planning and conducting research do not become involved early enough in the administrative process as it deals with problem identification and definition. Although Berdie's point is well taken as regards future research about students, there is still the problem of using the research about British students' which has already been completed.

This paper contends that the research findings on contemporary British students provides potentially useful social comparison data for those who are involved in institutional decision-making in higher education. This paper also proposes a brief rationale for organizing the research findings, and gives examples of how some recent studies could be categorized. In an earlier paper (Is Student Dissent All Over: A Look at the British Scene, 1975), the author has summarized research findings and theoretical writings concerning contemporary British student dissent, and this literature is not included in the present review. Also the present paper primarily uses examples of research studies reported during the time period 1965-1975.

A Brief Rationale

Research about British students is valuable because it provides systematic social comparison data which can be used in making institutional decisions. Such social comparison data provides institutional decision-makers with an opportunity to improve their individual evaluations and group evaluations of situations involving students. The effects of research findings about students on institutional decision-making depends on the weight of research findings to old information, the perceived validity of the research findings and old information, and size

of new and old sample groups. Because of these factors it is obvious that similar research findings affect different decision-makers differently. Obviously, research about students can mean something different to different people, because individuals have different histories of opinions about students and they believe these opinions to be correct for different reasons. Some individuals have used subjective criteria for assessing the correctness of these opinions - they just feel their opinions are correct. Others have used social criteria for assessing the correctness of these opinions - people have told them or agree with them that their opinions are correct. Finally, some individuals have used objective criteria for assessing the correctness of these opinions - they have made observations of their own or they may have even read research articles. If research about students is to have an impact on decision-making processes, individual and group histories of opinions must be considered before introducing research findings.

Research findings about British students are not integrated into the decision-making process in some simple or clear-cut manner. The reason being that individuals involved in decision-making have made previous social comparisons of students and as a result of these evaluations, they have opinions about student which to some degree they believe are correct. The kinds of opinions generated by research data about students are basically the same as these opinions generated from individual experiences.

When research findings about students are introduced into decision-making, individual opinions can be compared to opinions based on the research data. If there are discrepancies, we might expect a variety of behaviors aimed at reducing the tensions caused by the discrepancies.

The problem is that decision-makers in such situations are often confronted by conflicting motives of "wanting to avoid anxiety" and also "wanting to know correct information." In spite of this dilemma, research findings about students have considerable potential to influence opinions of decision-makers, since individuals generally tend to prefer opinions which have an objective basis.

Research about British students can be particularly valuable when it provides new samples of students which can be used for social comparisons. Quite simply, decision-makers can compare their opinions based on previous samples of students to opinions generated by different or more representative samples. Research findings about students are also valuable in decision-making when findings present new norms or points of reference for comparisons. To be more specific, research findings about students can improve institutional decision-making by providing: (1) descriptive information about the characteristics or behaviors of students, (2) descriptive information about alternative groups of students and the differences among them, and (3) descriptive information about relationships between present characteristics and behaviors of students and future characteristics and behaviors.

One category of research findings provides social comparison data describing characteristics of present students, and/or factors influencing present student behavior. Studies generate descriptive opinions about present students and usually involve comparing different traits or behaviors of similar groups of students. The trouble is that such descriptive studies usually present partial data about students and so in order to get any kind of complete picture, one must make a variety of comparisons employing less and less similar groups. Still, these studies of student traits and behaviors can be helpful in clarifying

definitions, particularly if different methods of measurement are used.

Another category of research about British students provides social comparison data describing or differentiating groups of students. Such findings highlight similarities and differences among alternative groups of students. Studies usually describe characteristics or behaviors which differentiate groups of students from each other or characteristics or behaviors which differentiate a group of students from student in general.

Finally, the third category of research provides social comparison data concerning relationships between present traits and behaviors of students and certain future behaviors or traits. Studies may compare the relationships of predictor variables and criteria for the same or different groups of students.

The rest of the paper presents some examples of recent research findings concerning contemporary British students which provide (1) present descriptions of student behaviors or traits, (2) descriptions of different groups of students, and (3) descriptions of the relationships between present and future behaviors or traits of students.

Present Descriptions of Student Behaviors or Traits

These studies have described characteristics or behaviors of students, and identified correlates. An independent variable in most investigations is a measure of a student characteristic or behavior. A majority of studies have looked at the characteristics or behaviors of first-year students.

Differences between male and female students have been the subject of a few research studies. The academic progress of male and female first-year university students was compared (McC.Miller, P., & Dale, R.R., 1972). Women when matched with men for attainment at entry and on other relevant

variables made better progress in both Arts and Science faculties during first year. McCracken (1969) found that women did better than men in first-year examinations. But after the first year, men made better academic progress than did women. Occupational values of male and female students were compared on entry and after two years [Smithers 1969 (b)]. Overall, female students were found to be more people-oriented, and males were more extrinsic-rewards-oriented and more inclined toward leadership. On entry, female students attached less importance than males in the same subject area to extrinsic rewards, particularly security, but over two years these differences largely disappeared. After two years, the attitudes of female students toward extrinsic reward were closer to those of male students in the same fields. Female students in all fields of study attached less importance than males to exercising leadership both at the time of entry and two years later.

Age differences among students is another socio-demographic characteristic which has also been looked at in some studies. For instance, characteristics of mature students (those who had a break of two years or more between leaving secondary school and re-entering as an undergraduate or in order to gain entrance qualifications to a university) were described (Nisbet & Welsh, 1970). Mature students were from the same section of the population and the same kinds of schools as the younger direct entrants. During their careers at Aberdeen University, they had approximately the same failure and withdrawal rates as the younger direct entrants. About the same percentage of mature students as the younger direct entrants had taken honors degrees or were in honors classes at Aberdeen. More than 60% said they were anxious over "making the grade." Forty percent had financial problems when they began full time study, and only 24% managed on their student grant alone.

Fifty-eight percent of the married mature students were experiencing "strain in their domestic life" as a result of taking up full-time study. The major reason quoted by 55% of them for entering the University was dissatisfaction with their present job. About 53% said they had no difficulty in establishing good relationships with younger students. Very few (23%) were disappointed that the University was not as unique an intellectual experience as they had expected and very few (18%) admitted that especially in their early months at the University, they found difficulty organizing their time for studies.

Since students on most campuses live in different types of housing, this socio-demographic characteristic has also been the subject of some research. For example, the academic achievement level and wastage among first-year Scottish students at Edinburgh in different types of residences were described (Jones, McMichael, & McPherson, 1973). At each of three ability levels, students who spent the greater part of their first year in lodgings had a lower average level of achievement and a higher wastage rate than either those students who had lived mostly at home or in halls of residence. No differences were found between hall or home students in the average level of first-year achievement, but home students had a higher wastage rate at each ability level. Albrow (1966) after controlling for ability and social background differences of students at Reading, failed to find any differences in first-year achievement between hall and lodgings students.

Educational and vocational characteristics have been the subject of a number of studies on students. Educational values of students at entry to a university and then again two years later were described in two studies [Musgrove, 1968; Smithers, 1969 (c)]. Musgrove found that first-year students placed the greatest weight on intellectual objectives and

somewhat less on development of social and vocational skills. A close correspondence was found between staff and student values. Smithers [1969 (c)] later reported that after two years, students' values were predominantly stable. Intellectual objectives like "independence of mind," "understanding concepts," "relating theory to practice" were given greatest weight at entry and continued to be so after two years. Developing wide intellectual interests continued to be deemphasized after two years by all but social scientists. The close correspondence of staff and student values persisted after two years.

First-year university entrants were also asked about their ideas about the student's role (Toomey, 1969). They listed three essential characteristics or qualities of the good university student. For a majority (87%) the good student was one who had the personal abilities and capacities which would bring him success in formal studies and/or a career. Students also listed things which they thought would bring them most satisfaction in being a university student. Sixty-six percent of the respondents mentioned satisfactions derived from participation in the social life of the university, while intellectual satisfactions were mentioned by 57% of the students. Finally, students were asked about what they would dislike most about being a student. Approximately 45% referred to hard work, examinations, or self-discipline.

The question concerning qualities of a good student failed to distinguish between groups of students, but the question about anticipated satisfactions did. Social scientists were more inclined than either physical scientists or engineers to mention intellectual satisfactions and were least inclined to mention instrumental satisfactions, i.e. career references or gaining qualifications. Physical scientists showed the strongest emphasis of the three curricular groups upon social satisfactions.

They were also more likely to mention instrumental satisfactions than were engineers. Engineers were more inclined than the other two groups to mention satisfactions derived from personal development. No significant differences were found between male and female social scientists in their replies to the question concerning their anticipated satisfactions in being a student. As might be expected, those first-year students who had been employed before coming to the university were less inclined to mention satisfactions derived from independence and freedom, and were more inclined to mention intellectual satisfactions.

Among physical scientists, working class students were more likely than others to see instrumental aspects of the student's role as more important. In the case of social scientists, no significant social class differences emerged. With the engineers, more working class students mentioned satisfactions derived from independence and participation in social life than did those students from non-manual homes.

Career orientations of university freshmen was the subject of another study (Musgrove & Child, 1969). First-year science and engineering students completed two scales designed to show their orientations to proposed fields of future employment. These students and 41 entering social science students also completed a questionnaire designed to show their role conceptions, as well as one to discover their choice of reference groups.

In general, students in science and engineering were more "organizational" in their career outlook than "professional." (Individuals who are "organizational" in their career outlook see their primary job as loyalty to the organization for which they work; individuals who are "professional" seek status within their professional group and are committed to their professional ideology). For example, students of physics

and civil engineering obtained highest mean scores on the scale of "professional" orientation and the lowest mean scores on the scale of "organizational" orientation. Students of mechanical and chemical engineering were least "professional" and most "organizational" in career outlook. No significant relationship was found between social class background of students and their level of "professional" or "organizational" outlook. Seventy-four percent of the first-year students said that "being a prospective member of a particular profession" was an important aspect to their life in the next few years, and 79% said that "being a university student" was important.

When students considered whose judgment of their abilities they would value most, greatest weight was attached to lecturers in the university; 93% ranked this reference group first or second. Next were people holding senior positions in the career they hoped to follow, then fellow students, and finally parents. Social scientists were significantly more inclined to attach high value to the opinion of parents and fellow students, and lower value to the opinion of people holding senior posts in the career they hoped to follow.

Major reference groups of first year university students were identified (Musgrove 1967). Approximately 67% said their families were the most important people in their lives, 19% referred to friends, 26% referred specifically to their mother, and 25% referred specifically to their father. No differences were found between males and females in their references to either their fathers, mothers or other members of their family. The vast majority of students, regardless of their social background, thought their parents were supportive of their entering the University.

Educational objectives and job or career attitudes of first-year

Portsmouth Polytechnic students were the focus of yet another study (Oxtoby 1971). The main educational objectives of applied scientists and engineers were very similar, no matter what the student's particular degree course, type of entry qualifications or his experience prior to going to the Polytechnic. All groups of students attached great importance to education which would provide vocational training, and which would enable them "to apply fundamental knowledge to new problems in practical situations" and allow them "to develop the ability to base judgments on evidence and not simply on authorities." Students attached least importance to objectives such as (1) enable me to make better use of my leisure time in later life and (2) to develop knowledge and interest in community and world problems. Surprisingly, students who had been to an independent or grammar school were much less likely to value higher education which enabled them to either learn more about themselves or that which provided a basic general education than those students who have not attended such schools.

Polytechnic students in applied science and engineering seem to agree as to what values are important to them in a future job or career. Many of these students placed great emphasis on intrinsic, performance oriented job rewards, i.e. enable them to use their special abilities and qualifications as well as on extrinsic rewards, i.e. "enable them to look forward to a stable secure future." Students straight from secondary school were more interested in earning good money and less interested in the chance to be creative than were those students who had spent some time in full-time employment.

First-year university students indicated the extent to which a job or career would have to satisfy ten possible requirements [Smithers 1969 (c)].

When field study was controlled for differences between male and female, responses were minimal. Occupational values of applied scientists and engineers were very similar, but they differed sharply from those of students in arts and social science, and pharmacy and optics. All groups of student except the pharmacists and opticians attached greatest importance to making use of their special abilities in their future careers. Applied scientists and engineers also attached great weight to earning good money and being able to look forward to a stable secure future. In both these ambitions, they differed significantly from students of arts and social science.

A number of researchers have looked at different personal and social characteristics of students. For instance, problems of a sample of students during their first year and then again 18 months later were compared (Musgrove, 1969). Academic study problems were checked most frequently in the first year and in the third year, homesickness and college rules and regulations were least frequently checked on both times. In the third year, more men were overwhelmed by academic work, troubled by thoughts of exams, and bored by some of their work, but fewer felt unsure of their abilities, fewer had accommodation problems, and fewer were troubled by the attitudes of lecturers. During the third year, more women reported academic study problems, and fewer reported problems related to interpersonal relationships. No greater number of Sandwich students in the third year than in the first year felt overwhelmed by academic work or by the thought of exams. During the third year, fewer Sandwich students were bored by their work and fewer felt they were not working as hard as they should. During the third year, Sandwich students expressed more concern about future career prospects. Finally, students

in science and technology were more often worried on all counts than were the students in arts and social sciences.

A religious attitude scale and a questionnaire concerning religious activities and beliefs were administered to university students in their first year and then again in the third year (Pilkington, Poppleton, & Robertshaw, 1965). Third-year students at a training college also completed the scale and questionnaire. During the two years at the university, the students declined significantly on four out of seven indices of religious activity and attitudes. Results show that women university students over two years moved away from religion more than had the men. Moreover, by the third year, women university students were significantly more religious than the men on only one index of religious behavior whereas in the first year all seven revealed significant sex differences. Students within the Faculty of Arts (predominantly women) showed significant decreases in religious practices and attitudes. Non-conformist and Roman Catholic students declined more in their religious attitudes and beliefs than did Church of England students.

A test of maturity was administered to students in a women's college of education and three factors in maturity were identified: (1) capacity for realistic thought and self-appraisal, (2) an ability to take a long term view and (3) independence and self-control under stress (Shields, 1972). The type of secondary school attended prior to college entry (single sex or co-educational) had no significant effect on maturity test scores of first-year students. However, mean test scores of third-year students who attended co-educational secondary schools were significantly higher than those who attended single sex schools. No significant difference was found between mean test scores of third-year and first-year students who attended single sex schools. Third-year students who had

been to co-educational secondary schools had significantly higher scores on the maturity test than first-year students from co-educational secondary schools.

Results also showed that test scores of third-year students were significantly higher than those of first-year students, and that maturity scores were not influenced by type of course followed in college. The conclusion from this study was that those students who attended single sex secondary schools and then attended an all women's college made less growth in maturity than those from co-educational schools.

First-year students who scored high (top 1/6th) and low (bottom 1/6th) on a measure of authoritarianism were compared (Dunham, 1973). Over half of the high authoritarians were engineering students, and about 25% were mathematicians and pharmacists. Almost one-third of the low authoritarians were sociologists and one-fifth were architecture students. However, architecture students had the widest range in scores on the measure of authoritarianism. Only one sociology student was in the high authoritarian group.

Some descriptive information about the social and political convictions of students during their first year and third year in a technological university was provided in another study (Child, 1969). The Eysenck Social Attitude Scale which measures the extent of an individual's radical/conservatism attitudes and tough/tendermindedness attitudes was administered at entry and then two years later. At both times, women were more "tenderminded" than men. Both men and women were more "radical" after two years at the university. Science and technology students were more "conservative" than the social scientists both as freshmen and two years later. At entry, students from middle class homes were less "radical"

than those from working class homes. After two years, this distinction was not significant.

Descriptions of Different Groups of Students

These studies focus on describing differences between identified groups of students. Researchers may compare particular groups of students to each other or they may compare a group of students to a reference group of students in general.

One way of differentiating groups of students is to develop a psychological or sociological typology. In the United States a popular typology was developed by Clark and Trow (1966) who identified four student subculture and role orientations - academic, collegiate, nonconformist, and vocational. Similarly, two British researchers (Cohen & Toomey, 1973) have identified five student role orientations:

- (1) The Social-Intellectual Role Orientation - a student who takes part in university life outside the classroom, whose social life is largely within the university, who enjoys the intellectual life of the university and spends a lot of time outside of lectures in social contact with fellow students.
- (2) The Social-Fun Role Orientation - a student who comes to the university primarily to have a good time, spending much of his out-of-class time in social contacts with fellow students. He describes himself as popular with the opposite sex and a good mixer, and he is not given to spending a lot of time in solitary study.
- (3) The Vocational Role Orientation - a student who primarily comes to the university to obtain a qualification in preparation for a successful career. He cares more for getting his degree than for fundamental values.

- (4) The Academic Role Orientation - a student who has the capacity to tackle both work and examinations successfully, expressing a great interest in his chosen work.
- (5) The Reformer Role Orientation - a student who spends a considerable amount of time thinking about and discussing social and political reform. He believes that working on his own is more valuable than attending lectures.

Females score higher than males on the two Social Roles, while males score higher on the Vocational Role. Social scientists score higher on the Reformer Role Orientation than did life scientists, physical scientists or engineering scientists. These authors concluded that the Social-fun Orientation most closely qualified for consideration as a student sub-culture because of the distinctive normative values which distinguish it from other university groups.

Some differences among first-year students in different courses at a university have also been identified. Students reading for science prefer work which provides opportunities for dealing with things rather than people; they rate themselves as convergers, achieve well in the verbal ideational divergent thinking tests, do not desire work which offers adventure but prefer work to offer a chance of being original, and finally they tend to be introverted. There was no suggestion that I.Q. scores were associated with a science bias. Social science students tended to be neurotic introverts, with no desire to exercise leadership, but have preference for work which offers "supervised adventure" (Child & Smithers, 1971).

Third-year male physical education students and a sample of third-year males in general courses were compared (Hendry & Whiting, 1972).

Physical education students tend to be mesomorphic, stable extroverts with driving expressive social responses and authoritarian attitudes, as compared with the students following general courses. Students whose ideal or probable choice of a career was teaching were more likely to come from working class families than other students. The "teacher" group was also significantly more people oriented at time of entry and two years later than were other students (Cohen, 1969).

Davis and Satterly (1969) compared the personality characteristics of female student teachers of "high" and "low" rated teaching ability. The characteristics associated with low teaching ability were most clearly differentiated. On the 16PF personality test, poor student teachers were less conscientious and persistent than their more successful counterparts, tenderminded and sensitive, prone to feelings of insecurity and timidity, and liable to be tense, excitable and restless.

The mean level of neuroticism of entering business students at a university was higher than that of the general population, but similar to that of other university students (Smithers, 1969). The mean neuroticism score on the Eysenck Personality Inventory was significantly higher than that of successful businessmen. Business students were less introverted than the student norm. Business students tended to come from a higher social class background and to come from a wider geographical area than students in other courses and they were also better qualified at entry than were other students. On entry to the university, business students attached greatest importance to the extrinsic rewards of work such as good money and security and also to the opportunity for self-expression.

In a follow-up study (Hornsby-Smith, Newberry, & Hart, 1973) characteristics of course-changers and potential course-changers, three groups were compared: (1) former grant recipients who had changed their course while at the university, (2) former grant recipients who now wished they had changed their courses while at the university, and (3) a control group consisting of all other recipients. Forty-six percent of the controls, 49% of the potential course changers and 62% of the course changers were strongly recommended by their head teachers as worthy of grant support. Course changers and potential course changers were distinguished from the controls by a less voluntary pattern of subject specialization in the schools, by a later choice of a university course, and by a smaller influence of career intentions on the choice of a career. Course changers obtained a much higher proportion of "good honors" awards, and a much higher proportion of them expressed high levels of job satisfaction in their careers several years after graduation as compared with potential course changers. The academic performance of course changers was generally above average.

A national study of Polytechnic students showed that 67% of the students had applied for a university place (Robinson, 2-21-75). Seventy percent of those students under 25 years of age had attempted to enter a university and 44% of the students over 25 years of age had applied to a university. A large number of the Polytechnic students who had applied to a university first, went to the Polytechnic because they did not obtain "A" level grades required for acceptance on a university course. A consistently higher proportion of those Polytechnic students who had applied to a university possessed characteristics usually associated with "average" university undergraduates, i.e. 18 year old school

leaver with father in a non-manual occupation and had been educated in a grammar, direct grant or public school.

The characteristics of students entering the Universities of Sussex and Essex in 1966 were compared (Oxtoby & Smith, 1969, 1970). (Sussex tends to sponsor, at least in the Arts, something akin to liberal education. Essex, notwithstanding a first year program emphasizing the study of several related subjects, remains committed to fairly intense specialization.) The two groups of students were found to be quite similar as regards age, sex distribution, social and educational background, and educational and vocational objectives. At both universities, students in the Humanities and Social Sciences showed most evidence of "tolerance of ambiguity" and students in Mathematics and in Physical and Biological Sciences showed the least such tolerance. Overall, Sussex students showed more "tolerance of ambiguity" and more evidence of racial tolerance.

Descriptions of the Relationships between Present and Future Student Behaviors or Traits

A third group of studies often has to do with predictions. Usually investigations have involved predicting criterion behaviors such as academic success, academic persistence or academic failure. Several problems have arisen in these studies, first the criterion may be poorly defined and difficult to reliably measure, and second, since correlation or regression methods are often used, the findings tend to be misinterpreted by those who assume that such regularities reflect causality.

Miller (1970) completed an extensive review of research about student characteristics and academic performance. In the studies reviewed the criteria of academic failure have included (1) failure to attain any formal qualification, (2) failure to graduate in minimum time, (3) failure

to graduate with some delay, and (4) failure in first or subsequent years. Other studies have used wastage criteria such as (1) percentage of students failing to complete a course or a year, (2) failure of students to remain in one particular institution until graduation, and (3) failure to transfer to another institution to complete a qualification.

Miller cited a University Grants Committee Report of 1968, which showed no great changes in overall wastage rates in ten to fifteen years, that scientific and technological faculties still have the highest proportion of failure, and that the greater amount of wastage occurs in the first year. He cited a small number of studies which show that such variables as age, size of family, social class, place of residence while a student, and peer relations have little correlation with academic achievement. For example, in a study of students who left University College, London without obtaining a degree, no significant differences were found between graduate and failure groups in age, nationality, religion, whether or not they were evacuated from their homes to the country or abroad during the War, whether or not they had done National Service training, number of siblings, place of residence while at the University, estimated time spent on games, sport or union activities, questions relating to childhood happiness, parental harmony or discord and childhood discipline. Miller also cited a study of engineering apprentices showing little evidence that lack of ability was responsible for high failure rates in technical colleges.

Miller argues that, even though ability and social class are influential in whether a student finds a place in higher education, once there, the influence of these variables appears to be less marked. For instance, in some research reviewed, it was noted that students of extremely high ability failed or dropped out inordinately. Students of IQ 130 plus, the top four percent in ability, accounted for 20% of the wastage in one university, while

students of only average ability, IQ of 105, at about the 55th percentile, sometimes attained degrees.

Results of research about academic performance and wastage have been inconsistent in several cases (Miller, 1970). The relationship between anxiety and academic performance or finance and academic performance are not clear. For most students, anxiety appears to make academic learning more difficult. Yet for some students of higher ability, it seems to be facilitating, and some students actually do well undergoing severe stress. The research also seems to show that student finance, like ability, is a threshold variable. Given a minimal amount of finances, success is possible if students have certain other characteristics.

A number of research studies have looked at student variables in academic performance and have yielded rather consistent findings (Miller, 1970). Interest, curiosity, aspirations, and study habits of students consistently stand out as important characteristics of students related to academic performance and wastage. For instance, it was reported that dropouts frequently say they are not interested in or are tired of being students, and that interest in chosen courses is positively correlated with favorable examination results. Study habits and attitudes toward study have been found to differentiate between high and low achievers in college even more than methods of study. Finally, children from homes that are democratically run, where decision-making is not concentrated in one person, and where initiative and self-reliance are encouraged tend to stay on longer in school.

Entwistle (1972) summarized some recent research concerning personality and academic attainment. He also reported on a follow-up of a group of some 2600 students from twenty different British institutions which showed interesting differences in the relationship of personality and academic

attainment between areas of study. For example, neurotic introverts apparently make good engineers, but stable introverts do better in the pure sciences. Neurotic introverts are also good at languages, but stable introverts make better historians. Among social science students, the correlations between both personality dimensions (neuroticism and introversion-extroversion) and attainment were near zero. Entwistle concluded that it was dangerous to assume wide generality in statements about the relationships between personality and academic attainment.

Wilson (1971) looked at the relationship between a composite "symptom" score of entering students and first year academic performance. Four symptoms making up the composite score were (1) headmaster's estimate of the student's capacity to take an Honors degree; (2) number of Scottish Certificate of Education passes at the first setting, (3) student's level of aspiration as expressed by his intention to study for an Honors or Ordinary degree; and (4) introverted-extroverted personality. Surprisingly almost half of the students entering Aberdeen University in 1967 could be regarded as "at risk" of failing first year on the basis of these symptom scores. Also he reported that a high level of academic performance was more successfully predicted than a low level.

A few sociological and psychological factors associated with dropping out of a technical university have been identified (Cohen & Child, 1969). In one year, 13% of entrants dropped out or withdrew. Seventy-eight percent withdrew for academic reasons and the rest said they withdrew for personal reasons. Students in Engineering and Technology showed the highest withdrawal rates and Social Science students showed the lowest. Dropouts generally reported a greater degree of worry about academic work, boredom over some aspects of their course, uncertainty about career prospects and more financial

worries than successful students. Dropouts were significantly less satisfied with the career of their choice than were non-dropouts.

Some characteristics of graduates in Social Science and Health Science were compared (Smithers & Batcock, 1969). Among Social Scientists, there was a significant tendency for students from working class backgrounds to be overrepresented among those obtaining good degrees and underrepresented among failures. A similar but not statistically significant trend was discernible among Health Scientists. Introversion was significantly related to a superior performance in the Social Sciences but not in the Health Sciences. Openmindedness was positively related to academic success in the Social Sciences while performance in Health Sciences was independent of the level of dogmatism.

Predicting the performance of university Chemistry students was the subject of another study (Sherwin & Child, 1969). First-year university examinations were used as the criterion. Results indicated that students with "A" level mathematics have the best chance of success. However, all-around achievement in the Sixth Form was generally more important than individual competence in chosen subjects.

Researchers have also tried to predict psychiatric criterion behavior. For example, significant characteristics of first-year University of Edinburgh students who later developed psychiatric disorders while at the University have been identified (Kidd, 1965). The prevalence rate for psychiatric disorders among 1555 first-year students for one academic year was 9% for men and 15% for women. Only two students had been admitted to a psychiatric hospital.

The prevalence of psychiatric disorders was significantly higher for men who did not have a Western cultural background and for men who were colored. Kidd concluded that one way in which illness-prone students can be identified

in the first year is their lack of participation in the non-work aspects of the school curriculum.

First-year women were more prone to develop psychiatric disorders than were men, and women from broken or unhappy homes were particularly vulnerable. Among overseas students, those who were confronted with the greatest ethnic and environmental contrasts were especially illness-prone. Kidd thinks that one of the best ways of finding out which first-year students are prone to develop psychiatric disorders is to ask them about their mental health problems. For instance, significant proportions of those first-year students who said they had previous nervous complaints were subsequently found to have had psychiatric disorders during that period.

Discussion and Conclusion

Obviously this paper does not represent a complete picture of all research which has been done on British students during the last ten years. Some studies have been excluded because of difficulties in interpreting the findings, and some had extremely limited generalizability. To be sure, other studies may have been unintentionally overlooked. However, it is hoped that this short paper might be a stimulus to others who might do a more comprehensive review. For the paper does represent an attempt to develop a rationale and structure for organizing this growing amount of research.

If one assumes that research about students has relevance and utility for others than researchers, you are confronted with several problems. Some are methodological. For example, it would be quite easy to discredit several research studies by focusing on sampling problems. Some researchers were unclear about how their samples were drawn and others inadequately described their samples and the populations. One could also raise questions about statistical methodologies in other studies. Still, in my opinion,

such discussions about methodology or sampling details (even though important) miss the central point. If these problems were solved, would the content or substance of the research findings have any significance?

This paper suggests that research about British students is a rich source of social comparison data and the findings generate opinions which can be useful for comparing and checking purposes. Even though decision-makers can compare their opinions with those based on the research findings, the nature of an individual's or a group's past opinions influences how the research-generated opinions will effect evaluation processes in decision-making.

Now, if researchers want their findings to effect decision-making, more needs to be known about the social psychological characteristics of different kinds of research findings. To merely discuss differences among research findings using only content-based categories begs the question of utility. Three types of research findings can be useful in decision-making: (1) information about characteristics or behaviors of students, (2) information about differences between groups of students, and (3) information about the relationship between present and future characteristics and behaviors of students.

The point of this paper is that there is a pressing need to organize research findings about students in order to increase the utility of the research. Indeed, if these research findings are not organized into some meaningful and simple system based on utility, it is difficult to make a case for further research in this area.

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