Retention and Withdrawal of College Students

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Foreword

THE PURPOSE of this study has been to inquire into the extent and character of retention, transfer, and withdrawal of undergraduate students in a group of representative institutions of higher education. Attention has been given to characteristics of students, their standing in high school and on placement tests, their reasons for going to college, their financial resources, their subjects of greatest interest, the location of their homes in relation to college, where they lived while attending college, their extracurricular activities, and the extent to which they contributed to the defrayment of their college expenses. Particular emphasis has been placed on length of attendance and reasons for transfer and discontinuance.

Information and understanding to guide action in the recruitment and retention of able students are needed by those who finance, govern, and administer higher education in the United States. Acute shortages of professional and technical manpower have convinced educators and employers that steps must be taken to reduce the educational mortality rate of capable students in our educational systems.

For a long time educators have been aware of the principal factors which govern the retention, transfer, and withdrawal of students, but no systematic and comprehensive analysis has heretofore been available to show the impact of these factors in combination. Casualties usually do not occur solely because of a poor admissions policy, an unsuitable curriculum, inadequate counseling,

indifferent instruction, or poor physical facilities. Neither is the failure of students usually due alone to low scholastic aptitude, lack of individual and family motivation, or insufficient funds to pay the costs of attending college. Remedial measures require the skillful management of this complex of interacting factors.

No claim is made that the study developed a foolproof formula for the management of the forces that determine the attraction and retention capacities of educational institutions. But at least it brings us close to the beginning of knowledge in the sense that it sets out what is known and what is not known about the extent and causes of student mortality.

This study has been a genuinely cooperative project. The Office of Education has had the encouragement and support of the American Association of Collegiate Registrars and Admissions Officers throughout the study. The Association appointed an advisory committee that has worked with the staff and the cooperating colleges. The Office has had equally substantial cooperation from the general administrative officers of 147 institutions of higher education in 46 states and the District of Columbia. An indispensable contribution was also made by more than 8,000 undergraduate students who participated by reporting to the Office of Education and to their own institutions.

LLOYD E. BLAUCH
Assistant Commissioner for Higher Education

ERNEST V. HOLLIS, *Director*
College and University Administration Branch

Acknowledgments

THE OFFICE OF EDUCATION more specifically acknowledges the indispensable cooperation of officials of the American Association of Collegiate Registrars and Admissions Officers, and of the general administrative officers of the 147 cooperating colleges. The names of the AACRAO Committee are listed in appendix A, along with those of institutional representatives who assembled and reported much of the information on which the report is based.

The development of the early stages of the project was the work of Willard E. Blaesser under the supervision of the Director of the College and University Administration Branch of the Division of Higher Education. The coordination of the work of the cooperating institutions, the compilation of the returns, and the preparation of the report were the responsibility of Robert E. Iffert with the assistance of Betty S. Clarke. Brief periods of service of Layne Allen, R. Wayne Lykes, and Allen Jones in the preparation of drafts are also acknowledged.

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Chapter 1

Introduction

THIS IS A REPORT of a study that was designed to answer three questions: (1) What is the rate of student dropout in relation to type of institution, economic status of the family, motivation of the student, academic performance, amount of self-help, participation in extracurricular activities, and residence of the student? (2) What reasons do students give for transferring to other institutions and for discontinuing college attendance? (3) What implications do the characteristics of students and their mobility have for higher educational institutions with reference to recruitment, selection, admission, counseling, instruction, scholarship aid, and other functions?

When the proposal to investigate the extent and causes of student mortality in colleges and universities was first considered in the Office of Education, the American Association of Collegiate Registrars and Admissions Officers gave its enthusiastic support and appointed a special committee to consult with the Division of Higher Education in planning the study and developing the schedule and report forms. Early in the planning it was decided that the study should be conducted on a sampling basis so that problems could be attacked in greater depth than would be possible if data were collected from the total student population in institutions of higher education.

It was also agreed that the study should be based on the records and reports of students who entered as full-time freshmen in the fall of 1950. Part-time students, foreign students, students who were married at the time of first registration, and students in

attendance under the provisions of legislation for veterans' education were to be excluded. Preliminary tests of the Student Report Form demonstrated the impracticability of using a uniform schedule for so diverse a population.

The influence of the Korean conflict on college persistence records of men must also be noted. The total withdrawal rate of students during the period from 1950 to 1954 was affected by the number of men who entered military service either voluntarily or through Selective Service. The withdrawal rate of women, although not seriously affected by the Korean conflict, was increased because many married and left. For practical reasons no provision was made in the study for following these students to determine whether they returned to college. These factors must be taken into account when interpreting student persistence rates and comparing them with rates reported for other studies.

Classification of Institutions

In this report higher educational institutions are grouped by type of control. Those under public control are treated as a single group. The privately controlled institutions are subdivided into two groups: those independent of church control and those under complete or partial control of a religious denomination, order, or sect. The latter are designated as church-related and are frequently further separated into the Roman Catholic group and the non-Catholic religious group. The finer grouping is made when the matter under study might be expected to display uniqueness.

In addition to the groupings by control, the usual designations by curricular organization used in the *Biennial Survey of Education in the United States*, as issued by the Office of Education, have been adopted. Only five of the six categories are included in this study: Universities, technological institutions, liberal arts colleges, teachers colleges, and junior colleges. Theological schools and other separately organized professional schools are not included because their enrollments are composed predominantly of students who transfer from other institutions of higher education.

Universities include "institutions in which there is considerable stress on graduate instruction, which confer advanced degrees in a variety of liberal arts fields, and which have at least two professional schools that are not exclusively technological."

Technological institutions are 4-year "institutions in which training is predominantly in technical and physical science disciplines."

Liberal arts colleges are 4-year "institutions in which the principal emphasis is placed on a program of general undergraduate education."

Teachers colleges are separately organized "institutions primarily devoted to teacher training."

Junior colleges are 2-year institutions which have programs essentially paralleling the first 2 years of degree-granting institutions and which may have, in addition, programs not carrying degree credit.

The institutions participating in the study are listed in appendix A according to the foregoing designations. A few institutions may appear to be incorrectly classified because each was classified according to the section of the institutional organization from which the sample of students was drawn. For example, if students in the sample were enrolled exclusively in the college of arts and sciences of a large university, the institution was placed in the liberal arts college group. No claim is made for a high degree of homogeneity within each curricular organization category. Many of the liberal arts colleges are more like universities, for example, than one technological institution is like other technological institutions.

The participating institutions were also classified according to the designations by highest level of offering, used in the *Education Directory, Part 3, Higher Education*, of the Office of Education, but the complexities involved in analyses of these categories made their use impractical. Apparently any system of classification of higher educational institutions beyond the unit system has deficiencies which must be considered when comparisons are involved. Grouping of data often results in classifications which create the illusion of differences where none of significance exist.

Sampling Procedure

The sequence of events in organizing the institutional sample has significance in the interpretation of the study findings. Quotas were established for the various types and sizes of institutions by large geographical regions. All of the approximately 1,600 eligible institutions were assigned to their appropriate "cells," and a sample totaling 177 institutions was drawn from the "cells" in proper proportion. These institutions were invited to participate in the study. The presidents of 22 institutions reported that they were unable to accept the invitation, and the quotas of the affected types of institutions among the remaining 155 were increased.

The revision in quotas resulted in requests from 4 institutions to be excused and satisfactory substitutes were found for 2 of them. Then during the progress of the study, 4 institutions withdrew.

Finally, usable material was furnished by 149 institutions, although 2 of these furnished only part of the desired information. As a result data on all phases of the study were supplied by 147 institutions. Lack of consistency in total numbers of students in the tables is to be expected as a result of using all available information from institutions and student respondents.

Definition of Retention, Withdrawal, and Survival Status

It is important that student retention and withdrawal status be clearly defined. Reproduction of the instructions for classifying students seems to be the most direct and efficient way to show how the students from the sample of entering freshmen in the fall of 1950 were grouped:

GROUPS ACCORDING TO RETENTION AND WITHDRAWAL STATUS
(7A, 7B)

	Code
Non-returnees as of July 1, 1953, who dropped out or transferred during or at the end of the 1st semester or quarter of the freshman year	1
Non-returnees as of July 1, 1953, who dropped out or transferred during or at the end of 2nd semester or 2nd or 3rd quarter of the freshman year	2
Non-returnees as of July 1, 1953, who dropped out or transferred during or at end of the sophomore year	3
Dropped out or transferred during the junior year	4
Completed the junior year in 1953 but did not return for the senior year	5
Completed the junior year in 1953, returned for the senior year, but did not graduate in 1954	6
Graduated in 1954 in regular progression	7
Returnees who dropped out or transferred before the end of the sophomore year	8
By July 1, 1954, did not belong in any of the eight (8) preceding categories	9
First year, full-time—returned on a part-time basis	0

Code 8 in column 7 should be used for students of less than junior standing who missed at least one full registration period (excluding summer school) and then re-registered as full-time students. Students who complete at least two years and who drop out and return should be coded 9 in column 7.

Another term requiring definition is "Survival Status." Again,

the best way to define the term is to reproduce the coding instructions. Reference to the Student Report Form and the Master Data Sheets in appendix B will clarify the instructions. Column numbers (sometimes in parentheses) refer to the number at the head of the columns on Master Data Sheets A and B.

SURVIVAL STATUS (41A, 57A, 26B, 43B, 60B)

Column 7 (first digit of student serial number) is a partial code of Survival Status, therefore, the information recorded in the "Survival Status" columns will reflect to some extent the reports of students in Items 17, 18, and 19 of the Student Report Form for those students to whom these items apply (transferees and drop-outs).

	Code
Not a casualty during or at end of period (include graduates)	0
Transferred to another institution during semester or year	1
Transferred with a loss of at least 1 year	2
Transferred to a smaller institution (full-time enrollment)	3
Transferred to a larger institution (full-time enrollment)	4
Withdrew during first or second month of period [1]	5
Withdrew after second month but before end of period [1]	6
Completed period but did not return [1]	7
Returned with a loss of 1 year or less (time, not standing)	8
Returned with a loss of more than 1 year (time, not standing)	9

[1] No information in college files or student report regarding transfer.

Note that more than one statement may apply to a given student. Record the code numbers for all statements that apply to the student in relation to your institution. If he transferred from your institution and then to a third, the latter transfer should *not* be recorded.

The suggestions sent to the institutions for inclusion in the letter of transmittal to the students in the sample were as follows:

The American Association of Collegiate Registrars and Admissions Officers and the United States Office of Education have joined forces to gather facts for use in solving some of the problems affecting the persistence of students in college. The class entering as freshmen in the fall of 1950 has been selected for the study. Information is to be gathered from drop-outs, transfers and graduates.

———— college (university) has been selected by lot as one of 200 out of 1,600 institutions to participate in the study. We have accepted this responsibility, knowing that it involved a great amount of work on our part and on the part of students and former students who in turn are being selected by lot to supply the basic information for the study.

Studies that utilize scientific sampling techniques depend for their success upon the utmost cooperation of those who are selected to participate. More than half a million students entered colleges and universities as freshmen in the fall of 1950 but fewer than 20,000 of them are being asked to prepare reports. Therefore, each person being polled represents about 3 percent of entering students in 1 year only.

I am sure you will agree that it is very important for each institution and person in the sample to furnish complete information.

The method of selecting the sample eliminates the possibility of bias or design on the part of those responsible for the study. You will note that certain code numbers have been placed on the form. These are necessary to insure proper identification when the two parts reach the Office of Education. You can be assured that the information you give will be treated confidentially. That on Part I goes to the Office of Education only.

Please fill in Part I on the form and send it to the Commissioner of Education in the postage-free addressed envelope that is provided. When you have completed Part II please send it to me in the other envelope that is enclosed. Experience with a preliminary form indicates that the average time required to fill in both parts is about 45 minutes. I believe, and I hope you will agree, that the study is of sufficient significance to justify your cooperation.

A number of basic tables appear in appendix C. An effort has been made to make these tables self-explanatory.

As the study progressed an effort was made to keep participants informed of developments. Advantage was also taken of opportunities to give general distribution to some of the findings and their implications.

The chronology of preliminary reports which were made during the progress of the study is as follows:

October 1953. The Study of College Student Retention and Withdrawal. Illinois Association of Collegiate Registrars, Bloomington, Ill.

March 1954. What Ought Colleges and Universities Do About Student Mortality? Ninth Annual National Conference on Higher Education, National Education Association, Chicago, Ill.

March 1955. Mortality of Students in Higher Education. National Association of Collegiate Deans and Registrars, Petersburg, Va.

April 1955. The Student Retention and Withdrawal Study. 41st Annual Meeting, American Association of Collegiate Registrars and Admissions Officers, Boston, Mass.

April 1955. The Educational Implications of Withdrawals, Failures and Drop-Outs. Panel Discussion. American College Personnel Association, Chicago, Ill.

December 1955. Study of College Student Retention and Withdrawal. American Association for the Advancement of Science, Atlanta, Ga.

March 1956. Dropouts: Nature and Causes; Effects on Student, Family, and Society. Eleventh Annual National Conference on Higher Education, National Education Association, Chicago, Ill.

April 1956. Study of College Student Retention and Withdrawal. 42d Annual Meeting, American Association of Collegiate Registrars and Admissions Officers, Detroit, Mich.

April 1957. College Scholarships—Investment or Speculation? *Higher Education*, 13: 143–146.

November 1957. Scholarship Funds and Extracurricular Activities. *Higher Education*, 14: 51–55.

In addition, each participating institution received (in January 1956) a summary report on the data for its sample. The distributions and averages for the total sample in those reports differ slightly in some respects from the figures in the present report. As a result of the issuance of the January 1956 reports, a few errors in reporting and interpretation were discovered and corrections were made accordingly. In this connection it must be reported that, throughout the study, there was ample evidence that very high standards of accuracy were being maintained in the cooperating institutions. One registrar, when asked about the correctness of a grade entry for a student, said rather whimsically, "I am sure that the grades on your Master Data Sheets are exactly as they are in our books, but I am not prepared to say that they are right."

Keeping the lines of communication open was an important function during the data-collecting phase of the study. It is equally important that the return lines carrying the report of the study be kept clear and that the reports of others be correctly summarized and properly interpreted. This involves an obligation to point out limitations and suggest implications. Not all that the tables tell will be pointed to in the text. Not all questions that could be answered from the data will be answered. The complexity and comprehensiveness of the data preclude an exhaustive treatment of all phases of the study. The obligation to take out and refine the ore from the present mine is recognized, and every effort will be made to fulfill this obligation by the issuance of supplementary reports.

Chapter 2

The Study Sample

AN INVESTIGATION which purports to gather data and report findings representative of a nation must be designed with great care. In a study of student retention and withdrawal, geographical regions, types of institutions by control and organization, sex of students, and size of institutions must be considered in selecting the sample. Another matter of concern is the degree to which human beings in the sample maintain a uniform rate of response to the questionnaire.

Institutions were selected by the Office of Education on the basis of geography, type, and size. Student samples were drawn by the institutions in accordance with uniform procedures. Table 1 shows the percentage distribution of 1950 first-time enrollments: the totals for the United States, for the study sample, and for the study respondents, by sex of students, by type of institutional control.

Table 1.—Percentage distribution of 1950 first-time enrollments, by sex

Sex	Percentages by type of control								
	United States			Study sample			Study respondents		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
Men	60.4	61.8	59.0	57.6	57.2	59.1	57.4	54.5	55.6
Women	39.6	38.2	41.0	42.4	42.8	40.9	42.6	45.5	44.4

The percentages of women in the sample and among the respondents exceed the percentage in the United States total. The excess is greater in the publicly controlled institutions. However, the difference is not great enough to have a serious effect upon the representativeness of the sample.

The percentage distribution of first-time enrollment in 1950 by type of institution for the United States, the study sample, and the respondents is shown in table 2.

Table 2.—Percentage distributions of 1950 first-time enrollments by type of institution, United States total, study sample, and study respondents

Type of institution	Percentage distribution					
	Including junior colleges			4-year institutions only		
	United States Total	Study sample	Study respondents	United States Total	Study sample	Study respondents
Universities	34.3	42.2	41.4	43.6	45.6	44.4
Technological Institutions	4.3	5.6	5.9	5.5	6.1	6.4
Liberal Arts Colleges	29.6	30.7	31.7	37.6	33.2	34.0
Teachers colleges	10.5	14.0	14.2	13.3	15.1	15.2
Junior colleges	21.3	7.5	6.8			

Failure to obtain adequate representation of junior college students makes it necessary to interpret with extreme caution any comparative figures involving this group. Tables showing distributions by type of institutional control, public and private, include junior college students unless otherwise indicated, but many distributions by type of institution omit the junior college students because of their underrepresentation.

Rate of Response

National figures are compared with those in the sample and for respondents in table 3. Note that the figure in each cell is the number per thousand of all students in that cell who were in the sample or were respondents. The departure from the percentage base was made out of respect for the feelings of those who abhor the concept of four-tenths of a student.

Each 1,000 first-time students who enrolled in higher educational institutions in the United States in the fall of 1950 had a representation of 27 students in the study sample and of 17 among the respondents. The respondent representation per thousand

Table 3.—Number per thousand of total 1950 first-time enrollments represented in sample and among respondents, by control and type of institution

Type of institution	Number per thousand					
	Sample			Respondents		
	Total	Public	Private	Total	Public	Private
Universities	34	37	30	20	23	17
Technological institutions	36	33	39	24	18	30
Liberal arts colleges	28	35	26	18	18	18
Teachers colleges	39	34	78	24	22	64
Junior colleges	10	7	18	5	4	9
Total	27	27	27	17	16	18

ranged from 24 for technological institutions to 5 for junior colleges. The latter figure indicates the need for caution in placing confidence in the representativeness of either the sample or the respondents from junior colleges. The 64 per 1,000 in the privately controlled teachers college category represents 140 respondents from a total of 2,195 first-time enrollments in the fall of 1950. The overrepresentation is therefore not so glaring as it seems.

The rate of response must also be considered in interpreting the data furnished by respondents in the study. Table 4 shows that frequency of response is associated with length of attendance among both men and women students.

Table 4.—Percentage distribution of students in study sample, who were respondents, by sex, by length of attendance

Length of attendance	Percent of sample responding		
	Total	Men	Women
Not more than 1 year	44.1	44.4	43.7
More than 1 year, not more than 2 years	60.3	61.1	59.6
More than 2 years, not more than 3 years	59.4	56.5	65.1
Entered 4th year, but not graduated	60.8	61.0	60.0
Graduated in 1954	76.8	76.3	77.6
Others	59.8	57.0	66.0
Total	61.7	61.5	61.9

The length of time between departure from the institution and sending out questionnaires was apparently one factor in a poor response. Students who left during or at the end of the first year had a lower rate of response than those who left later or who graduated. The higher rate of response among graduates should

be remembered when comparisons are made between the reactions of graduates and nongraduates and particularly the nongraduates who completed no more than one year.

Approximately half of the students in the sample from the class entering in 1950 had left the campuses of the participating institutions when the sample was drawn in 1953. About 28 percent had been gone for 2 years and another 18 percent for 1 year; 5 percent left during or at the end of the 1952-53 school year. Large numbers of men left for military service. Many of the women were married. A significant number of the withdrawals were generally dissatisfied with the institution of first registration and transferred to other institutions.

When these and other facts are considered, it must be concluded that the participating institutions received a high degree of cooperation from their students and former students. More than three-fourths of the graduates and more than three-fifths of all students in the sample responded.

The percentage distribution of respondents by type of institution, by sex, is shown in table 5. Since there were only 47 women from technological institutions in the sample, the high percentage of response is not significant.

Table 5 indicates that rate of student response was not markedly different among the five types of institutions. The low rate of response by men in teachers colleges is probably related to the high rate of dropout during or at the end of the first year (see table 8) rather than to the type of institution. Another factor, discussed later in the report, may be the large number of men who transferred from teachers colleges because of general dissatisfaction. The inference of relationship between response rate and early withdrawal is based on fact, but the surmise that a low response rate is related to general dissatisfaction is based on the assumption that disgruntled students are poor respondents.

Table 5.—Percentages of total study sample who were respondents, by sex, by type of institution

Type of institution	Percentage responding, by sex		
	Total	Men	Women
Universities	60.7	60.9	60.3
Technological institutions	65.1	64.5	74.5
Liberal arts colleges	63.5	62.6	64.4
Teachers colleges	61.9	57.5	64.9
Junior colleges	56.4	63.8	52.7
Total	61.7	61.5	61.9

Response Bias

Quantitative and qualitative differences between respondents and nonrespondents must be taken into account in the interpretation of findings. The bias due to differences in response rate is illustrated in tables 6 and 7. The percentage of men in the total sample who withdrew from 4-year institutions during or at the end of the first year, for example, was 27.4; for respondents 19.8, and for nonrespondents 39.6, exactly twice as high.

Table 7 shows that 38.8 percent of all men in the sample from 4-year institutions graduated in normal progression from the institution of first registration. However, the respondents indicate a graduation rate of 45.9 percent, nearly twice that of the nonrespondents. The bias is most pronounced for men in teachers colleges, and only a little less so for men in liberal arts colleges.

Table 6.—Comparative percentages of first year withdrawals for respondents and nonrespondents, by type of 4-year institution, by sex of student

Withdrawals	Percent of students who withdrew during or at end of first year									
	Total		Universities		Technological institutions		Liberal arts colleges		Teachers colleges	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Total	27.4	27.0	24.3	25.3	22.7	14.9	28.7	26.7	43.3	30.8
Respondents	19.8	18.9	17.8	17.6	17.7	11.4	19.4	18.8	33.5	21.5
Nonrespondents	39.6	40.8	34.6	36.8	31.8	25.0	44.4	41.3	56.5	48.1

Table 7.—Comparative percentages of graduates for respondents and nonrespondents, by type of 4-year institution, by sex of student

Graduates	Percent of students who graduated in normal progression from institution of first registration									
	Total		Universities		Technological institutions		Liberal arts colleges		Teachers colleges	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Total	38.8	40.5	39.1	38.8	42.0	53.2	40.8	41.8	28.8	40.7
Respondents	45.9	49.7	47.0	46.6	47.8	54.3	52.3	51.2	41.8	49.9
Nonrespondents	28.9	24.8	26.7	26.8	31.4	50.0	21.4	24.2	11.2	21.3

It was recognized early in the study that nonresponse could be a serious problem and that checks would be necessary to determine the effect. Distributions were made of data furnished by the institution on standing in high school graduating class, standing on college placement tests, and college grades, and the averages for respondents and nonrespondents were compared.

The comparisons showed that the average of college grades for respondents in each type of institution was significantly higher than that for the nonrespondents and that average high school tenths and average placement tenths for respondents from teachers colleges were significantly higher than for nonrespondents. Although all differences between means were in favor of the respondents, none of the others proved to be significant.

Obviously, it was not possible to test the bias of nonresponse on items of information furnished only by respondents. The inference that the effects are not great enough to invalidate the findings for total groups seems to be justified by the results of the tests on the comparable data for both respondents and nonrespondents. However, there is a constant error—a tinge on the happy side.

In addition to the problem of bias associated with response rate, there were other difficulties: Not all institutions had available all of the information requested for all students in their samples; a few small institutions could not report standing in high school graduating class; many could not report this item of information for part of their students; placement-test results were not always available; occasionally it was impossible to code survival status. As a consequence the question, "How many students were involved in the study?" requires a variety of answers. The tables in the report show the numbers for which information was available for the items under consideration.

Summary

In conclusion, comparative analyses of the data show that the study sample of 4-year institutions and total students is adequately representative. Generalizations based on information submitted by student respondents, such as reasons for going to college, reactions to college facilities, and family income must be made in the light of bias caused by overrepresentation of graduates and underrepresentation of first-year dropouts. This bias is minimized in comparisons involving length of attendance because it is not concealed. However, the reported median family income

of all college students in 1953, for example, is subject to an unknown correction for the response bias. In this case the inference that the median is somewhat high is indicated. Correction for underrepresentation could be made for some items of information, but dubious assumptions would be involved and no attempt to derive adjusted figures has been made in this report.

Chapter 3

Length of Attendance and Rate of Graduation

A STUDY of the extent to which colleges retain their students and the extent to which students withdraw must use as its yardstick the length of time students attend. However, the purpose of this study was not to make a quantitative or qualitative appraisal of the optimum length of attendance but to determine the facts regarding length of attendance and rate of graduation.

Numerous studies of student mortality have been made in the past, although only one had national implications—that reported by John H. McNeely in 1937 for the Office of Education entitled "College Student Mortality." The others were local or regional in scope.

Since the results of studies must be considered in context, comparisons between the mortality rates reported in these earlier investigations and those reported in the present study will not be made. To make comparisons without analyses of semantic differences, procedures, and historical factors would be superficial and misleading. References to studies involving general and specific problems of student mortality are included in the bibliography.

The basic information on length of student attendance and rate of graduation appears in table 8. Emphasis is placed on the expression "All in relation to institution of first registration," at the head of the table.

There is little difference between the percentages of men and women who have dropped out of the institution of first registra-

Table 8.—Percentage distributions showing periods of attendance in 4-year institutions by type, by sex, and by control; all in relation to institution of first registration

Period of attendance	Grand total	Total by sex		Type of institution [1]								Type of control			
				Universities		Technological institutions		Liberal arts colleges		Teachers colleges		Total public	Private		
		Men	Women	Men	Women	Men	Women	Men	Women	Men	Women		Total	Independent	Church related
Not beyond 1st registration period	10.7	13.0	7.2	11.3	6.8	9.9	6.4	14.1	6.5	21.3	9.2	12.5	8.2	7.8	9.2
Beyond 1st registration period, not more than 1 year	16.6	14.4	19.8	13.0	18.5	12.8	8.5	14.6	20.2	22.0	21.6	18.4	14.2	12.0	20.1
Beyond 1 year, not more than 2 years	15.0	12.2	19.1	12.8	19.0	10.2	6.4	11.7	21.1	12.3	16.3	15.7	14.2	14.0	14.7
Beyond 2 years, not more than 3 years	6.0	6.3	5.6	6.7	6.7	7.1	8.5	6.1	4.7	4.4	5.3	6.0	6.0	6.5	4.8
Entered 4th year, not graduated	7.3	9.8	3.7	12.1	5.6	11.8	10.6	6.5	2.5	6.1	2.2	8.7	5.4	6.3	3.0
Graduated in 1954	39.5	38.8	40.5	39.1	38.8	42.0	53.2	40.8	41.8	28.8	40.7	33.0	48.0	49.6	43.7
Others	4.9	5.5	4.1	5.0	4.6	6.2	6.4	6.2	3.1	5.1	4.7	5.7	4.0	3.8	4.5
Total number of students	12,667	7,503	5,164	3,802	1,973	736	47	2,191	2,006	774	1,138	7,179	5,488	3,996	1,492

[1] The percentages for 1,021 junior college students are as follows: Not beyond 1st registration period—12.0; beyond 1st registration period, not more than 1 year—28.3; beyond 1st year, not more than 2 years—56.8 (see ch. 2, *The Study Sample*, for comments on representation).

tion by the end of the first year, but the time during the year is significantly different. For men, 27.4 percent had left by the end of the first year; for women, 27.0 percent, but 47.4 percent of the men who left during or at the end of the first year did so during or at the end of the first registration period, and only 26.7 percent of the women who left during or at the end of the first year did so before entering the second registration period. By the end of the second year, 39.6 percent of the men and 46.1 percent of the women had left. The higher percentage of men who entered the fourth year but did not graduate is partly attributable to male enrollments in extended programs such as engineering.

The rate of graduation in regular progression from the institution of first registration was 39.5 percent, with 38.8 percent of the men and 40.5 percent of the women graduating. The difference is too small to say with certainty that, in terms of ultimate graduation, one sex or the other had a superior record.

The last four columns in table 8 show percentage distributions by type of control. The effect of selective admissions is evident in the dropout rates. Nearly 31 percent of the students who entered publicly controlled institutions of higher education in the fall of 1950 withdrew during or at the end of the first year. The corresponding percentage for privately controlled institutions is 22.4. In the latter group the church-related institutions lost 29.3 percent of their 1950 entering class by the end of the first year, while privately controlled institutions independent of church lost 19.8 percent. The dropout rates for the second and third year were practically the same regardless of the type of control. The publicly controlled institutions, however, had the highest percentage (5.7), who had not graduated but were still in college, probably half of whom eventually graduated.

The ratio of graduates to the total number who entered privately controlled institutions independent of church is 150 percent of the ratio of graduates to the total number who entered publicly controlled institutions. Stated another way, publicly controlled institutions graduated 330 students per 1,000 entrants, and privately controlled institutions independent of church graduated 496 per 1,000 students who entered 4 years earlier. The church-related institutions graduated 437 per 1,000 entrants.

The only available index of the relative quality of entrants was the standing in high school graduating class. Placement-test standings were based on institutional distributions, and therefore could not be used for this purpose. The mean high school tenth of students entering publicly controlled institutions was 3.32; all privately controlled institutions, 2.94; privately controlled insti-

tutions independent of church, 2.75; and church-related institutions, 3.40. The church-related institutions admitted students farther down the scale of high school ranking than did the other control-types, yet they graduated 107 more per thousand entrants than did the publicly controlled institutions (437 vs. 330).

The complete story of student persistence in higher educational institutions is *not* given in table 8. The information in table 9 furnishes additional clues. The data on student persistence in table 9 come from two sources—the records of the participating institutions and the reports of the respondents. The institutions recorded survival status on the master data sheets for each student in the sample at the end of each reporting period. The student respondents who transferred reported the date of transfer and the institutions to which they transferred (see item 17 on part II—Student Report Form, appendix B). Seeming inconsistencies in respondents' reports were checked with the institutions. In some cases it was found that correct information furnished by the student had not been a matter of record in the institution, but the frequency was not high enough to indicate serious inadequacies in the survival status reports of the institutions.

When an effort is made to estimate the total percentage graduating, the bias in the sample associated with response introduces

Table 9.—Student records of graduation, transfer, and dropout, by types of 4-year institutions

Student record	Percent by type of institution				
	Total for 4-year institutions	University	Technological institution	Liberal arts college	Teachers college
Graduated in 4 years from institution of 1st registration	39.5	39.0	42.8	41.3	36.0
Not graduated but still attending after 4 years	11.2	13.1	13.8	9.3	8.6
Transferred to another institution	12.0	10.7	11.2	15.4	8.6
To smaller institution	4.8	7.0	3.3	3.1	2.7
To larger institution	5.5	2.3	5.4	10.8	4.8
Dropped out, no record of transfer	41.5	42.7	35.3	39.7	44.1
No information	1.4	.7	.8	.9	4.7
Total number of students	12,667	5,775	783	4,197	1,912

Percentages exceed 100 because some students fall in more than 1 category. For example, a student may have transferred and later returned with a loss of standing so that he would be counted in the "transfer" group as well as the "still attending" group. The excess is some indication of the relative student mobility within the 4 types of institutions. The total transfers also exceed the identifiable numbers transferring to smaller and larger institutions.

a more serious problem. The institutions reported that 24 percent of transfers were known to have graduated. Of the respondents who transferred, 65 percent did not report that they later discontinued college attendance. Unfortunately, the absence of a report of discontinuance cannot be interpreted unequivocally to mean that only 35 percent did discontinue and that 65 percent went on to graduate. If it is assumed that allowance for response bias would reduce the graduating percentage of 65 for respondents and raise the percentage of 24 known to the institutions to 45 for all transfers, an additional 1,500 students would make a total of 6,500 students who graduated during the reported period of the study (through the summer of 1954) from the institutions of original registration or from some other institutions to which they transferred. The 4-year graduation percentage would then be 51.3.

Table 9 shows that 11.2 percent or approximately 1,400 of the students who entered as full-time freshmen in the fall of 1950 were still attending the institutions of original registration after the spring of 1954. The information on the later status of these students is too vague to apply a direct estimation procedure. It is known that about 500 men were seniors with major interest in engineering, 125 were seniors interested in medicine, and about 40 were seniors interested in law. Many of these 665 men would not have received a degree by 1954, but their prospects of eventually receiving a degree would be very good. (The numbers of women in these fields normally requiring more than 4 years for graduation are too small to be considered.) If the conservative estimate is made that the same percentage of the 1,400 students who were still attending will eventually graduate, as graduated in 4 years, then the additional 700 would make a total of 7,200 graduates or 56.8 percent of the entering class.

The total number of students in the "other" category in table 8 is 621, or 4.9 percent. The study does not furnish data which would permit an estimate of the percentage of these students who ultimately graduate. Estimates by numerous college registrars with whom the question has been discussed range from about one-fourth to about three-fourths, with a majority indicating that about one-half graduate. If we apply this fraction, we can add another 300 graduates and arrive at a final figure of 59 percent as the probable maximum percentage eventually graduating. No attempt will be made to extend the estimates to type of institution or sex breakdowns because of the very limited information available.

Summary

By way of summary, we can say that slightly fewer than 40 percent of students entering the higher educational institutions in the study graduated from the institution of original registration in normal progression—that is, in a 4-year period—and perhaps 51 percent graduated from some institution in this period. The conclusion that nearly 60 percent of the students in the study eventually graduated from some institution of higher education seems to be justified by the data.

A case might be made for a still higher percent of those who enrolled in 1950 having ultimately graduated from college. Table 47 in Chapter 10 shows that 31 percent of 4,000 dropouts reported on item 18 of the Student Report Form (appendix B) that they planned to resume college work later. How "promising" these students are is a matter of conjecture. No attempt will be made here to guess how many of them will graduate, but they can be thought of as a reserve in defense of any lack of conservatism in the estimates of the preceding paragraphs. Certainly adult and extension education afford opportunities for those who planned to resume college work later and possibly serve as a stimulant to the 19 percent of 4,000 who were undecided about further college attendance.

In average length of student attendance differences among the types of institutions suggest numerous questions. For example: Why is the first registration period mortality for men in teachers colleges more than twice that in technological institutions? Why do church-related institutions lose 29.3 percent of the entering enrollment during or at the end of the first year as compared with 19.8 percent by privately controlled institutions which are independent of church? Why is there a difference of 15 percent in favor of privately over publicly controlled institutions in graduation rate?

The chapters which follow present analyses of the characteristics of students—ability levels, family incomes, subject-fields of interest, reasons for going to college, reasons for transfer, and reasons for discontinuance—all designed to shed light on the questions raised by the figures in table 8. However, no set of facts in a single category will establish unique casual relationship in an area so complex and involved as college student retention and withdrawal.

Tables 53 through 56 in appendix C include further analyses of student retention and withdrawal status which permit a variety of comparisons.

Chapter 4

Reasons for Going to College

WHAT DO STUDENTS EXPECT to derive from their college experiences? What are the drives which impel them to attend? It was hoped that if answers were found to such questions, a relationship between retention or withdrawal and motivation for attending college might be evident. Thus the design of the study called for an examination of the reasons students have for going to college. Other studies of student motivation had demonstrated the importance of several kinds of drives, but no definite information could be found indicating the sustaining power of different drives. Do students with strong academic interests, for example, make better adjustments in liberal arts colleges than in technological institutions? Would the reverse be true for students with strong occupational interests?

The examination of the relationship between motivation and performance involved the use of a student opinionnaire form (appendix B) on which students rated the importance of 25 reasons for going to college. The student was afforded the opportunity to indicate his dominating interest or motivation at the time he decided to go to college and also at the time he filled in the form. The former rating was made in retrospect since he had already attended college. Students in the sample who had left the institution of first registration by 1953 rated the reasons at that time. Those who left subsequent to 1953 did the rating at or near the time when they left or graduated.

A preliminary list of reasons for going to college was drawn from literature on motivation, from persons with experience in

admissions and consulting service, and from students. The list of 25 reasons used in the study (see appendix B) represented the refinement of a much longer list which had undergone experimental use with college students in the District of Columbia area.

A jury of 12 specialists in higher education independently classified each reason under one of 5 headings: (1) Academic, (2) occupational, (3) personal-self, (4) social service, and (5) traditional. Items in the original list were discarded if fewer than 9 classifiers agreed on the heading under which they should be placed. Seven of the items were considered by the jury to be sufficiently overlapping to be included in two classifications for scoring purposes. The arrangement of the reasons under the classifications is shown below:

(1) Academic Reasons

6. I had serious intellectual curiosities which only college could satisfy.
14. I had a compelling interest in one particular field in which I wanted to specialize, namely ———.
17. I wanted to find out more about certain fields of knowledge.
22. I enjoyed studying and wanted to continue academic work.
24. My teachers thought I was good college material.

(2) Occupational Reasons

1. I felt a college degree was necessary for the kind of work I wanted to do.
7. I wanted to prepare myself for a better paying job than I would otherwise be able to get.
15. I wanted to explore several lines of work to see what I would be most interested in.
16. I felt I could live an easier life if I had a college education.
18. I felt college acquaintances and contacts would prove advantageous in finding a position after graduation.

(3) Personal—Self Reasons

3. I hoped to make many new friends in college.
5. The persons I respected most in my community had gone to college.
8. I wanted to learn how to get along with other people.
11. Most of my friends were going to college.
12. I thought college life would help me to develop socially.
13. I wanted the close fellowship of living in a dormitory, sorority house, or fraternity house.
16. I felt I could lead an easier life if I had a college education.
19. I thought a college education would enable me to be more influential in community affairs.
20. I thought that college would be a good place to meet the type of person I'd like to marry.
21. I hoped that college training would enable me to be a better husband or wife.
23. There was not much for me to do around home.

(4) Social Service Reasons

2. Business, church, or other community leaders encouraged me to go to college.
9. I hoped to acquire some qualifications for leadership in civic affairs.
19. I thought a college education would enable me to be more influential in community affairs.
21. I hoped that college training would enable me to be a better husband or wife.

(5) Traditional Reasons

2. Business, church, or other community leaders encouraged me to go to college.
4. It had always been expected that I would go to college.
5. The persons I respected most in my community had gone to college.
10. My parents insisted on my going to college.
11. Most of my friends were going to college.
24. My teachers thought I was good college material.
25. In my family young people had always gone to college.

The instructions for recording ratings are reproduced for the convenience of the reader in interpreting the tables.

A. Reasons for Going to College

Some of the reasons students give for going to college are listed below. Looking back to the period *before* you entered college, show the degree of importance each of the reasons had in influencing your decision to attend college. After each statement write the appropriate code symbol in Column A. Some find it easier to go through the statements and mark all of the 0's first, then the 1's, and so on. Do it the way it is easiest for you.

Degree or Level of Importance

	Code
Of no importance, or does not apply	(0)
Of slight importance	(1)
Of moderate importance	(2)
Of great importance	(3)

Try to record your reactions, not according to what you consider now to be "good" reasons, but according to what you feel were your reasons *at the time you decided to go to college.* Add any you wish.

You will find instructions for Column B when you come to the end of the section.

Reasons

	Code Symbol Column A	Column B
1. I felt a college degree was necessary for the kind of work I wanted to do ——— (See appendix B for the complete list)	_____	_____ 1

Instructions for Use of Column B

Please go back over the reasons and write the code number, 0, 1, 2, or 3, to show how you *now* rate the importance of each reason as a motive for going to college or for remaining in college.

The number of possible ways in which the data obtained from the ratings can be analyzed is seemingly unlimited. Comparisons among separate items can be made. The composite ratings for each of the five groups of reasons can be checked against such variables as length of attendance, type of institutions attended, standing in high school graduating class, standing on college placement test, college performance in terms of average grades (quality point averages—Q. P. A.), family income, self-support in college, reasons for transfer, and reasons for discontinuance. Obviously, not all of those analyses can be reported in detail. Summary statements based on unpublished tabulations must suffice.

Men and women tended to have different rating patterns. Men differentiated more clearly among the reasons for attending college. Specifically, the range in mean ratings among individual reasons, as well as among the five groups of reasons, was much wider for men.

In recalling initial reasons for going to college, men gave the highest mean rating of importance to occupational reasons, while women gave academic reasons the highest rating.

Men rated academic reasons second in importance, and women occupational reasons. The differences between the mean ratings by men and women were statistically reliable for both types of reasons.

In retrospect, men rated traditional, social service, and personal reasons as third, fourth, and fifth in importance. After attending college, they changed the order to social service, personal and traditional reasons.

In retrospect, women rated personal, traditional, and social service reasons as third, fourth, and fifth in importance. After attending college they changed the order to social service, personal, and traditional reasons.

There were no significant differences for any of the reasons between ratings of women attending publicly controlled institutions and women attending privately controlled institutions. But men attending privately controlled institutions, particularly those independent of church, rated academic reasons significantly higher than did men attending publicly controlled institutions. Also, men in publicly controlled institutions rated social service and personal reasons higher than did men in privately controlled institutions.

Men and women who attended church-related institutions placed a higher rating on social service reasons than did students who attended either publicly controlled institutions or privately controlled institutions independent of church.

Teachers college students gave a higher rating to academic reasons than did the students in the other four types of institutions. This may have been due in part to the fact that 62 percent of the respondents from teachers colleges were women who, as has been noted before, gave academic reasons for going to college a higher rating than did men. Since the technological institution group was 93 percent men and the teachers college group was 62 percent women, the indication is that the relatively high rating given to occupational reasons by teachers college students is of significance. However, it is to be expected that occupational reasons would receive high ratings by students in special purpose institutions.

Of the five reasons in the academic group, a compelling interest in one particular field of specialty was ranked first in importance by students from all types of institutions. Wanting to learn more about certain fields of knowledge was ranked second by all students except those from teachers colleges who ranked it third. Enjoyment of study and desire to continue academic work ranked second with teachers college and third with other students. The other two items, opinion of teachers and intellectual curiosity of students, were ranked fourth and fifth by students in each type of institution.

The rankings of the five reasons in the occupational group by type of institution were more diverse, as is shown in table 10. University students placed preparation for a better job at the top of the list. Liberal arts and junior college students displayed interest in exploring several lines of work, indicating less certainty

Table 10.—Relative importance of occupational reasons for going to college, by type of institution

Occupational reasons	Rank order of importance				
	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
1. College degree was necessary for work	2	1	1	1	1
7. Prepare for better paying job	1	2	2	2	2
15. Explore several lines of work	4	4	3	5	3
16. Easier life with a college education	3	3	4	3	4
18. Advantages of contacts	5	5	5	4	5

about their occupational objectives. All groups ranked better pay above easier life. In terms of mean ratings, teachers college students showed the least interest in the better pay reason, followed by liberal arts, junior college, technological institution and university students (table 15).

Additional comparisons by sex and by type of institutional control can be made from the mean ratings in table 11. Note that each arrow in the table points to a mean that is significantly higher than its opposite. The absence of an arrow between pairs of mean ratings indicates the absence of a statistically reliable difference. The table should be read, for example, as follows: A mean rating of 1.544 was given to academic reasons for going to college by men in privately controlled institutions. This is significantly higher than the mean rating of 1.496 given by men in publicly controlled institutions. The ratings opposite "before" reflect the student's judgment of importance of the reason as a factor in his decision to go to college. The ratings opposite "after" show how important the student considered the reason after he had been in college, that is, at the time of doing the rating. Note that all reasons are rated higher in the "after" sense except traditional reasons.

Further comparisons of the level of importance of reasons for going to college can be made by examining the mean ratings in tables 57 and 58 in appendix C. The tables permit comparisons between the ratings of men and women in publicly and privately controlled institutions including those independent of church control and those under church control.

The comparative ratings of men in publicly controlled institutions with those of men in privately controlled institutions suggest that the former have a stronger faith in the benefits to be derived from personal "contacts" in college, particularly in "finding a job after graduation." Moreover, it apparently was more important to men in publicly controlled institutions to go to college to prepare to earn a better living and to live an easier life. The women in publicly controlled institutions also rated the "easier life" motive higher than did the women in privately controlled institutions, but all groups of women rated this reason for going to college significantly lower than did the men. The importance of the "easier life" motive generally diminished as the length of the students' attendance at college increased.

The jury assigned the task of classifying the reasons for going to college by type, considered item 14 "I had a compelling interest in one particular field in which I wanted to specialize," to be an academic item. Students tended to rate this item more in con-

Table 11.—Mean ratings of the importance of reasons for going to college, by sex, by type of institutional control

Reasons	Men				Women			
	Total		Private control		Total		Private control	
	Public	Private	Independent of church	Church-related	Public	Private	Independent of church	Church-related
Academic:								
Before	1.496 →	1.544	1.565 ←	1.484	1.736	1.770	1.816 ←	1.690
After	1.805 →	1.881	1.867	1.863	2.038	2.110	2.131	2.074
Occupational:								
Before	1.715	1.688	1.709 ←	1.626	1.472	1.499	1.557 ←	1.398
After	2.036	1.967	1.982	1.923	1.829	1.816	1.814	1.819
Personal-self:								
Before	.976 ←	.915	.913	.919	1.234	1.233	1.312 ←	1.271
After	1.345 ←	1.279	1.277	1.285	1.546	1.518	1.476 →	1.588
Social service:								
Before	1.000 ←	.913	.864 →	1.059	1.119	1.083	.990 →	1.248
After	1.442 ←	1.316	1.262 →	1.471	1.566	1.514	1.426 →	1.668
Traditional:								
Before	1.008	1.056	1.081 ←	.961	1.152	1.187	1.207	1.153
After	.907	.898	.906	.875	1.059 ←	1.016	.998	1.057

NOTE: The means which are joined by arrows are significantly different. In each case the arrow points to the higher mean, i.e., the difference is three times the standard error of difference.

formity with "occupational" items than with other "academic" items. This fact indicated the probability that a compelling interest in a specialty was more closely identified with occupational than with academic or cultural motivation. Interest in a specialty ranked third in importance among the 25 reasons. The mean ratings for men and women, by type of institution, in retrospect and at the time of reporting, are shown in table 12.

Compelling interest in field of specialty as a reason for going to college was rated significantly higher by men and women in publicly controlled institutions than by men and women in privately controlled institutions. Students in church-related schools showed a tendency to rate the reason higher than did students in privately controlled institutions independent of church. Women in the former gave significantly higher ratings than did either the men or the women in the latter. The relatively high "after attend-

ing college" rating by women would suggest that the "one particular field" aspect of the item may not have been so prominent before their attending college. Although not quite so pronounced, the ratings by men show the same tendency.

The composite mean ratings of "traditional" reasons for going to college generally ranked below the mean ratings for the other 4 types of reasons. Students in privately controlled institutions independent of church gave traditional items a higher rating than did those enrolled in church-related and publicly controlled institutions, in that order. The composite ratings of traditional reasons were generally lower after attendance, regardless of the type of institutional control. Men showed a greater tendency to lower the ratings of traditional reasons after attendance than did the women.

The ratings of a typically "traditional" reason for going to college, namely, "It had always been expected that I would go to college," placed it fifth in rank order of importance for both men and women in the before-going-to-college ratings. After-going-to-college ratings of this traditional reason placed it far down the line in order of importance. It would appear that these students did not consider themselves entirely self-propelled when they first enrolled.

In spite of the generally low average ratings of traditional reasons as a group, a significant number of students considered several of the individual items of great importance. Institutions of higher education vary with respect to the importance attached to traditions. It would probably be difficult to establish quantitatively a high degree of association between the relative importance ascribed to a series of reasons for going to college, by coincidence termed "traditional," and the degree of satisfaction students experience in institutions which place varying degrees of emphasis upon their traditions. High school counselors who

Table 12.—Mean ratings of reasons for going to college—impelling interest in field of specialty

Institutional control	Mean ratings, by sex, by time of rating			
	Men		Women	
	Before	After	Before	After
Publicly controlled	3.020	3.334	2.064	3.386
Privately controlled:				
Independent of church	1.850	3.221	1.667	3.328
Church-related	1.863	3.306	1.943	3.425

have experimented with a modified form of "reasons for going to college" have observed that high school seniors who rate the traditional items as important tend to describe their ideal college as one having strong traditions. These students might make a better adjustment and therefore remain longer in institutions with strong traditions.

Critics of college catalogs generally agree that relatively little space is devoted to the exposition of traditions which matter to students. Some institutions have published bulletins or booklets which include established rules and regulations for student conduct. The practice of making such publications available to prospective students varies. A booklet presented by the Class of 1957 at Stephens College, Columbia, Mo., entitled "Within the Ivy—A Guide for New Students" is an example of a publication that should prove interesting and informative to prospective students as well as to new students. In spite of the fact that traditional reasons for going to college generally diminish in importance after college attendance, these reasons do persist as important in the minds of a significant number of students. It is conceivable that institutional policies with respect to student government, for example, could be an important consideration in making a choice of college.

Motivation and Persistence

The hypothesis that the stronger a student's motivation, the better are his chances of remaining in college has been advanced by many writers and has been supported by evidence. Every effort in this study to find an association of sufficient magnitude to support the hypothesis by comparing the ratings of reasons for going to college and the records of persistence has met with failure.

The relationship for a few of the more promising items is shown in table 13. Note that only ratings of students indicating "of slight importance" and "of great importance" are used. The "of moderate importance" and "of no importance, or does not apply" ratings are omitted. The students were divided into two groups—nongraduates and graduates. A strong reversal in the percentages for nongraduates and graduates would indicate a discriminating motivation item, but the percentages are so nearly parallel that the differences are probably due to chance. The five items treated in table 13 had the largest number of ratings at the "slight" and "great" importance levels, pointing to the greater probability that

Table 13.—Percentages of nongraduates and graduates rating selected reasons for going to college as of slight importance and of great importance, by sex

Selected reasons for going to college, by sex	Percentage rating of slight and great importance			
	Nongraduates		Graduates	
	Slight importance	Great importance	Slight importance	Great importance
1. I felt a college degree was necessary for the kind of work I wanted to do:				
Total	11.6	64.7	11.1	67.6
Men	10.2	67.0	10.3	68.3
Women	13.5	61.6	12.3	66.6
7. I wanted to prepare myself for a better paying job than I would otherwise be able to get:				
Total	14.1	55.9	17.2	51.4
Men	11.0	61.2	13.3	56.2
Women	18.5	48.3	23.2	44.1
15. I wanted to explore several lines of work to see what I would be most interested in:				
Total	43.0	24.7	41.3	24.6
Men	44.5	23.8	42.4	22.0
Women	40.7	26.0	39.6	28.7
16. I felt I could live an easier life if I had a college education:				
Total	33.5	23.0	36.8	22.0
Men	30.1	25.8	32.3	24.2
Women	39.3	18.4	44.3	18.3
22. I enjoyed studying and wanted to continue academic work:				
Total	31.0	29.7	28.5	32.7
Men	39.2	20.6	35.5	25.3
Women	21.6	40.1	20.1	41.7

they would differentiate more than items with a high frequency of "moderate" ratings.

The highest degree of association that could be discovered involved item 16, "I felt I could live an easier life if I had a college education." An analysis of 509 ratings of this item by students in technological institutions showed that, of the 232 who rated the item of no or slight importance, 16.0 percent dropped out the first year; 5.6 percent, the second year; 6.5 percent, the third year; 10.3 percent, the fourth year; 7.3 percent, other nongraduates; and 54.3 percent graduated. The corresponding percentages for the 277 who rated the item of moderate or great importance

were: 18.4; 12.7; 5.4; 14.8; 5.4; and 43.3. Students who entered technological institutions moderately or strongly motivated by the desire to make an easier living, showed a slightly greater tendency to withdraw than students who attached less importance to living an easy life.

It was found that high ratings of item 16 were generally associated with poor persistence records for all groups of students. High ratings of item 15, "I wanted to explore several lines of work to see what I would be most interested in," were associated with good persistence records for students in technological institutions but with poor records of persistence for students in liberal arts colleges.

Mean ratings for the five groups of reasons for men and women according to length of attendance are summarized in table 14. These are mean "before" ratings. There are significant differences between the mean ratings of men and women. There are significant differences between the ratings of first semester dropouts and the ratings of graduates in some cases, but there are no consistent patterns of change in ratings with length of attendance. In other words, with the exception of the ratings of social service reasons by men, mean ratings by graduates do not stand apart. They are neither highest nor lowest.

The relative importance of the several types of reasons for going to college did not vary significantly with the type of institution attended. Academic and occupational reasons showed the most consistent differences but not large enough to justify using the findings in advising an individual student about the type of institution he should attend.

Junior college students, although feeling less strongly than other students the need for a college degree, nevertheless rated the importance of the item highest among the occupational reasons. They rated the exploration of several lines of work of more importance than did the students from other types of institutions.

The composite ratings of the occupational reasons for college attendance were slightly higher than the composite ratings of academic reasons (see table 15). The higher average occupational ratings prevailed for every type of institution.

Students from teachers colleges gave academic reasons a higher rating than did students from other types of institutions, but whether this reflected their intellectual curiosity or their interest in education was not altogether clear. If the latter, these academic reasons assume the tone of occupational. This very well might be the case since the group rated item 14, "I had a compelling interest in one particular field in which I wanted to specialize,"

Table 14.—Mean ratings of the importance of reasons for going to college by sex, by length of attendance

Length of attendance	Reasons									
	Academic		Occupational		Personal-self		Social service		Traditional	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Not beyond 1st registration	1.488	1.661	1.665	1.416	0.890	1.102	0.972	1.017	0.909	0.993
Beyond 1st registration, not beyond 1 year	1.461	1.655	1.674	1.438	.929	1.200	.966	1.087	1.006	1.105
Beyond 1 year, not beyond 2 years	1.739	1.738	1.716	1.442	.932	1.290	.968	1.157	.978	1.153
Beyond 2 years, not beyond 3 years	1.658	1.806	1.763	1.395	1.026	1.216	.982	1.098	1.062	1.161
Entered 4th year, not graduated	1.519	1.991	1.751	1.495	.965	1.137	.955	1.078	1.082	1.148
Graduated	1.535	1.783	1.696	1.447	.954	1.232	.951	1.474	1.054	1.216

Table 15.—Mean ratings of importance of academic and occupational reasons for going to college, by type of institution

Reasons	Mean ratings by type of institution				
	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Academic—Total	2.054	2.079	2.066	2.107	2.063
6. I had serious intellectual curiosities which only college could satisfy	1.788	1.803	1.773	1.735	1.741
14. I had a compelling interest in one particular field in which I wanted to specialize, namely:	2.568	2.613	2.550	2.691	2.634
17. I wanted to find out more about certain fields of knowledge	2.049	2.096	2.085	2.033	2.133
22. I enjoyed studying and wanted to continue academic work	1.980	1.966	2.040	2.080	1.983
24. My teachers thought I was good college material	1.896	1.857	1.925	1.912	1.762
Occupational—total	2.134	2.173	2.100	2.146	2.129
1. I felt a college degree was necessary for the kind of work I wanted to do	2.555	2.593	2.497	2.670	2.444
7. I wanted to prepare myself for a better paying job than I would otherwise be able to get	2.720	2.552	2.336	2.315	2.423
15. I wanted to explore several lines of work to see what I would be most interested in	1.812	1.729	1.885	1.667	1.905
16. I felt I could live an easier life if I had a college education	1.900	1.915	1.835	1.880	1.887
18. I felt college acquaintances and contacts would prove advantageous in finding a position after graduation	1.708	1.690	1.716	1.726	1.771

highest of all the academic reasons. This thought is further emphasized by the fact that the teachers college group gave a rating to the occupational second only to that of the technological institution group.

Although the "reasons for going to college" part of the study did not result in the development of an efficient instrument for measuring student motivation, a contribution has been made by the discovery that responses to the "reason" items are not directly related to persistence. Further study must be made to determine the degrees of association between motivation indices and measures of success other than simple persistence in college. It is also important to discover what contribution a measure of motivation can make in combination with other measures. Moreover, there is need for an instrument to measure motivation in terms of the kinds of drives that are associated with success in different kinds of institutions.

The failure to find a significant relationship between students' ratings of the importance of certain reasons for going to college and the length of their stay in college does not disprove the theory that motivation of students and their performance in college are positively related. The findings on importance of reasons for going to college, rated after attendance at college, provide valuable data for the development of an instrument for use by and with students prior to attendance at college. The experience with part I of the student opinionnaire form indicates that painstaking research can result in a useful tool for the admission officers as well as the high school guidance counselor.

Chapter 5

Student Reactions to College Facilities and Services

IN ORDER TO INCREASE the chances of receiving uninhibited evaluations of institutional facilities and services, students were requested to report their reactions directly to the Office of Education for study. The instructions and items to be rated appear in appendix B. Numerous breakdowns showing ratings by length of attendance and by type of institution are included in appendix C.

Several practical difficulties of reporting should be mentioned here. Because of the bulk of material collected, tables are representative rather than comprehensive, and only the reactions of men graduates are reported. They comprise the largest group when all responses are grouped by sex and by length of attendance. Careful study of the ratings reveals that this group is sufficiently typical of the total group to permit the omission of detailed tabulations for women and for nongraduates.

The mean ratings of the 51 items involving college facilities and services by 2,220 men graduates are summarized in table 16. (See part IB, appendix B for instructions and items.) Differences as large as 0.2 between means for a church-related group and either of the nonchurch-related groups are significant at the 5-percent level. Differences must be as large as 0.3 to be significant at that level when comparing church-related non-Catholic and Roman Catholic mean ratings.

Table 16.—Mean ratings of facilities and services by men graduates, by type of institutional control

Items relating to—	Mean rating by type of control				
	Total	Public	Independent of church	Church-related	
				Non-Catholic	Roman Catholic
ADMINISTRATION					
1. Services of admissions office prior to enrollment	3.257	3.168	3.301	3.346	3.416
5. Size of my classes	3.158	3.029	3.205	3.522	3.264
9. Assistance from college officials in receiving part-time employment	3.097	3.019	3.193	3.071	3.000
13. Services of student health department	3.097	2.979	3.209	3.000	3.246
19. Opportunity to secure adequate housing	3.403	3.372	3.447	3.427	3.237
30. Services and facilities of library	3.511	3.613	3.473	3.685	3.253
34. Availability of courses and facilities for training in my major field	3.268	3.256	3.294	3.068	3.203
29. Opportunity to secure loans from the college	3.345	3.219	3.478	3.163	3.554
31. Study conditions in the library	3.033	3.111	2.964	2.829	3.204
32. Study conditions in my room	2.884	2.860	2.896	2.895	2.958
37. Recreational facilities on campus	2.917	3.072	2.828	2.714	2.729
38. Services of the business office	3.094	3.148	3.033	3.156	3.040
39. Services of the registrar's office	3.220	3.218	3.159	3.497	3.220
40. Compulsory chapel and assembly attendance	2.508	2.511	2.331	2.618	3.168
DEANS					
2. Orientation program at start of my freshman year	2.823	2.813	2.823	2.900	2.799
8. Assistance from counselors on "how to study" techniques	1.925	1.803	1.997	1.960	2.267
14. Opportunity for testing and counseling	2.729	2.747	2.714	2.664	2.789
17. Opportunity to participate in organized student activities outside the classroom	3.513	3.511	3.515	3.610	3.384
21. Opportunity for informal social contacts with students	3.541	3.577	3.534	3.509	3.396
23. Quality of counseling assistance received on problems of educational and vocational choice	2.687	2.624	2.686	2.693	2.911
25. Availability of occupational information for help in choosing an occupation	2.876	2.879	2.902	2.706	2.893
27 Opportunity to join a fraternal group of my liking	3.461	3.520	3.471	3.504	2.603
28. Opportunity to receive help on important spiritual and moral problems	3.166	3.096	2.979	3.521	3.827
32. Study conditions in my room	2.884	2.860	2.896	2.895	2.958
34. Degree of emphasis in college on vocational guidance	2.444	2.436	2.413	2.453	2.648
35. Opportunity to consult with personnel deans on personal problems	2.963	2.818	3.060	3.145	2.934
36. Quality of help generally available from personnel deans	2.954	2.896	3.057	2.758	2.913

See footnote at end of table.

Table 16.—Mean ratings of facilities and services by men graduates, by type of institutional control—(continued)

Items relating to—	Mean rating by type of control				
	Total	Public	Independent of church	Church-related	
				Non-Catholic	Roman Catholic
FACULTY					
3. Services of my faculty adviser in helping me select my first term courses	2.346	2.415	2.236	2.468	2.312
4. Teaching abilities of my instructors	3.120	3.013	3.211	3.216	3.108
6. Opportunity to take elective courses along with required program	2.946	2.821	3.068	3.235	2.694
7. Assistance from instructors on "how to study" techniques	2.149	2.053	2.197	2.279	2.344
10. Opportunity to have private conferences with instructors on academic questions stemming from course work	3.322	3.227	3.395	3.305	3.364
11. Opportunity to have private conferences with instructors on personal questions	2.923	2.739	3.009	3.205	3.166
12. Opportunity for informal social contacts with faculty	2.672	2.520	2.793	2.974	2.485
15. Opportunity to consult from time to time with major professor	3.342	3.236	3.441	3.400	3.270
16. Opportunity to consult from time to time during freshman year with faculty adviser	2.796	2.778	2.823	2.897	2.681
18. Quality of help usually available from major professor	3.216	3.179	3.301	3.200	3.300
23. Assistance from academic deans on problems related to course work	2.681	2.634	2.711	2.688	2.782
24. Availability of courses and facilities for training in my major field	3.268	3.256	3.294	3.066	3.303
26. Degree of emphasis in college on intellectual and cultural pursuits outside the classroom	2.707	2.600	2.731	3.019	2.995
30. Opportunity to compete for scholarship aid	3.203	3.085	3.255	3.352	3.264
33. Ability of instructors to set forth clear-cut and interesting course objectives	2.785	2.664	2.876	2.838	2.908
FACTORS NOT NECESSARILY RELATED TO COLLEGE FACILITIES AND SERVICES					
1. College rules relating to social activities	2.782	2.647	3.008	2.550	2.434
2. College rules governing academic life, such as class cuts	2.930	2.843	3.094	2.575	2.785
3. Hazing by students	3.140	3.100	3.178	3.090	3.187
4. Customs and practices regarding campus apparel	3.330	3.257	3.410	3.296	3.333
5. Emphasis on social fraternities (sororities)	2.946	2.871	3.038	3.073	2.587
6. General type of students attending the college	3.281	3.235	3.349	3.563	3.483

See footnote at end of table.

Table 16.—Mean ratings of facilities and services by men graduates, by type of institutional control—(continued)

Items relating to—[1]	Mean rating by type of control				
	Total	Public	Independent of church	Church-related	
				Non-Catholic	Roman Catholic
FACTORS NOT NECESSARILY RELATED—Cont.					
7. General intellectual life around the college	2.994	2.934	3.000	3.163	3.156
8. Treatment by townspeople	2.940	2.870	2.974	3.109	2.992
9. Emphasis on intercollegiate athletics	2.994	3.058	2.960	2.911	2.900
10. Recreational facilities in town	2.390	2.179	2.628	1.910	2.831
11. Opportunities for religious life	3.617	3.671	3.478	3.760	3.928
Total number of men	2,320	941	973	161	145

[1] Items are grouped according to areas of responsibility. Complete list appears as Part IB in Appendix B.

Among the 51 items to which the students reacted by expressing degree or level of satisfaction with college facilities and services the last one on the list, No. 11 in the supplementary group (see appendix B), received the highest average rating. Table 16 shows that the men who were graduates of Roman Catholic institutions were nearly unanimous in rating the item "very satisfactory," with a mean rating of 3.928. The men who graduated from other church-related institutions also gave the item the highest average rating, as did the men graduating from publicly controlled institutions. Among men who graduated from privately controlled institutions independent of church, the item tied for third place.

The consensus of students that colleges provide satisfactory opportunities for religious life does not support the opinion of some who charge that institutions of higher education are godless and materialistic. Considering the diversity of religious backgrounds represented on the college campus it could be inferred that institutions of higher education have done remarkably well in providing opportunities for religious life.

There is marked contrast between the areas of services and facilities represented in the 10 highest and the 10 lowest ranking items. The 10 items receiving the highest rating are listed in descending order of satisfaction as follows:

1. Opportunities for religious life
2. Opportunity for informal social contacts with students

3. Opportunity to participate in organized student activities outside the classroom
4. Services and facilities of library
5. Opportunity to join a fraternal group of my liking
6. Opportunity to secure adequate housing
7. Opportunity to secure loans from the college
8. Opportunity to consult from time to time with major professor
9. Customs and practices regarding campus apparel
10. Opportunity to have private conferences with instructors on academic questions stemming from course work

As can be seen, 5 of the 10 items rated as being most satisfactory are concerned with the social or religious life of the campus. Students in non-Catholic church-related institutions included 6 such items, while those in Catholic institutions included 4. Only 3 of the first 10 items were concerned with instructional facilities and services.

The 10 items receiving the lowest ratings, listed in ascending order of satisfaction, are as follows:

1. Assistance from counselors on "how to study" techniques
2. Assistance from instructors on "how to study" techniques
3. Services of my faculty advisor in helping me select my first term courses
4. Recreational facilities in town
5. Degree of emphasis in college on vocational guidance
6. Compulsory chapel and assembly attendance
7. Quality of counseling assistance received on problems of educational and vocational choice
8. Opportunity for informal social contacts with faculty members
9. Assistance from academic deans on problems related to course work
10. Degree of emphasis in college on intellectual and cultural pursuits outside of the classroom

At least 5 of the 10 lowest ranking items refer to instructional facilities and services. Six fall more specifically into the guidance and counseling category. In fact, the three items receiving the lowest rating deal with this service.

Two other items deserve comment. First, "Opportunity for informal social contacts with faculty members" is in the bottom 10, while, as has been pointed out, 5 of the top 10 are items having to do with social or religious life of the campus. Second, students rated as comparatively unsatisfactory the degree of emphasis on intellectual and cultural pursuits outside the classroom.

A number of observations can be made about the rating shown in table 16 of students in the Roman Catholic institutions. As might be expected, these students rated item 40, "Compulsory chapel and assembly attendance," higher than did any other group. This observation can also be made about item 28, "Oppor-

tunity to receive help on important spiritual and moral problems." There is consistency in the rating this group gave to item 22, "Quality of counseling assistance received on problems of educational and vocational choice," their rating was above the average ratings given by students from the other groups. On the other hand, students in Roman Catholic institutions gave low ratings to items involving social services and facilities. Also, the men graduates from the Roman Catholic institutions rated item 1 in the supplementary list, "College rules relating to social activities," lower than did the men of any other group.

The rank order of the ratings of item 40, "Compulsory chapel and assembly attendance," shows the highest degree of satisfaction, significantly above the others, on the part of the men who graduated from the Roman Catholic institutions. The mean rating by men graduates from church-related non-Catholic institutions ranked second. The men graduates from the publicly controlled institutions ranked third, and in last place the mean rating of students from privately controlled institutions independent of church. The reverse is true in the ranking of item 1 in the supplementary list, "College rules relating to social activities." What are the sociological and psychological explanations for this converse ranking of the two items?

Additional points of interest can be noted in the ratings. Item 28, "Opportunity to receive help on important spiritual and moral problems," was rated by men graduates of church-related institutions significantly above the average ratings of men graduates of other institutions. The same is true of the rating given to item 6 of the supplementary list, "General type of students attending the college," showing that these groups were better pleased with their fellow students. "Opportunity to secure loans from the college" (item 29) was rated by men graduates of church-related non-Catholic institutions significantly below the average ratings by men graduates of other privately controlled institutions. Students of privately controlled institutions gave the high rating to item 30, "Opportunity to compete for scholarship aid," and they also gave the high rating to item 33, "Ability of instructors to set forth clear-cut and interesting course objectives."

Recreational facilities on the campus (item 37) were more satisfactory to men graduates of institutions under public control than these facilities were to men graduates of privately controlled institutions. The services of the registrar's office (item 39) in church-related institutions were rated significantly above those in publicly controlled and in privately controlled institutions independent of church. Supplementary item 7, "General intel-

lectual life around the college," was generally only "fairly satisfactory." Only the institutions under public control exceeded the "fairly satisfactory" rating on supplementary item 9, "Emphasis on intercollegiate athletics."

In the discussion of reasons for going to college it was pointed out that students who attended non-Catholic church-related institutions indicated an above average interest in reasons usually associated with other than academic activities. In their rating of recreational facilities (item 37 and supplementary item 10) the men graduates of these church-related non-Catholic schools exhibited greater dissatisfaction than satisfaction. How much did interest in recreational facilities influence the judgment of facilities?

The ratings are composite judgments of the quality of services and facilities as expressed by men who graduated in normal progression from the institutions of first registration. Some of the services and facilities, particularly facilities, could be measured objectively in the institutions participating in the study, and comparisons could be made between the mean ratings and the objective measures. It is clear on close examination that the composite judgments were generally consistent—that is to say, when a specific facility or service received an extraordinarily high or low rating in a given type of institution, the other related facilities or services likewise tended to receive ratings at the same level of satisfaction. The gradations in levels of satisfaction by length of attendance, as discussed later, also tend to confirm the validity of the ratings.

Based on table 16 and the foregoing comments on the reactions of students to college facilities and services, a few general suggestions to colleges wishing to reduce dropouts and increase holding power might be worthy of consideration. First, it is evident that the facilities and services reflecting the greatest satisfaction, especially those affording opportunity for social activity, should be strengthened—or at least not forgotten by institutions attempting to make the other facilities and services more effective. Advantage should be taken by the institutions of assets possessing holding power.

However, the areas noted as weak are the ones needing great attention. It is apparent that institutions of higher education should take appropriate steps to improve the effectiveness of their guidance and counseling services if dropouts are to be reduced. The weight of evidence emphasizes this need as an acute one. An indirectly related matter also seems to need attention: A greater realization by faculty members that students consider

classroom teaching is only a part of their job, that informal social contacts with students are an indispensable part of teaching. Finally, institutions of higher education might consider the practicability of encouraging or providing intellectual and cultural extraclassroom activities on a voluntary rather than on a required basis.

Analyses have been made of the relationships between length of attendance or persistence in college and the ratings given by students to the various facilities and services in the institutions in which they first registered. Care has been exercised in selecting typical items to illustrate the relationships. The ratings given by men and women are generally not significantly different and, because men represent nearly two-thirds of the respondents, their mean ratings are presented in the interest of simpler comparisons.

One of the problems growing out of increased college enrollments involves the size of classes. Will increasing the size of classes tend to increase the withdrawal rate of students? Table 17 shows the relationship between the length of time men students attended the various types of institutions and ratings of their level of satisfaction with the size of classes.

The junior colleges and the universities represent the extremes in mean rating of the degree of satisfaction men experienced with the size of their classes. The junior colleges received the highest mean rating; the teachers colleges and the liberal arts colleges

Table 17.—Degree or level of satisfaction with size of classes
[Men students by length of attendance, by type of institution]

Length of attendance	Mean rating by type of institution					
	Total	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Not beyond 1st registration period	3.098	2.774	3.464	3.352	3.258	3.300
Beyond 1st reg. period not more than 1 year	3.125	2.717	3.164	3.355	3.537	3.615
Beyond 1 year, not more than 2 years	3.537	2.899	3.233	3.434	3.540	3.715
Beyond 2 years, not more than 3 years	3.195	2.855	3.074	3.647	3.722	—
Beyond 3 years, not graduated	2.982	2.892	2.984	3.195	3.318	—
Graduates	3.158	2.862	3.301	3.215	3.438	—
Total rating	3.150	2.848	3.230	3.446	3.449	3.655
Total number of students[1]	4,570	2,176	440	1,302	426	226

[1] Number of men students in each type actually rating the item 0, 1, 2, 3, or 4.

were practically tied for second place; the technological institutions were fourth; and the universities were lowest. There is no general tendency for early dropouts to show greater dissatisfaction with size of classes than for the students who remained for a longer period of time. The university men who remained more than 1 year rated the item higher, probably because size of classes became progressively smaller. It may be more than coincidence that students who transfer from universities generally go to smaller institutions, that universities have a high rate of early dropouts or transfers, and that first-year dropouts from universities show the greatest dissatisfaction with class size. The statement "Size of my classes" is ambiguous. The discussion is based on the assumption that big size rather than small size of classes is responsible for the displeasure expressed.

Of the 408 men who withdrew from universities during the first year 12.8 percent rated class size as "Very unsatisfactory," and 26.0 percent rated class size "Somewhat unsatisfactory." Of the 1,089 men who graduated from universities in normal progression, 9.4 percent rated class size as "Very unsatisfactory," 21.2 percent as "Somewhat unsatisfactory." Nearly one-third of all the men students in the universities, regardless of length of attendance, rated class size as less than "Fairly satisfactory."

Men students in teachers colleges had a higher mortality rate, but as a group they did not register dissatisfaction with class size. Those who persisted to graduation gave the item a lower rating than the men who attended beyond 1 semester and not more than 2 years.

The generally low esteem in which counseling services was held has been mentioned earlier. With the exception of the technological institutions, the quality of counseling assistance received on problems of educational and vocational choice was rated lower by graduates than by first-year dropouts. Tables 18 and 19 compare the men's ratings of the assistance they received from counselors and faculty members on how to study.

The primary significance of these tables lies in the evidence of waning enthusiasm as length of attendance increases for the assistance of both faculty and counselors in "how to study" techniques. More ground was lost by the counselors than by the faculty, but neither could find a staunch supporting group of men in any type of 4-year institution.

Table 20, showing the degree or level of satisfaction with the quality of counseling assistance received by men on problems of educational and vocational choice, leads to practically the same conclusion as did tables 18 and 19. The average rating of

services and facilities concerned with these matters by men students from all types of 4-year institutions was at the "Somewhat unsatisfactory" level. The level of satisfaction with counseling on problems of educational and vocational choice was, in general, higher than that expressed by the students on guidance in "how to study" techniques, but no group of men graduates rated this item (22) even "Fairly satisfactory."

With the exception of those in technological institutions, men graduates generally rated these services and facilities lower than did men who did not attend beyond the first registration period,

Table 18.—Degree or level of satisfaction with assistance from counselors on "how to study" techniques

[Men students by length of attendance, by type of institution]

Length of attendance	Mean rating by type of institution					
	Total	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Not beyond 1st registration period	2.333	2.209	2.200	2.344	2.385	2.556
Beyond 1st registration period, not more than 1 year	2.261	2.119	2.178	2.231	2.468	2.805
Beyond 1 year, not more than 2 years	2.270	2.147	2.325	2.155	2.234	2.594
Beyond 2 years, not more than 3 years	2.228	2.155	2.850	2.338	1.929	—
Beyond 3 years, not graduated	1.981	1.958	2.020	1.895	2.050	—
Graduates	1.925	1.873	1.953	2.000	1.895	—

Table 19.—Degree or level of satisfaction with assistance from instructors on "how to study" techniques

[Men students by length of attendance, by type of institution]

Length of attendance	Mean rating by type of institution					
	Total	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Not beyond 1st registration period	2.389	2.374	2.000	2.474	2.373	2.684
Beyond 1st registration period, not more than 1 year	2.332	2.224	2.188	2.278	2.634	2.755
Beyond 1 year, not more than 2 years	2.411	2.243	2.293	2.362	2.458	2.762
Beyond 2 years, not more than 3 years	2.284	2.112	2.227	2.500	2.500	—
Beyond 3 years, not graduated	2.195	2.100	2.404	2.299	2.333	—
Graduates	2.147	2.104	2.084	2.221	2.203	—

Table 20.—Degree or level of satisfaction with quality of counseling assistance received on problems of educational and vocational choice

(Men students by length of attendance, by type of institution)

Length of attendance	Mean rating by type of institution					
	Total	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Not beyond 1st registration period	2.826	2.777	2.316	2.835	2.980	3.200
Beyond 1st registration period, not more than 1 year	2.818	2.713	3.062	2.734	3.029	2.979
Beyond 1 year, not more than 2 years	2.441	2.720	2.925	2.730	2.745	3.217
Beyond 2 years, not more than 3 years	2.797	2.712	3.048	2.823	3.000	—
Beyond 3 years, not graduated	2.609	2.621	2.375	2.646	2.955	—
Graduates	2.667	2.652	2.815	2.653	2.652	—

but there was not the steady downward trend with increasing length of attendance that can be seen in tables 18 and 19. Moreover, the degree of satisfaction expressed by men graduates of technological institutions was higher than that expressed by those who did not attend beyond the first registration period.

Nevertheless, it must be reiterated that in spite of some hopeful variations counseling services and facilities have again been rated as unsatisfactory, this time on problems of educational and vocational choice.

Mean ratings by men students of degree or level of satisfaction with "Study conditions in my room" by length of attendance are shown in table 21. The shifts from high to low ratings with length of attendance are consistent among the types of institutions. Why were men who attended college no more than one registration period better satisfied with study conditions in their rooms than men who had records of longer attendance? The data do not supply the answer.

Table 22, the final one in this series by type of institution, illustrates the tendency to give lower ratings with length of attendance. Item 26 was stated as follows: "Degree of emphasis in college on intellectual and cultural pursuits outside of the classroom." The shifts in rating might indicate that students became more discriminating in their appraisal of the emphasis being placed on intellectual and cultural pursuits, or they had more interest in such activities, or those who were easily satisfied had dropped out. At any rate, the men who entered the fourth year were uniformly least satisfied with this phase of college life.

Table 21.—Degree or level of satisfaction with "study conditions in my room"

[Men students by length of attendance, by type of institution]

Length of attendance	Mean rating by type of institution					
	Total	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Not beyond 1st registration period	2.988	2.890	3.500	2.908	3.104	3.267
Beyond 1st registration period, not more than 1 year	2.798	2.700	3.068	2.743	2.816	3.216
Beyond 1 year, not more than 2 years	2.911	2.880	3.143	2.788	2.953	3.084
Beyond 2 years, not more than 3 years	2.765	2.826	2.750	2.653	2.875	—
Beyond 3 years, not graduated	2.963	2.938	3.000	2.544	2.850	—
Graduates	2.884	2.895	3.103	2.901	2.897	—

Table 22.—Degree or level of satisfaction with the emphasis in college on intellectual and cultural pursuits outside the classroom

[Men students by length of attendance, by type of institution]

Length of attendance	Mean rating by type of institution					
	Total	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Not beyond 1st registration period	2.844	2.825	2.458	2.978	2.926	2.579
Beyond 1st registration period, not more than 1 year	2.722	2.525	2.571	3.022	2.819	2.696
Beyond 1 year, not more than 2 years	2.776	2.669	2.902	2.893	2.816	2.799
Beyond 2 years, not more than 3 years	2.865	2.734	2.690	3.190	2.863	—
Beyond 3 years, not graduated	2.663	2.634	2.431	2.892	2.750	—
Graduates	2.707	2.627	2.509	2.875	2.756	—

Ratings by the 440 men in technological institutions showed a marked difference in their ratings from those of other groups as can be noted in the preceding 6 tables.

Tables 23 and 24 are presented to show the relationship between length of attendance and mean rating of college facilities and services. These item ratings are broken down by type of institutional control.

There was a pronounced general downward trend in the ratings of compulsory chapel and assembly attendance with the length of attendance in school as shown in table 23. Men in schools

under the control of the Roman Catholic Church reported the highest degree of satisfaction with required attendance at chapel or assembly or both, and the men in privately controlled institutions independent of church looked with least favor upon the requirement. A steady decrease in enthusiasm with length of attendance was expressed by the men in church-related non-Catholic schools. Apparently the regulation requiring chapel and assembly attendance did not contribute significantly to early discontinuance of college attendance. On the other hand, the

Table 23.—Degree or level of satisfaction with compulsory chapel and assembly attendance

[Men students by length of attendance, by type of control]

Length of attendance	Mean rating by type of control				
	Total	Publicly controlled	Independent of church	Church-related	
				Non-Catholic	Roman Catholic
Not beyond 1st registration period	3.066	3.009	2.825	3.571	3.787
Beyond 1st registration period, not more than 1 year	2.980	2.894	2.915	3.256	3.250
Beyond 1 year, not more than 2 years	2.877	2.832	2.724	3.214	3.556
Beyond 2 years, not more than 3 years	2.548	2.449	2.310	3.133	3.308
Beyond 3 years, not graduated	2.586	2.466	2.592	3.000	3.000
Graduates	2.508	2.511	2.331	2.618	3.168

Table 24.—Degree or level of satisfaction with recreational facilities (A) on campus and, (B) in town

[Men students by length of attendance, by type of control]

Length of attendance	Mean rating on two recreational items							
	Publicly controlled		Independent of church		Church-related			
					Non-Catholic		Roman Catholic	
	A	B	A	B	A	B	A	B
Not beyond 1st registration period	3.279	2.776	3.117	2.783	3.500	2.200	3.050	2.950
Beyond 1st registration period, not more than 1 year	3.153	2.628	3.046	3.017	2.833	2.238	2.794	3.032
Beyond 1 year, not more than 2 years	3.023	2.624	2.967	2.873	2.971	2.129	2.565	3.053
Beyond 2 years, not more than 3 years	3.207	2.500	2.981	2.711	3.000	2.167	3.071	2.750
Beyond 3 years, not graduated	3.126	2.334	2.850	2.774	2.000	2.167	3.048	2.400
Graduates	3.072	2.179	2.828	2.626	2.714	1.910	2.729	2.831

Table 25.—Analysis of faculty items by length of attendance, by sex

Length of attendance	Mean ratings by sex															
	Item 3		Item 4		Item 6		Item 7		Item 10		Item 11		Item 12		Item 15	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Not beyond 1st registration	2.637	2.876	3.269	3.309	2.955	2.917	2.389	2.463	2.994	2.963	2.840	2.782	2.447	2.604	2.777	2.867
Beyond 1st registration, not more than 1 year	2.708	2.898	3.244	3.275	2.908	3.027	2.332	2.423	3.082	3.158	2.861	2.953	2.475	2.663	2.876	2.976
Beyond 1 year, not more than 2 years	2.740	2.963	3.284	3.331	3.000	3.220	2.411	2.527	3.247	3.284	3.014	3.170	2.746	2.925	3.057	3.229
Beyond 2 years, not more than 3 years	2.555	2.704	3.321	3.186	3.039	2.859	2.284	2.460	3.283	3.206	2.990	2.833	3.674	2.633	3.226	3.080
Beyond 3 years, not graduated	2.459	2.670	3.002	3.168	2.699	2.900	2.195	2.143	3.222	3.209	2.799	2.692	2.449	2.606	3.167	3.229
Graduates	2.346	2.579	3.120	3.214	2.946	3.020	2.147	2.280	3.238	3.318	2.922	2.891	2.672	2.889	3.343	3.328

Length of attendance	Item 16		Item 18		Item 23		Item 24		Item 26		Item 30		Item 32		Item 42	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Not beyond 1st registration	2.915	3.154	2.985	2.969	2.892	2.887	3.273	3.358	2.844	2.823	3.123	3.178	2.892	2.896	3.409	3.462
Beyond 1st registration, not more than 1 year	2.960	3.051	2.897	2.976	2.733	2.824	3.222	3.219	2.723	3.000	3.068	3.286	2.442	2.913	3.287	3.392
Beyond 1 year, not more than 2 years	3.107	3.215	3.086	3.143	2.884	2.980	3.195	3.324	2.776	3.006	3.090	3.296	2.909	3.031	3.227	3.321
Beyond 2 years, not more than 3 years	3.103	2.938	3.193	2.970	2.808	2.809	3.437	3.253	2.865	2.950	3.154	3.198	2.883	2.737	3.112	3.240
Beyond 3 years, not graduated	2.779	2.857	3.079	3.150	2.686	2.809	3.301	3.313	2.663	2.840	3.128	3.315	2.689	2.796	2.998	3.101
Graduates	2.796	2.747	3.216	3.215	2.681	2.809	3.268	3.394	2.865	2.972	3.202	3.298	2.785	2.802	2.980	3.061

regulation became a less pleasing feature of the institution the longer the student remained.

Men who attended publicly controlled institutions generally rated the campus recreational facilities higher than did the men in privately controlled institutions, both independent of church and church-related (see table 24). Men in Roman Catholic institutions rated these facilities in town higher than did men in other institutions; in fact, the rating of town recreational facilities by boys in Roman Catholic schools is slightly above that given their campus facilities.

The lowest average rating was given to recreational facilities in town by men who graduated from church-related non-Catholic schools, and the highest rating was given to campus facilities by men attending these schools no more than one registration period. It does not appear that the campus recreational facilities were a significant factor in student retention. Tastes and judgments change with maturity, and it is possible that recreational facilities which were satisfactory to freshmen were found wanting by upperclassmen.

Table 25 summarizes the relationship between length of attendance and ratings of 16 faculty service items by men and women. Some of the observations that have been made on the differences in the ratings of men and women are illustrated in the table.

The items concerned with faculty services are as follows:

3. Services of my faculty adviser in helping me select my first-term courses.
4. Teaching abilities of my instructors.
6. Opportunity to take elective courses with required program.
7. Assistance from instructors on "how to study" techniques.
10. Opportunity to have private conferences with instructors on academic questions stemming from course work.
11. Opportunity to have private conferences with instructors on personal questions stemming from college life in general.
12. Opportunity for informal social contacts with faculty members.
15. Opportunity to consult from time to time with major professor.
16. Opportunity to consult from time to time during freshman year with faculty adviser.
18. Quality of help usually available from major professor.
23. Assistance from academic deans on problems related to course work.
24. Availability of courses and facilities for training in my major field.
26. Degree of emphasis in college on intellectual and cultural pursuits outside of the classroom.
30. Opportunity to compete for scholarship aid.
33. Ability of instructors to set forth clear-cut and interesting course objectives.
42. College rules governing academic life, such as class cuts.

Note, for example, the narrower range in the mean ratings by women students and the tendency of women to give higher ratings than the men, particularly on items which reflect on persons rather than on conditions.

Faculty services were generally given relatively low ratings by all students. It would seem, therefore, that some of the elements making for dissatisfaction and consequent withdrawal would be found among the faculty items. The number of items among the 16 analyzed in table 25 that can be described as discriminating is very small if it is assumed that students who withdrew should have given a service a lower rating than did the students who persisted in attendance. That the reverse is true for a majority of the items may perhaps be explained by the fact that students who were early withdrawals did not have time to discover the limitations of the faculty.

The relative ranking of the several facilities and services in terms of average ratings makes it possible to compare degrees or levels of satisfaction. Among the 16 items making up the faculty category, men and women who attended college no more than 1 year gave their lowest rating to item 7, "Assistance from instructors on 'how to study' techniques." Item 12, "Opportunity for informal social contacts with faculty members," was rated as less than fairly satisfactory and was rated lower by first-year withdrawals than by students who persisted for a longer period of time.

The significance of the low rating given by first-year withdrawals to item 15, "Opportunity to consult from time to time with major professor," is negated by the fact that few first-year students have a major professor. These students had an opportunity to code the item 0, "Does not apply to me, or no opinion," but only 23 percent of 985 men respondents, and 27 percent of 716 women respondents who were first-year dropouts so coded the item. The low percentages indicate the probability that many early dropouts had a general misconception of the term "major professor." The higher percentage of women rating the item "0" may, but does not necessarily, connote superior verbal facility.

The 4 items (3, 7, 12, 23) among the 16 describing faculty services which were rated lowest by students generally are in the area of guidance or counseling responsibilities of faculty members and of social contacts between the student and faculty members. The 4 items (30, 24, 10, 15) given the highest ratings among the 16 are those concerned with more strictly academic matters. A contrast illustrating this observation is found in the ratings given item 10 and item 11. It would seem from the foregoing

that students tend to rate faculty members higher as experts in teaching than as experts in human relations.

Student reactions to college experiences may be compared according to the three areas of responsibility: Administration, nonacademic deans, and faculty. When grouped in this way, the services and facilities normally considered to be primarily the responsibility of the administration received the highest mean rating, those usually considered to be the function of the nonacademic deans ranked second; and those reflecting upon the quality and performance of the faculty ranked lowest. The analyses of items grouped in this manner and by the length of attendance of men and women are presented in a series of tables numbered 59 to 63 in appendix C.

Student dropouts did not identify unsatisfactory college facilities and services by their ratings in a way that would set them apart as a distinct group. In fact, the mean rating of many facilities and services decreased in level of satisfaction as length of attendance increased. Frequently, the highest mean ratings in the "administrative" series of items were given by students who left college during or at the end of the first registration period.

In conclusion then, it can be said that the students who withdrew from institutions of higher education before graduation did not directly or by inference attribute their withdrawal to outstanding deficiencies in the facilities and services of the institutions in which they first registered. To be sure, many students who withdrew rated many college facilities and services as very unsatisfactory, but the percentage of those giving this rating was seldom as high as it was for students who did not withdraw.

It might be inferred from the foregoing that withdrawal from college is associated not so much with dissatisfactions as with inability, or unwillingness, to endure dissatisfactions.

Chapter 6

Subject-Fields of Student Interest

THE EARLIER DISCUSSION of motivating factors associated with going to college is incomplete without some consideration of fields of knowledge and areas of training in which the students in the study were interested. The student report form (see item 9) included a list of 61 subject-fields, some much more specific than others, which was essentially a duplication of the list used in *Earned Degrees Conferred by Higher Educational Institutions*, issued annually by the Office of Education. The expression "subject-field" is used because of the mixture of disciplines and occupations in the list.

The extent to which students' first subject-fields of interest are related to the type of institution they enter is indicated in tables 26 and 27. The table for men includes all subjects in which at least 2.5 percent of all men responding expressed an interest at the time of entering college. The table for women includes all subjects with at least a 1.5 percent representation. As can be observed from table 26, engineering was indicated by the largest number of men respondents (830) as the subject-field of greatest interest at the time of their entrance. Of this number, 45.3 percent entered universities, 33.2 technological institutions, 14.8 liberal arts colleges, 2.5 teachers colleges, and 4.2 percent junior colleges.

The two lists of subject-fields tend to be mutually exclusive. Only 2 subject-fields are common to the top 10: Business administration and physical education. Approximately two-thirds of the first interests are represented in the top 10 fields for both

men and women. None of the remaining fields has as much as a 3-percent following.

Tables 26 and 27 show that it would be difficult to define or describe a type of higher educational institution by completing the following sentence, "A —— is a type of institution to which

Table 26.—Types of institutions entered by men students having certain subject-fields of interest at time of entering

Subject field of interest	Total Number	Percent of men reporting interest who enrolled in—				
		Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Engineering	830	45.3	33.2	14.8	2.5	4.2
Business administration	487	55.4	3.7	27.3	6.6	7.0
Premedicine	344	61.9	1.2	33.7	.9	2.3
Chemistry	245	47.7	13.1	30.6	4.5	4.1
Accounting	217	60.4	2.3	14.7	10.6	12.0
Agriculture	200	55.0	5.0	27.0	8.5	4.5
Mathematics	184	32.6	9.2	33.7	20.1	4.4
Physical education	161	26.1	—	32.9	33.5	7.5
Prelaw	156	61.6	.6	28.2	4.5	5.1
History	143	35.0	.7	44.7	15.4	4.2
Education	126	27.8	3.2	17.4	49.2	2.4
Physics	116	40.5	27.6	25.9	4.3	1.7
Biology	113	27.4	1.8	53.1	11.5	6.2
English	113	37.2	—	48.6	13.3	.9

Table 27.—Types of institutions entered by women students having certain subject-fields of interest at time of entering

Subject field of interest	Total number	Percent of women reporting interest who enrolled in—				
		Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Education	639	26.0	0.3	21.0	46.2	6.5
Home economics	339	46.2	1.5	31.9	12.5	7.9
English	283	27.9	—	50.9	16.6	4.6
Music	217	21.6	—	52.1	18.0	8.3
Business administration	212	30.2	—	23.1	22.6	24.1
Fine arts	158	32.9	2.5	43.0	10.8	10.8
Nursing	142	26.1	—	27.5	33.8	12.7
Physical education	130	20.8	—	33.8	37.7	7.7
Languages	122	28.7	—	59.0	9.0	3.3
Journalism	101	57.5	—	26.7	7.9	7.9
Speech and dramatic arts	101	36.7	—	37.6	7.9	17.8
Psychology	88	43.1	—	44.3	4.5	9.1
Mathematics	87	32.2	—	47.1	16.1	4.6
History	75	22.7	—	58.7	16.0	2.6
Social work	74	39.2	1.3	39.2	6.8	13.5
Premedicine	54	50.0	—	42.6	1.8	5.6

students who are interested in —— go to study." All but 3 of the 61 subject fields in the list had at least one male subscriber in the sense that he had the greatest interest in that subject at the time he entered college. Of the 61 subject fields, universities attracted students interested in 58; technological institutions in 31; liberal arts in 50; teachers colleges in 44; and junior colleges in 48.

Of the men who enrolled in technological institutions, 468 reported their subject fields of greatest interest at the time of entering. 275, or 58.8 percent, reported engineering; 32, chemistry; 32, physics; 18, business administration; 17, mathematics; and the remaining 94 reported interests distributed among 21 other fields, including 10 in agriculture, 9 in fine arts, 8 in music, 7 in metallurgy, 6 in forestry, and 5 in accounting. The records of these 468 men showed a withdrawal rate of 48 percent; a much better record of persistence than that of the men in teachers colleges. Academic difficulties constituted the predominant reason for the transfer and withdrawal of these students.

Among the 429 men who entered teachers colleges in the fall of 1950, 62 reported education as their greatest interest; 54 physical education; and 313, or 73 percent, reported 42 other subjects. The 62 who reported education as their greatest interest represented only 14.5 percent of all men respondents who entered teachers colleges. The 54 who reported physical education as their greatest interest represented 12.6 percent of all men respondents who entered teachers colleges.

The persistence record of the 429 men respondents who entered teachers colleges shows that 65 percent withdrew from the institutions of first registration. A majority of those who changed institutions transferred to institutions other than teachers colleges, mainly because of (1) general dissatisfaction and (2) changes in curricular interests. It might be inferred that many of these men were looking for institutions with *curriculums* which they felt were more in harmony with their unchanged *occupational* interests.

The data show that high withdrawal rates frequently result when student interests are subordinated to other considerations such as accessibility and cost in the selection of an institution of higher education for first-time registration. High school advisers or counselors sometimes tell the high school graduates that the programs of the first 2 years of all institutions of higher education are essentially the same. They advise students with limited financial resources to go to the nearest and least expensive

institution for 2 years. While it is recognized that the alternative to going to the nearest and least expensive college may be not going at all, this advice, nevertheless, may represent a serious disservice to the students, to society, and to the nearest and least expensive institution. Men are likely to be more critically affected because their occupational interests are usually stronger than those of women students.

The instructions given to the students for reporting their interests are shown in item 9 in part II of the student report form (see appendix B). The "and so on" phrase was an open-end invitation, and a few students numbered as many as 12 interests. The master data sheets on which the institutions recorded the information provided for only 5 interests; consequently, no record was kept of reported interests beyond 5. When more than 5 interests were recorded, the circled number was regarded as the fifth interest. Students were instructed to consider order in time and not in intensity of interests when checking the subject-fields.

In the analyses of changes, interests numbered 1 were compared with the circled interest—the subject-field of the student's major—or, if none was circled, with the highest numbered subject-field of interest. Actually, because a majority of the students limited their designation to 1 or 2 subject-fields, the comparisons in tables 28 and 29 involved for the most part, the second as the final interest.

The report on interests of men and women, as shown in tables 26 and 27, indicates the great diversity in pattern of original interests. The changes in interests of men and women also present very different patterns. The tables give quantitative pictures of the students' interests on entering and at the time of reporting.

Only first interests which had at least 100 men adherents are included in table 28, thus giving a total of 3,435 men respondents for whom constancy of interests is reported.

Of the 217 men whose first interest was accounting, 79, or 36.4 percent, did not report a second interest. The pattern of change in interest, and consequently in program, was toward a more general program. Fewer than 1 percent showed a shift of interest from accounting to agriculture; 77, or 35.5 percent, of the men changed to business administration, 9 shifted to economics, 7 to prelaw, 6 to engineering, 5 to mathematics, 4 to education, and 4 to history. Journalism and physical education each attracted 3 men whose original interest was accounting. Two converts each were won by English, geography, philosophy, and political science.

Table 28.—Analysis of changes in subject-fields of interest by men students

Code	First interest (Only first interests with frequencies of 100 or more)	Number	Percent maintaining same interest (underlined) and percent changing to a new interest															
			Accounting (1)	Agriculture (2)	Biology (10)	Business Administration (12)	Chemistry (13)	Education (16)	Engineering (17)	English (23)	History (29)	Mathematics (36)	Physical Education (45)	Physics (46)	Prelaw (50)	Premedicine (51)	Other	Total
(1)	Accounting	217	36.4	0.9	------	35.5	0.5	1.8	2.8	0.9	1.8	2.3	1.4	0.5	3.2	------	12.0	100
(2)	Agriculture	200	1.0	45.0	2.5	4.5	1.0	3.5	5.5	2.0	.5	.5	1.0	------	.5	------	32.5	100
(10)	Biology	113	------	------	20.4	1.8	11.5	5.3	1.8	1.8	4.4	4.4	3.5	1.8	1.8	6.2	35.4	100
(12)	Business administration	487	7.8	1.2	.6	45.8	.8	2.5	5.3	1.2	3.9	.6	2.1	------	3.1	.2	24.9	100
(13)	Chemistry	245	.8	.8	2.0	2.9	21.2	2.9	18.0	3.3	4.1	7.8	.8	6.1	.8	4.9	28.7	100
(16)	Education	126	1.6	4.0	1.6	6.4	.8	33.3	3.2	4.8	9.5	6.4	1.6	------	1.6	.8	24.6	100
(17)	Engineering	830	2.2	1.1	.5	6.4	2.7	.7	60.5	.5	.8	4.0	.8	2.4	.6	.6	16.4	100
(23)	English	113	.9	------	1.8	2.7	.9	.9	.9	24.8	15.9	2.7	.9	------	6.2	4.4	37.2	100
(29)	History	143	1.4	------	1.4	3.5	.7	4.9	------	6.3	26.5	2.1	3.5	------	4.9	.7	44.1	100
(36)	Mathematics	184	5.4	.5	1.6	7.6	5.4	2.7	13.0	2.7	4.9	19.6	6.0	13.0	------	.5	16.9	100
(45)	Physical education	161	1.9	1.2	3.7	4.4	.6	6.2	2.5	1.9	5.6	1.2	53.4	------	.6	.6	15.2	100
(46)	Physics	116	------	------	1.7	4.3	6.9	------	24.1	2.6	.9	9.5	.9	28.5	1.7	.9	18.1	100
(50)	Prelaw	156	7.7	------	------	14.7	.6	4.5	3.2	2.6	4.5	------	------	.6	27.6	5.1	28.9	100
(51)	Premedicine	344	1.5	1.7	4.9	4.1	7.6	.9	4.1	3.5	2.3	1.5	------	2.0	1.5	36.9	27.6	100

About one-fourth of the men whose original interest was English persisted in that interest and nearly one-sixth shifted to history. A slightly higher percentage of men whose original interest was history maintained that interest but only about one-sixteenth shifted to English. The remaining two-thirds changed to a wide range of subject-fields. The majority of the changes from education among men went to history, business administration, mathematics, and English. Only 7 of 143 men changed their field from history to education; but 12 of 126 changed from education to history. The largest number of changes from history went to political science, 20.3 percent. Accounting, economics, and political science shared equally in the changes from prelaw, each receiving 7.7 percent. The largest transfer from biology, which is not specified in table 28, went to zoology, 5.3 percent. The remaining 30.1 percent in the "other" column for biology ranged from anatomy to psychology with no frequency higher than 4.0 in any new subject-field.

The average constancy of interest for the men in the subject-fields reported in table 28 was 42.3 percent. The subject-field with the highest constancy was engineering with a percentage of 60.5, and next in rank was physical education with a percentage of 53.4. Only 19.6 percent of the 184 men whose original interest was mathematics designated it as their final subject-field. However, 37.0 percent changed to the applied fields of accounting, chemistry, engineering, and physics. Men whose first interests were chemistry, mathematics, and physics most frequently changed to engineering. The changes from engineering were widely scattered, with 6.4 percent selecting business administration. The largest departure from business administration was 7.8 percent to accounting, and next, 5.3 percent to engineering.

Women displayed an average constancy of interest in 16 subject-fields of 45.2 percent. Table 29 sets forth the changes for all subject-fields in which at least 50 women indicated an interest at the time they entered college.

The subject-field in which the largest number of college women reported a first interest was education. Concern about alleged influences in the academic environment which tend to discourage students with an interest in education does not appear to be justified by the record of women students. About 62 percent of them persisted in their interest. The heaviest loss was to English (6.6 percent), but English lost 11.3 percent of its original adherents to education. Among women, business administration, fine arts, mathematics, psychology, and social work were subject-fields in which education made heaviest inroads.

Table 29.—Analysis of changes in subject-fields of interest by women students

Code	First interest (Only first interests with frequencies of 50 or more)	Number	Percent maintaining same interest (underlined) and percent changing to a new interest																	
			Business Administration (12)	Education (16)	English (23)	Fine Arts (25)	History (29)	Home Economics (30)	Journalism (33)	Language (34)	Mathematics (36)	Music (39)	Nursing (40)	Physical Education (45)	Premedicine (51)	Psychology (52)	Social Work (56)	Speech and Dramatic Arts (58)	Other	Total
(12)	Business administration	212	43.4	15.1	7.6	1.9	1.9	5.7	0.5	1.4	1.4	1.9	0.9	2.4	.....	2.4	1.4	0.9	11.3	100
(16)	Education	639	2.8	62.0	6.6	2.4	1.6	2.7	.5	.8	.9	2.5	.9	1.4	.2	2.0	1.3	.8	10.8	100
(23)	English	283	1.4	11.3	25.1	8.5	6.4	1.1	2.8	7.1	1.8	3.9	.....	2.1	.7	4.2	1.8	3.2	18.7	100
(25)	Fine arts	158	1.9	14.6	9.5	35.4	1.3	8.9	2.5	3.2	.6	2.5	.6	.6	.....	1.9	1.3	1.9	13.3	100
(29)	History	75	2.7	8.0	6.7	2.7	24.0	1.3	1.3	6.7	1.3	2.7	.....	1.3	.....	.....	.....	1.3	40.0	100
(30)	Home economics	329	5.8	9.7	3.7	.9	.6	59.6	.3	.9	1.2	.9	1.8	2.1	.....	2.7	.6	1.8	7.3	100
(33)	Journalism	101	7.9	8.9	16.8	6.9	1.0	4.0	26.7	3.0	1.0	.....	.....	2.0	.....	2.0	1.0	3.0	15.9	100
(34)	Language	122	4.1	6.6	15.6	.8	1.6	3.3	1.6	33.6	2.5	4.1	.8	2.5	.....	4.9	.....	.8	17.2	100
(36)	Mathematics	87	4.6	12.6	4.6	1.2	5.8	4.6	.....	3.5	21.8	4.6	2.3	3.5	1.2	3.5	.....	.....	26.4	100
(39)	Music	217	2.3	13.4	7.4	3.2	.9	2.8	.9	2.3	2.3	51.6	.5	1.4	.5	3.2	.5	.9	6.0	100
(40)	Nursing	142	1.4	7.0	4.9	.....	.7	2.8	.7	1.4	.....	.7	60.6	.7	.....	3.5	.7	.7	14.1	100
(45)	Physical education	130	1.5	7.7	6.2	.8	2.3	3.1	.8	1.5	.....	.....	.8	54.6	.8	3.1	.....	3.1	13.8	100
(51)	Premedicine	54	3.7	7.4	1.9	.....	.....	1.9	3.7	1.9	5.6	5.6	9.3	3.7	20.4	7.4	3.7	.....	24.1	100
(52)	Psychology	88	5.7	11.4	9.1	2.3	1.1	2.3	1.1	4.6	.....	2.3	1.1	2.3	1.1	20.5	11.4	1.1	22.7	100
(56)	Social work	74	6.8	16.2	6.8	4.1	.....	2.7	2.7	6.8	.....	.....	1.4	.....	1.4	6.8	20.3	2.7	21.6	100
(58)	Speech and dramatic arts	101	6.9	4.0	11.9	4.0	3.0	3.0	1.0	4.0	2.0	1.0	.....	2.0	.....	4.0	1.0	38.6	13.9	100

Home economics ranked second among the subject-fields of first interest for women. A relatively high percentage (59.6) maintained their interest. Education drew the highest percentage of those whose interests changed from home economics. The highest percentage accession to home economics was from fine arts (8.9) followed by business administration (5.7).

The interest of women in having a home and an occupation as indicated in their reasons for going to college, may be associated with the high constancy of interest prevailing in education, nursing, home economics, physical education, and music. None of these subject-fields lost as many as half of its original adherents. For men, only two subject-fields, engineering and physical education, held as many as half of their original adherents.

In general, the tables on interest changes show that men and women who change tend to select a related subject-field. The definition of relatedness is highly subjective; consequently, the reader must make his own decision whether men or women show the greater tendency to change to related fields. The calculations must, of course, take into account the higher percentages of constant interests of women.

In spite of the relatively small numbers involved, the shifts in interest depicted in tables 28 and 29 may be of some value for program planning. The pattern of change for a single institution could not be expected to conform very closely to the national pattern, but the subject-fields with the highest constancy of interest will probably be found to be reasonably uniform.

Education has been defined as the process of realining one's prejudices. In the same cynical vein it might be said that because of, apart from, or in spite of education, changes in subject-fields of interest by college students tend to be identified with bread and butter considerations. Definitive analyses of the relationships between rate of persistence and constancy of interest are very difficult to achieve for a number of reasons. In the mass, students who reported a change in subject-field of interest had a higher graduation percentage than did students who, as a group, maintained the same interest. However, the students who maintained their interests in subject-fields distinctly occupational in character had the highest persistence and graduation rates. Change in interest from the academic to the practical combined with the higher graduation rate of those who change and of those who adhere to practical subject-fields suggests that occupation-centered interests promote persistence in college.

Chapter 7

Financial Factors and Persistence in College

IN COLLEGE, as in the market place, the ability of the con to pay for the product is very important. Much attentio been given and more must be given to the problems of su students who are at an economic disadvantage in financin cost of attending high quality colleges. Keeping the doo such institutions open is not enough. While not first in i tance, the financial difficulties many high quality students in entering college must be reckoned with. This lack of fina resources is a major cause of transfer or of dropping o college altogether.

Students attending publicly controlled institutions of h education in 1952–53 estimated an average expenditure of $ for that school year, whereas the estimated average expend of students attending privately controlled institutions was $1 The data, reported by Ernest V. Hollis and Associates in *Cos Attending College* (Office of Education Bulletin 1957, No also show that 40 percent of costs were defrayed with f provided by parents and relatives, 26 percent with student e ings while in school, 20 percent from trust funds and other l term savings, and 14 percent with funds from scholars veterans benefits, vocational rehabilitation, borrowings, and from others. Three of these sources of income—family contr tions, self-support, and scholarships—are vitally related to persistence, transfer, and dropout of students and, theref merit further reporting here.

Student Ability and Family Income

Reports from institutions on placement-test standing and reports from students on estimates of family income show that the quality of college students as measured by placement tests bears a negligible relationship to family income. The lack of significant relationship for college students does not mean that the same would be true for the general population where selection associated with registration in college has not taken place. Table 30 shows the number of students who reported from each placement tenth, the range of the middle 50 percent, and the median income for each tenth, and also for students in the top and bottom half of the placement-test scale. Students whose placement test performance placed them in the upper half of their class came from homes in which the median family income was $87 above the median for all students and $210 above the median for students in the lower half of the placement test distribution.

Table 30.—Estimates of 1953 family income by students from each college placement tenth

College placement test tenth	Number of students	Estimated family income		
		Top of lowest fourth	Median	Bottom of top fourth
Top Tenth	827	$3,095	$5,775	$9,156
2d Tenth	845	4,060	5,855	9,756
3d Tenth	815	3,981	5,858	9,616
4th Tenth	768	3,923	5,784	9,530
5th Tenth	715	3,989	5,711	9,760
6th Tenth	679	4,027	5,701	9,438
7th Tenth	624	4,193	5,687	9,143
8th Tenth	582	3,899	5,482	8,786
9th Tenth	510	3,835	5,613	8,608
Bottom Tenth	375	3,709	5,324	8,668
Total	6,740	3,988	5,713	9,287
Top half	3,970	4,014	5,800	9,500
Bottom half	2,770	3,954	5,590	8,969

The fact that ability of college students, as measured by placement tests bore a negligible relationship to family income level, as demonstrated in table 30, increases the significance of differences in family income of students when compared by length of attendance in college. Table 31 provides the basis for such a comparison. The 466 students who remained for no more than one registration period in the institution of first registration

reported family incomes, the middle 50 percent of which ranged from $3,550 to $7,518 with a median of $4,916. This median was found to be significantly lower than the median for any other group with a longer persistence record. The median family income of students who persisted to graduation, $5,947, was more than $1,000 above that of students who dropped out during or at the end of the first registration period. This is a statistically significant difference.

The median annual income of parents of nongraduating students was $437 less than that of parents whose children graduated. The chances that the true difference is greater than 0 are 97.5 in 100. In other words, if 1,000 samples had been drawn instead of 1, in 975 samples the median income figure for parents of graduates would have been higher than for parents of nongraduates. Similarly, the chances are 97 in 100 that the dropouts during or at the end of the first registration period would have a lower median family income than dropouts during the remainder or at the end of the first school year.

Table 31.—Estimates of 1953 family income by students according to length of attendance

Length of attendance	Number of students	Estimated family income		
		Top of lowest fourth	Median	Bottom of top fourth
Not more than 1 registration period	466	$3,550	$4,916	$7,518
Beyond 1st registration period, not more than 1 year	1,041	3,902	5,536	7,151
Beyond 1 year, not more than 2 years	1,314	3,982	5,732	9,435
Beyond 2 years, not more than 3 years	401	3,940	5,518	8,910
Beyond 3 years, not graduated	506	3,837	5,507	8,358
Graduates	3,555	4,126	5,947	9,741
Other	359	3,973	5,508	8,192
Total	7,642	3,983	5,706	9,217
Total graduates	3,555	4,126	5,947	9,741
Total non-graduates	4,087	3,875	5,510	8,684
Difference		251	437	1,057

Further comparisons of family incomes by length of student attendance can be seen in table 32. The proportion of graduates in the $10,000 or more income group exceeds that of the non-graduates by 5 percent—24 to 19. The "other" group, which includes students of intermittent attendance, had the highest percentage (5.8) of students from families with incomes under

Table 32.—Percentage analysis of length of attendance by family income level

Length of attendance	Percent of students with family incomes			
	Under $2,000	Under $3,000	Under $4,000	$10,000 or more
Not more than 1 registration period	5.2	14.4	23.7	15.2
Beyond 1st registration period, not more than 1 year	4.9	11.9	26.4	18.1
Beyond 1 year, not more than 2 years	4.9	11.2	25.3	22.5
Beyond 2 years, not more than 3 years	4.5	10.5	25.9	20.2
Beyond 3 years, not graduated	4.5	10.3	27.9	17.0
Graduates	4.3	10.3	23.3	24.0
Other	5.8	12.3	25.3	15.6
Total	4.6	11.0	25.2	21.3
Total graduates	4.3	10.3	23.3	24.0
Total nongraduates	4.9	11.6	26.9	19.0

$2,000. The first registration period dropouts were next in order, and the percentage tended to decrease with length of attendance. The low percentage in the "under $4,000" column and the high percentage in the "$10,000 or more" column are both identified with graduates.

In chapters 9 and 10 the importance of financial difficulties among the reasons for transfer or discontinuance is discussed. While the financial problem does not rank first in importance, it is a major factor in student mortality. The two preceding tables make it clear that entering and persisting in college attendance is only moderately dependent upon financial resources as represented by the single factor of family income. Distributions by type of control, by type of institution, and by sex all show approximately the same degree of overlapping.

The highest first registration period dropout rate was in publicly controlled institutions, and the median family income was lowest for students in publicly controlled institutions (see table 64 appendix C). These concomitants made it practically certain that the lowest median family income would be for students who discontinued during or at the end of the first registration period. The percentage distribution of family income by type of institutional control is shown in table 33.

Students in higher educational institutions under private control reported an estimated 1953 family income of $6,570 (see table 33) which is significantly higher than the median of $5,243 reported by students attending institutions under public control. The students in privately controlled institutions independent of

church reported the highest median family income, $6,816. Second in rank with a median of $6,454 is the group made up of a relatively small number of students (330) who attended institutions under control of the Roman Catholic Church. This group, incidentally, had the highest percentage of students coming from families having a 1953 income of $10,000 or more. Third in rank are the students in church-related non-Catholic institutions, who reported a median family income of $5,866 for 1953.

One student in five attending the institutions in this study came from a family whose 1953 income was as much as $10,000; one in 7 in the publicly controlled, and 3 in 10 in the privately controlled institutions. More than one-fourth of the students came from families with annual incomes under $4,000. One-eighth of the families of students in publicly controlled institutions had incomes under $3,000 as compared with 9 percent in privately controlled institutions.

The difference between the highest and lowest median incomes is more than sufficient to pay the average annual amount expended by students in publicly controlled institutions. Table 33 shows that there was an average difference of more than $1,300 between the annual incomes of parents whose children attended publicly controlled institutions and the annual incomes of parents whose children attended privately controlled institutions. The figures

Table 33.—Percentage distribution of estimated 1953 family income, according to type of control of institution attended

Income group	Percentage, by type of institutional control					
	Grand total	Public control	Private control			
			Total	Independent of church	Church-related non-Catholic	Roman Catholic
Less	0.46	0.40	0.53	0.59	0.15	0.91
$0 to $999	1.87	1.41	1.33	1.38	1.50	.61
$1,000 to $1,999	2.76	3.13	2.30	2.30	2.10	2.73
$2,000 to $2,999	6.40	7.60	4.90	5.01	4.64	4.55
$3,000 to $3,999	14.23	16.88	10.91	9.82	14.07	12.42
$4,000 to $4,999	14.36	16.58	11.59	10.78	13.92	12.73
$5,000 to $5,999	14.76	16.48	12.59	11.87	15.72	11.51
$6,000 to $6,999	10.22	10.18	10.26	10.11	10.93	10.00
$7,000 to $9,999	14.10	13.47	14.89	16.13	13.72	10.30
$10,000 or more	21.84	13.87	30.70	32.01	24.26	34.24
Total number	7,644	4,253	3,391	2,998	668	330
Median income	$5,706	$5,243	$6,570	$6,816	$5,866	$6,454

indicate that the parents of students in publicly controlled institutions pay as high a percentage of their income after taxes for college expenses as do the parents of the students in privately controlled institutions.

Student Earnings

The students who attended publicly controlled institutions not only came from lower income families, but devoted more time to self-support and earned a greater percentage of their expenses than did students in privately controlled institutions. Only 35 percent of students in publicly controlled institutions earned any expenses during the first registration period, but they earned a median of 45 percent of their expenses during the first semester, term, or quarter. The 29 percent of students in privately controlled institutions who were earning while learning paid a median of only 27 percent of their expenses with their earnings.

What is the relationship between working one's way through college and persistence in college? During the first registration period, 38 percent of the men and 22 percent of the women earned some of their expenses. During the period after the first registration period of the freshman year, nearly 45 percent of the men who remained earned some of their expenses (see table 34) for the same period, and only 25 percent of the women who remained earned a portion of their expenses. The percentages, by sex, for the remaining periods of attendance (sophomore, junior, and senior years) for those who remained tended to be stabilized at the 45 and 25 percent levels. The reports of men for the last half of the freshman year furnish a representative story of the relationship between earning expenses and persistence in college.

The only group of men in which more than one-half earned some of their college expenses consisted of those who dropped out during or at the end of the second year. Of the nearly 4,000 men who survived the first registration period and entered the second, 4.7 percent reported that they earned all of their college expenses. The percentage for graduates was 3.1, and the highest percentage, 7.8, was for the students with records of intermittent attendance. Differences between the several attendance groups do not provide convincing evidence of the probability that earning part or all of college expenses seriously affects persistence in college.

The amount of time devoted to self-support has some significance in interpreting length of attendance and financial data. The percentages of students estimating various numbers of hours

given to earning their way are shown in table 35. Of all respondents, 31.8 percent reported that they devoted some time to self-support during the 4-year period as compared with 44.5 percent for men during the last half of their freshman year (table 34). Detailed tabulations not reproduced here show that students who reported time devoted to self-support during their first registration period generally continued to work for self-support throughout their attendance. It is noted parenthetically that the wavy effect observable in table 35 persists through the other four reporting periods due, no doubt, to the characteristic tendency in

Table 34.—Percent of expenses men students earned during last half of freshman year, by period of attendance

Period of attendance	Percent of men earning various percentages of college expenses						
	None	1–19	20–39	40–59	60–79	80–99	All
Beyond 1st registration period, not more than 1 year	57.0	12.2	10.4	6.8	4.0	3.2	6.4
Beyond 1 year, not more than 2 years	49.0	12.6	10.7	8.0	7.4	4.9	7.4
Beyond 2 years, not more than 3 years	57.0	14.0	8.9	7.7	4.7	2.6	5.1
Beyond 3 years, not graduated	54.1	13.7	9.9	8.4	3.5	5.8	4.6
Graduated in 1954	57.0	14.0	10.3	7.0	5.4	3.2	3.1
Other	56.3	8.7	8.7	11.7	3.9	2.9	7.8
Total	55.5	13.2	10.2	7.5	5.2	3.7	4.7
Total number of men	2,207	527	405	299	208	146	186

Table 35.—Hours per week students devoted to self-support during first registration period

Weekly hours devoted to self-support	Percentages by type of institutional control					
	Grand total	Public control	Private control			
			Total	Independent of church	Church-related non-Catholic	Roman Catholic
None	68.20	66.15	70.71	69.89	71.49	74.78
1 to 4	2.86	2.49	3.32	3.72	2.90	1.45
5 to 8	5.22	4.66	5.89	6.60	8.23	3.48
9 to 12	7.11	6.84	7.45	8.16	6.71	4.06
13 to 16	4.54	4.86	4.16	4.19	3.05	6.09
17 to 20	5.06	6.28	3.56	3.50	2.90	5.22
21 to 24	1.29	1.44	1.11	1.15	1.22	.58
25 to 28	1.96	2.39	1.44	1.37	1.07	2.61
29 to 32	2.03	2.59	1.35	1.41	1.22	1.16
33 or more	1.72	2.30	1.02	1.02	1.22	.58
Total number	7,437	4,095	3,342	2,341	656	345

estimating to report "round number" estimates, in this case, multiples of 10.

Of the 7,437 students who gave an estimate of the amount of time they devoted to self-support during the first registration period, 425, or 5.7 percent, worked 25 or more hours per week and 7.0 percent worked more than half-time on the basis of a 40-hour week. In publicly controlled institutions the percentage working more than half time was 8.7 as compared with 4.9 percent in privately controlled institutions.

Tables 33 and 35 tell a consistent story. There is nothing startling or unexpected in the fact that the higher the family income, the fewer hours the student devoted to self-support. The higher the parent's income the greater the probability that the son or daughter attended a privately controlled higher educational institution and more frequently one independent of church. Table 34 points to the conclusion that working to earn expenses was practiced by men in about equal amount regardless of length of attendance.

Scholarship Funds

The extent to which reporting students defrayed their expenses at institutions of higher education by using scholarship funds is set forth in table 36. About one-fourth of the students who reported received some scholarship aid. One-sixth received some but less than enough to cover 20 percent of their expenses. One-twentieth received enough scholarship assistance to cover from 20 to 39 percent of their expenses.

One tendency noticeable in table 36 is that more scholarship funds are allocated to the men than to the women. Only in the group which received some scholarship aid but less than enough to cover 20 percent of expenses do we find the percentage of women higher than of men.

Data on high school standing and scholarship holding were

Table 36.—Percent of total college expenses defrayed from scholarship funds, by sex

Sex	Percent of students by percentages of expenses					
	None	1-19	20-39	40-59	60-79	80-100
Men	74.8	14.7	5.5	2.8	1.3	.9
Women	74.6	19.2	4.1	1.4	.5	.2
Total	74.8	16.6	4.9	2.2	.9	.6

available on 3,544 men. Of these, 1,132, or 31.9 percent held scholarships averaging 19.6 percent of their expenses. There were 19, or 1.7 percent, of the male scholarship holders in the bottom tenth of the high school class; 2.7 percent in the bottom fifth; 13.8 percent in the lower half; 58.3 percent in the top fifth; and 33.7 percent in the top tenth of their high school graduating classes. The mean high school tenth for men who held scholarships was 3.41 and for nonscholarship men it was 4.65.

Records of high school standing and scholarship holding were available on 2,506 women. Of these, 688, or 27.5 percent, held scholarships averaging 15.8 percent of their expenses. Only 1 woman from the bottom tenth of the high school class had a scholarship, paying 45 percent of her expenses; 11 or 1.6 percent were in the lower half; 400 or 58.1 percent in the top tenth; and 570 or 82.8 percent in the top fifth. The mean high school tenth of women scholarship holders was 3.20 and for nonscholarship holding women it was 3.53.

The mean high school tenths of scholarship holders, for both men and women, are significantly higher than of nonscholarship holders. There is, however, sufficient range in the distributions, particularly for men, to suggest that scholarships are not reserved exclusively for scholars. No information was reported on the nature of the scholarships received except for an occasional notation that veterans benefits were involved. These cases were excluded from the tabulations.

There were 3,777 men with records of placement-test standing and scholarship holding of whom 1,181 or 31.3 percent received scholarship assistance amounting to an average of 19.3 percent of their expenses. Of these, 54 or 4.6 percent stood in the bottom tenth on the college placement tests; 120 or 10.2 percent in the bottom fifth; 392 or 33.2 percent in the lower half; 395 or 35.9 percent in the top fifth; and 219 or 18.5 percent in the top tenth on the placement tests. The mean placement test-tenth for men who held scholarships was 4.87, and for other men 5.56.

The number of women with records on both placement-test standing and scholarship holding was 2,877, of whom 735 or 25.5 percent held scholarships covering 15.1 percent of their expenses. There were 20 women scholarship holders or 2.7 percent in the bottom placement-test tenth; 49 or 6.7 percent in the bottom fifth; 204 or 27.8 percent in the lower half; 274 or 37.3 in the top fifth; and 152 or 20.7 in the top tenth of placement-test standings. The average placement tenth for women scholarship holders was 4.46, which is significantly higher than 5.60, the average placement tenth of women who were not scholarship holders.

The study has demonstrated that attrition rates are not entirely determined by student ability, as measured by standing in high school class or in college placement tests. The first registration period grades earned by students who discontinued emphasized the loss of superior students. Table 65 in appendix C shows, for scholarship holders only, the mean percent of total college expenses defrayed from scholarship funds, by standing in high school graduating class and in college placement tests, by sex. Apparently considerations other than general scholastic ability are taken into account when some scholarships are awarded. Only 19 male scholarship holders were in the bottom tenth of the high school graduating class, but the mean percent of their total college expenses defrayed from scholarship funds was 27.6 whereas 381 male scholarship holders standing in the top tenth of the high school had a mean of 21.6 percent of their total college expenses defrayed from scholarship funds.

Students whose maximum period of attendance was one registration period (semester, quarter, or term) reported a median expenditure of $750 for educational and living costs. An average of $37 was paid out of scholarship funds. This was 4.9 percent of the total expenses for all first period dropouts. Students who attended more than 1 registration period but not more than 1 year spent a median of $1,430, of which an average of 4.3 percent, or $61.50, was from scholarship funds. Students attending more than 1 year but not more than 2 years spent about $2,100, of which an average of 3.2 percent, or $67.20, was scholarship money. Those who dropped out during or at the end of the third year spent $3,560, and an average of 4.6 percent, or $163.75, was scholarship money. Fourth-year entrants who did not graduate spent $4,900, and an average of 5.3 percent, or $260, represented scholarship funds. Graduates in regular progression reported a median total expenditure of $5,020 of which 6.4 percent, or $320, came from scholarship funds.

When first registration grades for students with varying amounts of scholarship assistance were examined, it was found that the 101 students who defrayed between 60 and 100 percent of their total college expenses with scholarship money had a 2.30 quality point average, which is 0.30 above *C* average. Table 37 shows the grade averages, by sex, for the students having various percentages of expenses covered by scholarship funds. The 1,614 scholarship holders who paid from 1 to 50 percent of their expenses with scholarship funds had, for the first semester, a quality point average of 2.65. The 173 students who had from 50 to 100 percent of their expenses paid from scholarship funds

Table 37.—First registration period grades and scholarship holdings

Percent of expenses paid from scholarship	Numbers and mean quality point averages [1]					
	Total		Men		Women	
	Number	Quality point averages	Number	Quality point averages	Number	Quality point averages
None	4,496	2.25	2,441	2.10	2,055	2.42
1 to 19	1,237	2.62	753	2.48	484	2.83
20 to 39	303	2.75	189	2.68	114	2.36
40 to 59	146	2.58	105	2.46	41	2.89
60 to 79	58	2.40	44	2.27	14	2.79
80 to 100	43	2.17	38	2.13	5	2.50
Total scholarship holders	1,787	2.62	1,129	2.49	658	2.75
Grand total	6,288	2.35	3,570	2.22	2,713	2.51

[1] The calculation of the quality point averages was based on values of 1.0 for grade of *D*, 2.0 for *C*, 3.0 for *B*, and 4.0 for *A*.

had a quality point average of 2.36, which is about average for all students but considerably below the average of the scholarship holders who defrayed less than 50 percent of their expenses with scholarship funds. The evidence in the study points to the conclusion that there is some waste and inefficiency in the administration of scholarship funds in higher education.

Information from the students in the sample applied to the total freshman enrollment in the fall of 1950 indicates that nearly $103 million of scholarship money was spent annually by undergraduate students during the 4-year period, 1950–54. Of the $103 million, 4.8 percent was used in defraying expenses of students who remained in the institution of first registration no more than 1 year. An additional 5.5 percent was used by students whose longest period of attendance was 2 years. Dropouts during the third and fourth year used 13 percent of the scholarship funds. The other nongraduates spent 1.8 percent of the scholarship funds during the 4-year period. The results of the extrapolation are as follows:

- Of the $102,700,000 expended annually in the form of scholarship aid during the 4-year period from 1950 to 1954, 75 percent, or $77 million was spent on graduates.
- Of the half million entrants in 1950, 240,600 graduated in 1954 at an average cost in scholarship funds of $320.
- The difference between the total amounts expended for scholarships and the amount spent on graduates was $25,700,000 which at the rate of $320 per graduate would produce more than 80,000 additional graduates.

It has not been possible to examine in detail the relation between financial need and the extent of scholarship aid. Gross comparisons show that large numbers of students from homes with high family incomes receive scholarship assistance. Further study of the data must be made, however, before a definitive statement can be made with reference to relative need. Factors such as numbers and ages of siblings, type of institution attended, subject-fields of interest, and reasons for transfer and discontinuance must be considered.

A cooperative research study begun in 1957 and coordinated in the Office of Education in which 20 colleges and universities are participating seeks much more detailed information on the relationships of scholarship funds, student loan funds, and student work opportunities to entrance, performance, and persistence in college. The report of this cooperative study will include certain comparisons with the findings of the retention and withdrawal study.

Apart from the question of financial need, there is evidence in the present study that scholarship money was used to defray the expenses of students of marginal ability while students of demonstrated ability dropped out of college because of financial difficulties. The facts provoke certain questions such as: Would the interests of the individual institutions of higher education and of society in general be better served by the primary utilization of scholarship funds and other available resources, such as loan funds and work opportunities, to insure the retention of students of proven ability rather than for the purpose of attracting promising students? Would the privileges and opportunities of higher education be denied to a significant number of able and highly motivated secondary school graduates if a minimum amount of scholarship aid were available for the first registration period?

Chapter 8

Home Location, College Housing, and Activities

THIS CHAPTER reports the relationships between persistence in college and (1) proximity and accessibility of home, (2) housing situation, (3) membership in fraternity or sorority, and (4) participation in extracurricular activities.

The graduation rate among men who lived within convenient daily traveling distance of the college during the first registration period was 11.1 percent lower than among men who lived beyond convenient daily traveling distance—38.9 percent versus 50.0 percent (see table 67 in appendix C). The corresponding percentages for women students were 40.8 versus 46.8 (see table 68). After first registration period dropouts had been eliminated, men living within convenient daily traveling distance for the remainder of the first school year had a graduation rate of 43.7 percent, whereas men living beyond convenient daily traveling distance had a graduation rate of 55.4 percent (see table 70, p. 168).

The weight of other evidence must be considered before generalizations are made about the relationship of home location and persistence in college. Some of the factors are suggested in tables 38 and 39. Institutions under private control had larger percentages of out-of-State students than had publicly controlled institutions, 49 percent versus 12 percent; 45 versus 12 percent for men, and 54 versus 12 percent for women. Privately controlled institutions also graduated a larger percentage of their 1950 entrants in 4 years, 48 percent as against 33 percent for publicly controlled institutions (table 8).

Table 38.—Percentage distributions of students according to home location in relation to college location during first registration period by institutional control, by sex

Location of home in relation to college	Men					Women				
	Total	Public control	Private control			Total	Public control	Private control		
			Total	Independent of church	Church-related			Total	Independent of church	Church-related
Within convenient daily traveling distance	42.5	44.6	39.8	40.6	37.5	37.4	42.8	30.9	32.5	28.0
In same city or county	28.5	28.9	28.0	29.2	24.8	22.8	25.4	19.3	22.2	14.0
Out of same city or county, same State	11.6	14.8	7.4	7.0	8.7	11.6	15.4	6.6	5.5	8.7
Out of State	2.4	.9	4.4	4.4	4.5	3.0	1.5	5.0	4.8	5.3
Beyond convenient daily travel distance	57.5	55.4	60.2	59.4	62.5	62.6	57.7	69.1	67.5	72.0
In same city or county	1.9	1.7	2.2	2.9	.2	2.2	2.4	1.8	2.2	1.1
Out of same city or county, same State	31.3	42.2	17.4	18.3	14.9	33.3	44.5	17.9	16.1	21.4
Out of State	24.3	11.5	40.6	38.2	47.4	27.1	10.8	49.4	49.2	49.5
Total out of State	26.7	12.4	45.0	42.6	51.9	30.1	12.3	54.4	54.0	54.8
Total number of students	4,812	2,704	2,108	1,553	555	3,519	2,026	1,493	964	529

Furthermore, the mean high school tenth of those enrolled in privately controlled institutions was higher, 2.94 as against 3.32 for the publicly controlled institutions (see chap. 3, page 17). The annual family income of students who attended privately controlled institutions was $1,327 above that of students in publicly controlled institutions (table 33). Likewise, 56.2 percent of the men (2,704 of 4,812) and 57.6 percent of the women (2,026 of 3,519) who furnished data on home location had enrolled in publicly controlled institutions. Finally, liberal arts colleges and technological institutions had the highest percentages of students from homes located beyond convenient traveling distance (table 39), and these institutions had the highest persistence records (table 8, p. 16).

Because all of the factors enumerated were found to contribute in varying measures to persistence in college, it would be very difficult to make a case for or against the student whose home was in the college community. The weight of evidence points to the conclusion that location of a student's home in relation to college had no significant bearing on his chances of graduation.

Some light is thrown on relationships between location of home and persistence in college by the data on where students lived while attending college. Table 71 (appendix C) shows that about 30 percent of students attending publicly controlled institutions lived with parents, relatives, and friends when they started to college as compared with 27 percent of students who were attending privately controlled institutions, a difference too small to be significant.

Because reports on housing arrangements during the first registration period indicated unsettled conditions, arrangements during the second registration period were selected as the basis for comparing persistence. Table 40 shows that, for both men and women, residents in the college community had a significantly better persistence record than had students who lived with parents, relatives, or friends. Again the difference was greater for men than for women.

Men who graduated and were members of social fraternities received slightly, but not significantly, lower grades than did men graduates who were not members. Women who graduated and were members of social sororities made significantly higher grades than did the contemporary women who were not members of social sororities. The comparisons are shown in table 41. The means are expressed in terms of quality point average accumulated to the time of graduation. A grade of *A* was given a point value of 4 and a *D* grade a value of 1.

Table 39.—Home location of students by type of institution in which they first registered

Location of home in relation to college	Percent by type of institution					
	Total 4-year	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Within convenient daily traveling distance	39.1	45.9	41.0	28.4	43.5	58.8
In same city or county	24.2	30.4	28.7	15.0	25.4	53.4
Out of same city or county, same State	12.1	12.5	10.5	9.8	17.1	4.7
Out of State	2.8	2.9	1.8	3.6	1.0	.7
Beyond convenient traveling distance	60.9	54.1	59.0	71.6	56.5	41.2
In same city or county	2.1	2.2	1.6	1.4	3.2	1.6
Out of same city or county, same State	33.7	35.5	28.3	27.8	45.2	9.7
Out of State	25.1	16.4	29.1	42.4	8.1	29.9
In same city or county	26.3	32.7	30.3	16.4	28.7	55.0
Out of same city or county, same State	45.8	48.0	38.8	37.6	62.3	14.3
Out of State	27.9	19.3	30.9	46.0	9.0	30.7
Total number of students	7,773	3,375	515	2,743	1,140	558

Table 40.—Housing situation of students who were enrolled at the beginning of the second registration period of the first year in relation to persistence in college, by sex

Period of attendance	Percent in each housing situation			
	Men		Women	
	With parents or relatives	In college community	With parents or relatives	In college community
Entered 2nd registration period, not beyond 1 year	14.6	13.2	20.4	17.0
Beyond 1 year, not more than 2 years	21.8	13.7	26.0	24.2
Beyond 2 years, not more than 3 years	7.3	5.9	6.6	5.4
Beyond 3 years, not graduated	10.9	10.2	4.9	2.6
Graduated in 1954	45.4	57.0	42.1	50.8
Total number of students	1,228	2,765	773	2,394

Differences between graduates and nongraduates with respect to fraternity or sorority membership are shown in table 42. Membership status at the end of the freshman year is described and percentages are given for graduates and nongraduates.

The table shows that of the 2,255 men graduates from the institution of original registration who reported, 4.4 percent said

that no fraternities were recognized on the campus of the institution in which they first registered; 41.1 percent said that fraternities existed but that they were not members, and 30.3 percent said that they were members or pledges of national social fraternities. More than 50 percent of the nongraduates were nonfraternity men. The representation of fraternity men was higher in the nongraduating group.

The national sororities were also better represented among the graduates than among the nongraduates. On the other hand, the local sororities had a higher representation among the nongraduating women than among the graduating women. By the end of the freshman year, 26.6 percent of the men were members or pledges of national social fraternities, and 18.8 percent of

Table 41.—Mean grades earned by members and nonmembers of fraternities and sororities—graduates only

Status	Fraternities		Sororities	
	Number	Mean grade	Number	Mean grade
Members	429	2.51	228	2.67
Nonmembers	690	2.55	548	2.54

Table 42.—Fraternity and sorority membership of graduates and nongraduates

Fraternity or sorority membership status at end of freshman year	Percent in each membership status			
	Fraternities		Sororities	
	Graduates	Non-graduates	Graduates	Non-graduates
A. None recognized on campus	4.4	9.7	7.1	14.3
B. Organizations existed—nonmember	41.1	50.3	46.3	44.1
MEMBER OR PLEDGE OF A LOCAL				
C. Social	4.8	4.8	6.2	7.8
D. Professional	.8	.8	.9	1.1
E. Honorary	1.0	.8	1.5	1.9
MEMBER OR PLEDGE OF A NATIONAL				
F. Social	30.3	22.6	22.4	15.8
G. Professional	2.4	1.3	1.7	1.4
H. Honorary	4.8	2.2	4.0	2.6
I. Member of a club that made same demands on time and resources as social fraternity or sorority	10.4	7.5	10.0	11.0
Number of students	2,255	2,076	1,560	1,837

women students were pledges or members of national social sororities. Part of this difference is due to the greater percentage of women attending institutions in which sororities were not recognized on the campus. The graduation and nongraduation percentages are based on the numbers of students who persisted beyond the first registration period, which accounts for the seemingly high graduation rates as compared with 39.5 percent for all students in the study.

Of the 300 men who were on campuses where no fraternities were recognized, 99, or 33 percent, graduated. Of the 1,972 men who reported that fraternities existed but that they were not members, 927, or 47 percent, graduated. Local social fraternities had a graduation rate of 52 percent; local professional, 54 percent; local honorary, 58 percent; national social, 59 percent; national professional, 68 percent; national honorary, 71 percent; and club members had a graduation rate of 60 percent.

Of the 873 women who reported that there were no recognized sororities on their campus, 111, or 28 percent, graduated. Of the 1,532 women who said sororities existed but that they were not members, 722, or 47 percent, graduated. Local social sororities had 40 percent of their membership graduate; local professional, 40 percent; local honorary, 40 percent; national social, 55 percent; national professional, 50 percent, and national honorary, 57 percent. Girls who were members of a club that made the same demands on time and resources as a social sorority had a graduation rate of 44 percent.

Fraternity or sorority membership was clearly associated with persistence to graduation. Institutions which had no recognized fraternities or sororities had a significantly lower graduation rate than did institutions in which an opportunity for some type of fraternity or sorority membership was available. This is a statement of finding, not a statement of casual relationship.

The mortality rate through the third year for girls who were not members of sororities in institutions having sororities was 46 percent. The corresponding mortality rate for men in relation to fraternities was 36 percent. The mortality rate during the second and third year for girls who were members of local social sororities was 54 percent and of national social sororities, 37 percent. During the second and third years local social fraternities lost 38 percent of their members and national social fraternities lost 26 percent.

Comparison of mortality rates indicate that if women attending institutions having sororities were not members of a national social sorority, they were more likely to leave the institution than

the ones who were members. The mortality rate for members of local fraternities and sororities was higher than for students who were not members of any fraternity or sorority. Girls, particularly, commented on reasons for transfer or discontinuance saying that they had not been able to join the organization of their choice. The fact might indicate that a study in depth of this situation as a factor in student retention and withdrawal would be profitable.

What is the persistence prognosis for a freshman who gets in the whirl of school activities as soon as he lands on the campus? About one-third of the student respondents reported that they spent no time as participants in organized extracurricular activities. At the other extreme, nearly 2 percent reported that they spent 25 or more hours per week in such activities. For the two-thirds who reported some time devoted to extracurricular activities, the median number of hours per week spent by students in universities was 5.7; in technological institutions, 5.3; in liberal arts colleges, 5.5; in teachers colleges, 5.1; and in junior colleges, 6.3. The median for participating students in 4-year institutions was 5.5 hours per week.

There was no difference in the reported hours of participation between students in publicly controlled and privately controlled institutions. The median for church-related schools was 5.9; for non-public schools independent of church, 5.5; and for schools under control of the Roman Catholic Church, 5.2 hours per week. A comparison of these medians with the persistence records in table 8 shows that no consistent pattern of relationship is present. In other words, no prognosis is possible from these data.

The extent to which students participated in extracurricular activities during the first registration period, as measured by the number of hours per week they devoted to them, is not a reliable indicator of the length of time they will attend the institution of first registration. The percentage of men who participated in extracurricular activities was 68.6 during the first registration period and 74.5 during the remainder of the first year. The median number of hours per week for all men participants and nonparticipants during the first registration period was 3.7; for all men who graduated 3.8, and for nongraduating men, 3.5. The median number of hours per week devoted to extracurricular activities by men who participated was 6.5; 6.1 for graduates, and 7.0 for nongraduates.

The extent of first-semester participation in extracurricular activities by men and women respondents by length of attendance is shown in table 48.

Table 43.—Extracurricular activities and length of attendance

Length of attendance	Median number of hours per week, during 1st semester	
	Men	Women
Not beyond 1st registration	1.0	0.0
Beyond 1st registration, not beyond 1 year	3.6	2.1
Beyond 1 year, not beyond 2 years	3.4	3.0
Beyond 2 years, not beyond 3 years	4.1	2.7
Beyond 3 years, not graduated	3.4	2.2
Graduated in 1954	3.8	2.4
Total, nongraduates	3.5	2.5
Total number of students	1,343	1,075

The percentage of women who participated in extracurricular activities during the first registration period was 64.6. The median number of hours per week devoted to extracurricular activities by all women was 2.5; by girls who graduated 4 years later, the median number of hours was 2.4; and for nongraduates it was 2.5 hours per week. The median for all women participants was 4.4 hours per week; for participants who graduated, 3.9; and for nongraduates, 4.9 hours per week.

It is clear from the distributions and the medians by persistence groups that neither the type of activity nor the amount of time devoted to extracurricular activities during the first registration period is related to length of attendance in college. The total length of attendance of intercollegiate athletes is slightly, but not significantly, shorter than that of participants in intramural sports. Relatively few students participate in student government activities during the first year of attendance, but those who do have a significantly better record of persistence than the athletes have. The same is true, but in lesser degree, of participants in curriculum-related activities.

Summary

Although students who lived within convenient daily traveling distance of the institutions of higher education they attended had poorer average persistence records than students who lived beyond a convenient daily traveling distance, location of home was so closely related to type of institution attended that no inference of casual relationship could be made.

Students who lived in college dormitories or other college-

operated housing facilities had the best average persistence record, but again other factors reduced the significance of the finding.

Students who were members or pledges of fraternities or sororities had better persistance records and graduation rates in the institutions of first registration than nonmembers. Similarly, institutions having local or national social fraternities and sororities also had lower withdrawal rates than institutions without such organizations.

Extent of participation in organized extracurricular activities was not found to be related to persistence to graduation although nongraduates did devote more time to these activities during their first year than did graduates.

Chapter 9

The Students Who Transfer

THIS CHAPTER considers the number and percentage of students who transferred from one institution to another, time of transfer, type of institutions from which and to which the students transferred, reasons given for transferring, and the degee or level of importance assigned to these reasons.

The records of 12,591 students who enrolled as first-time students in 4-year institutions in the fall of 1950 show that 10.3 percent transferred to other institutions. Universities lost 9.3 percent of their original registrants by transfer, technological institutions 8.6 percent, liberal arts colleges 13.4 percent, and teachers colleges 7.5 percent.

The graduates among the 12,591 students in 4-year institutions numbered 4,977, leaving 7,614 who did not graduate in normal progression from the 4-year institutions of first registration. Of the 7,614 nongraduates, 1,302, or 17.1 percent, are known to have transferred to other institutions.

The figures in table 54 (appendix C) show that among those who discontinued their attendance during or at the end of the first year after original registration, 21.3 percent transferred to other institutions at some time before the fall of 1954. This table shows a transfer rate of 28.2 percent for students who left the institution of original registration during or at the end of the second year. The corresponding transfer percentage for the third year is 19.1. Transfers amounted to only 0.1 percent among those students who discontinued their attendance during the fourth year. Records of transfer after the end of the fourth year were not available.

Table 44.—Time of transfer by control and type of institution—students entering first time in fall of 1950

Time of transfer	Percent transferring from —									
	All institutions	Control				Type				
		All Public	All Private	Independent	Church-related	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
Spring of 1951	6.58	7.66	5.43	6.08	4.40	9.79	13.05	5.43	7.63	1.34
Summer of 1951	4.27	3.04	5.57	4.28	7.66	3.12	11.59	5.23	4.58	2.68
Fall 1951	28.47	27.34	29.67	28.83	31.02	29.79	31.89	31.59	36.64	16.78
Spring 1952	5.97	6.74	5.15	5.86	4.01	7.71	14.49	5.43	3.05	3.36
Summer 1952	4.95	5.42	4.46	3.60	5.84	4.17	.....	4.03	5.35	8.73
Fall 1952[1]	33.08	33.82	32.31	30.40	35.40	27.50	14.49	28.57	27.48	56.38
Spring 1953	4.27	3.83	4.73	6.08	2.55	3.96	1.45	5.23	6.87	2.68
Summer 1953	1.36	1.85	.84	.68	1.09	1.46	1.45	1.21	1.53	1.34
Fall 1953, or later	11.05	10.30	11.84	14.19	8.03	12.50	11.59	13.28	6.87	6.71
Total	1,475	757	718	444	274	480	69	497	131	298

[1] Excess over fall 1951 in each of first five columns due to transfer from junior colleges. Fall 1951 transfers exceed fall 1952 transfers in 4-year institutions.

The times when students transfer from all types of institutions, including junior colleges, are shown in table 44. Information on time of transfer was available for a total of 1,475 students. Nearly 40 percent of all transfers had taken place by the fall of 1951. Transfers from privately controlled institutions during this period were slightly above those from publicly controlled institutions, with the highest percentage from church-related institutions.

Decision and action with reference to transfer was taken early by students originally registered in technological institutions, although the total number of transfers from technological institutions was only 69. The second highest percentage of early transfers came from the other specialized type of institution—the teachers colleges. The liberal arts colleges contributed the highest percentage of those who transferred after 3 years of attendance in the colleges of original registration. The probable reasons are twofold: The "Three-Two" Plan of liberal arts-engineering education no doubt contributed to the high percentage, and occupationally motivated college students probably had their eyes on other professional schools in universities.

The exodus by transfer is analyzed in terms of destinations in table 45. The table is read as follows: Of the students who transferred from universities, 43.81 percent went to other institutions in the same State. 12.17 percent transferred to other universities, and 31.64 percent went to other types of higher educational institutions. As for the size, 36.11 percent went to institutions in the same State that were smaller than the universities from which they transferred, and 7.70 went to institutions that were larger.

Attention is called to the fact that the reduction in choices is a factor in interpreting the figures relating to size. For example, 71.81 percent of students who transferred from universities went to smaller institutions, and 76.21 percent of students who transferred from liberal arts institutions went to larger institutions. Universities in the study were generally larger than the liberal arts colleges, and consequently their transferring students, a majority of whom went to different type institutions, had more smaller than larger institutions to choose from. The converse is true for the students originally enrolled in liberal arts colleges. The reader is cautioned against generalizing about the transfers from junior colleges because of the underrepresentation of junior colleges and particularly because of the overrepresentation of privately controlled junior colleges within the junior college sample reporting in the study.

Table 45.—Percent of transfer students going from several types of institutions

Transferred to another institution	Percent of transfers by control and type of institution from which transferred									
	All institutions	Control				Type				
		All Public	All Private	Independent	Church-related	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
A. In same State	45.10	57.36	32.11	33.70	29.62	43.81	37.14	35.40	69.40	55.23
1. Smaller	17.78	24.58	10.57	12.86	6.97	36.11	10.00	8.51	23.13	3.92
2. Larger	27.32	32.78	21.54	20.84	[illegible]	7.70	27.14	26.89	46.27	51.31
3. Same type[1]	8.17	9.09	7.18	8.42	5.23	12.17	12.86	5.61	15.67	2.29
4. Different type[2]	36.93	48.27	24.93	25.28	24.39	31.64	24.29	29.79	53.73	52.94
B. In another State	54.90	42.64	67.89	66.30	70.38	56.19	62.86	64.60	30.60	44.77
1. Smaller	20.47	22.15	18.70	17.74	20.21	35.70	30.00	15.28	11.94	6.21
2. Larger	34.43	20.49	49.19	48.56	50.17	20.49	32.86	49.32	18.66	38.56
3. Same type[1]	16.00	14.47	17.62	21.29	11.85	27.18	27.14	15.09	5.97	.98
4. Different type[2]	38.90	28.17	50.27	45.01	58.53	29.01	35.71	49.51	24.63	43.79
C. Smaller	38.25	46.73	29.27	30.60	27.18	71.81	40.00	23.79	35.07	10.13
1. Same type[1]	9.02	10.75	7.18	6.87	7.67	16.84	7.14	6.58	18.95	1.63
2. Different type[2]	29.23	35.98	22.09	23.73	19.51	54.97	32.86	17.21	26.12	8.50
D. Larger	61.75	53.27	70.73	69.40	72.82	28.19	60.00	76.21	64.93	89.87
1. Same type[1]	15.14	12.81	17.61	22.84	9.41	22.52	32.86	14.12	12.69	1.63
2. Different type[2]	46.61	40.46	53.12	46.56	63.41	5.67	27.14	62.09	52.24	88.24
E. Same type[1]	24.16	23.56	24.80	29.71	17.07	39.35	40.00	20.70	21.64	3.27
F. Different type[2]	75.84	76.44	75.20	70.29	82.93	60.65	60.00	79.30	78.36	96.73

[1] For example, university to university.
[2] For example, liberal arts college to technological institution.

An additional point of information not shown in table 45 may be of interest. The total percentage of faithfulness to type among transfers in 4-year institutions is 29.5. Students who originally registered in church-related institutions and later transferred showed the greatest tendency to switch to another type. The change was 82.9 percent from all church-related institutions, with 89.0 percent from non-Catholic institutions.

Students who transferred recorded their feelings or opinions regarding the relative importance of 10 reasons for transferring from the institution of original registration (see appendix B). Ratings ranged from 0 for no importance to 3 for great importance. Mean ratings by type of institutions from which the transfer was made are shown in table 46.

One participating liberal arts college had a junior college division which accounts for the rating of the first reason in the liberal arts college column. Subitem (e) on the report form appears as 2 items in the table. Failure of some students to record the date of transfer in item 17 accounts for the differences in total numbers of transfers in tables 44 and 46.

The small group of 69 transfers from technological institutions would apparently provide some interesting case studies. As a group they were the most dissatisfied, yet the record of the highest percentage transferring to the same type of institution was held by this group. Low grades, as a reason for transfer, had the highest mean rating of importance by transfers from technological institutions in spite of the fact that these institutions had the highest percentage of top-ranking high school graduates. The highest mean rating of importance given to change in curricular interests was that of transfers from technological institutions, but 40 percent went to other technological institutions.

Lack of interest in studies was rated higher in importance as a reason for transfer by the 69 transfers from technological institutions than by transfers from any other type of institution; yet the students who went to technological institutions had the highest mean scores on "occupational" reasons for going to college. Finally, the desire to attend a less expensive institution was rated higher by transfers from technological institutions than by any other group; yet the median family income of technological students was higher than for any other group. These apparent inconsistencies are cited to illustrate the risk of generalizing from a small number of cases.

The most important reason for transfer was general dissatisfaction, with students from privately controlled institutions independent of church showing the greatest discontent and transfers

Table 46.—Relative importance of reasons for transferring from one institution to another, by type of institution from which transfer was made

Reasons for transfer	Mean rating of level of importance by control and type									
	Grand total	Control				Type				
		All Public	All Private	Independent	Church-related	Universities	Technological institutions	Liberal arts colleges	Teachers colleges	Junior colleges
A. Enrolled in a junior college and completed my course	----------	0.569	0.332	0.080	0.726	----------	----------	0.017	----------	2.202
B. Curricular interests changed	0.780	.707	.847	.938	.701	0.889	1.174	.886	0.868	.300
C. Wished to attend less expensive institution	.500	.324	.424	.294	.625	.556	.710	.700	.279	.121
D. Grades too low to continue	.431	.429	.433	.520	.295	.673	1.246	.357	.257	.059
E. Wanted to be in a:										
Smaller institution	.360	.520	.206	.232	.167	.697	.210	.211	.452	.062
Larger institution	.351	.256	.461	.463	.457	.120	.148	.575	.703	.239
F. Wanted to be nearer home town	.642	.597	.697	.714	.670	.792	.515	.812	.529	.195
G. Generally dissatisfied	1.056	1.033	1.083	1.235	.847	1.268	1.420	1.163	1.274	.358
H. Completed preprofessional requirements	.256	.279	.240	.264	.201	.306	.159	.249	.301	.189
I. Not interested in what I was studying	.494	.485	.509	.574	.408	.658	.768	.256	.504	.143
Number of transfers	1,583	782	741	452	289	495	69	516	136	307

from church-related schools, the least. Desire to go to a smaller institution was about as important to transfers from universities as desire to go to a larger institution was to transfers from teachers colleges. The same reversal in rating of importance is observed when transfers from publicly and privately controlled institutions are compared.

Desire to be nearer home was rated greater in importance by students transferring from liberal arts colleges than by students transferring from other types of institutions. Nearly 72 percent of liberal arts college students and 54 percent of university students lived beyond convenient traveling distance of the institution of first registration. The marked tendency of the mean ratings to be parallel for desire to be nearer home and desire to attend a less expensive institution may be more than a coincidence.

Students who transferred were given the opportunity to write in additional reasons for transfer. Many of the "write-in" reasons were essentially rewordings of "given" reasons and were coded accordingly. A few of the additional reasons typical of those most frequently mentioned follow:

"Troubles with college alumni about money they had promised me."

"I wanted to be home and have good times more than I was interested in an education."

"I could teach out of (2d institution) teachers college in another year and I was anxious to support myself and pay own expenses rather than depend on the family."

"Allergies forced me to change major." (from veterinary medicine to podiatry.)

"My major, education, made it necessary to study in (another State) if to teach there."

"My greatest interest was in a naval career, and I was able to get an appointment to the U. S. Naval Academy."

"I was previously accepted at (2d institution) and only enrolled at (1st institution) for a year until our financial situation became clearer."

"(2d institution) had an ROTC program which I wished to enter."

"I disliked the recreational facilities of the town."

"Weather severity."

"Dissatisfied with athletic program."

"I wanted to get a fresh start at a new college. I became more interested in getting an education." (Transferred at end of 3 years.)

"To learn a technical subject before being drafted into army."

"I was asked to leave (1st institution) for disciplinary reasons."

"Completely disgusted with childish rules imposed—car rules and off campus restrictions."

"Transfer due to fact that (1st institution) dropped football."

"I wanted to work on a cooperative plan and gain job experience."

"It was my parents' idea, not mine, that I go to (1st institution)."

"Go to a college away from home."

"Antisemitism."

"Most of my friends were attending (2d institution)."

There is no significance in the order in which the special reasons for transferring are reported. Almost all reports of the students giving "other" reasons rated item G, "I was generally dissatisfied," as "Of great importance." This fact would indicate that the supplemental entries were made as footnotes to the very general item G.

Among students who transferred from 4-year institutions, general dissatisfaction ranked first in importance as the reason for transfer. Second in importance was change in curricular interest, paralleled by lack of interest in studies, and third was desire to be nearer home, paralleled by desire to attend a less expensive institution. Low grades and size of institution followed in order of importance as reasons for transfer.

Chapter 10

The Students Who Discontinue

REFERENCE was made earlier to the reporters' problem of maintaining lines of communication with the respondents. These lines are two-way, and frequently the difficulty is in the line from the reporter to the respondent. In spite of repeated try-outs of schedules and questionnaires, it seems inevitable that at least one item will be misinterpreted by some of the respondents, and item 18 of the Student Report Form (see appendix B) is an example. Item 18 begins with the expression, "If you discontinued college attendance • • •," and item 17 begins with, "If you transferred to another college or university • • •" A dichotomy was assumed when, in fact, it did not exist.

Clearly, many students could transfer and then discontinue, but their reasons for discontinuance under such circumstances could not be interpreted as entirely applicable to the institution of first registration. Students who transferred and went on to graduation but nevertheless reported on items 18 or 19, presumably because they thought they had "discontinued college attendance," were the statistical troublemakers. Considerable correspondence, both with institutions and with students, was devoted to clearing up problems that could have been avoided had the difficulty been foreseen when the schedule was prepared. Table 47 might well be called the result of salvage operations. The table attempts to reconcile time and situation by showing plans of dropouts to continue, and transfer and graduation status.

Table 47 shows that of the more than 4,000 respondents who dropped out of the institution of first registration, approxi-

mately one-third, 33.6 percent, transferred to other institutions, and nearly one-fourth, 24.0 percent, transferred and graduated from other institutions.

Table 47.—Status of dropouts from institutions of first registration at time of response

Situation at time of response	Percent, by type of institution of first registration				
	Grand total	Publicly controlled	Privately controlled		
			Total	Independent of church	Church-related
No plans to return	10.9	11.4	10.2	9.6	11.1
Will return	31.3	33.9	27.3	29.6	23.4
Uncertain	18.8	21.9	13.9	12.7	16.0
In college	1.9	1.7	2.2	2.3	1.9
Transferred and graduated	24.0	19.6	31.0	30.7	31.5
Discontinued after transfer	9.6	8.8	10.7	9.9	12.1
Other	3.5	2.7	4.7	5.2	4.0
Number of students	4,063	2,488	1,575	998	577

The institutions under public control showed the higher percentage of former students, who at the time of response indicated that they planned to return (whether to the same or a different institution was not indicated) or were uncertain. This group comprised almost 56 percent of those who had dropped out of the publicly controlled institutions, compared to 41 percent who had dropped out of privately controlled institutions and who were planning to return or were uncertain. On the other hand, the respondents who had dropped out of privately controlled institutions showed a greater tendency for action. Nearly 44 percent of this group had already returned to some institution compared to only about 30 percent who had dropped out of publicly controlled institutions.

Only respondents are represented in table 47, and the reader is reminded that they tend to portray the positive side of the picture. The information can be summarized as follows: About one-third of dropouts from the institutions of original registration transferred to some other institution, some being on record as having made several transfers, and approximately three-fourths of the transfers graduated. The highest percentage of transfers were from church-related institutions, 43.7 percent, of whom 72.2 percent graduated. Some are on record as having made several transfers.

The comments made by the student usually explained the circumstances. The most frequent comment among those who

planned to return was made by married women who had left college either to follow their husbands to military posts or to take full-time jobs. More than one-half of the students who considered themselves in the "discontinued" classification indicated that, *at the time of dropout*, they planned to return to college although not necessarily to the institution of first registration.

Higher educational institutions do not usually include upper age limits in admission requirements, consequently no definite number can be given to describe the final dropout rate. It is not unusual to find in college classrooms today wives who dropped out of college during World War II to be with their husbands. Combined with this difficulty is the fact that relatively meager information was available in institutional files on dropouts who did not respond. The reader must interpret the tables in the text and appendix that deal with students who discontinue in the light of these limitations.

Table 48 shows that gradations in importance of reasons for discontinuance were more pronounced for men than for women.

Table 48.—Reasons for discontinuing college attendance—percentage comparisons between sexes and among reasons

Reasons for discontinuance	Percent rating of some importance		Mean rating of level of importance	
	Men	Women	Men	Women
(a) Illness or physical disability (self)	7.32	10.07	0.178	0.339
(b) Illness or physical disability (family)	8.65	10.07	.191	.227
(c) Financial (self)	41.38	36.36	1.135	.821
(d) Financial (family)	29.66	23.26	.614	.686
(e) I found college work too difficult	26.51	19.94	.389	.320
(f) I was needed at home	12.89	12.51	.267	.266
(g) I had marital difficulties	3.62	3.32	.068	.062
(h) I took a full-time job	34.15	37.15	.902	.963
(i) I was lonesome and unhappy	14.69	16.55	.289	.397
(j) I planned to be married soon	10.69	49.20	.296	1.366
(k) Commuting took too long	6.55	6.55	.104	.112
(l) I was discouraged by low grades	40.00	22.92	.835	.467
(m) Military service (drafted)	24.62	0.00	.669	.000
(n) Military service (enlisted)	45.17	.97	1.316	.034
(o) I lacked interest in my studies	48.00	33.01	.950	.633
(p) Dismissal for academic failure	13.14	6.90	.462	.177
(q) Placed on probation for academic reasons	21.24	10.09	.445	.216
(r) Placed on probation for reasons other than academic	2.00	.44	.039	.019
(s) Dismissal for reasons other than academic	2.76	1.08	.067	.026
(t) Suspended for disciplinary reasons	1.66	.35	.028	.007
(u) My housing situation caused trouble	6.41	5.31	.118	.113
Number of students	1,450	1,130	1,450	1,130

Any comparisons involving standing in high school class must take into account the unequal distribution of men and women by high school fifths (see table 49). For example, in table 74, appendix C, the 17 women in the bottom fifth of the high school class frequently rated reasons at levels of importance fairly close to the ratings given by the 405 women in the top fifth, whereas ratings of men in the top and bottom fifths were significantly different for 13 of the 21 items.

In spite of the dissimilarity for men and the similarity for women in the mean ratings of top and bottom high school fifths, when the reasons for discontinuance were ranked in order of importance for each fifth, it was found that only 9 reasons among the 21 in the list appeared in the first 5 for both men and women. The reasons and their position for each fifth, by sex, are:

Rank order of importance	Men					Women				
	Top fifth	2d fifth	3d fifth	4th fifth	Bottom fifth	Top fifth	2d fifth	3d fifth	4th fifth	Bottom fifth
1	N	N	N	N	N	J	J	J	H	J
2	O	O	O	O	O	H	H	H	J	H
3	C	C	C	C	L	C	C	O	L	O
4	D	M	L	L	M	D	D	C	O	L
5	M	D	M	M	C	O	L	D	C	Q
Number	249	328	276	188	118	405	243	130	80	17

The key to the letters in the rankings above is:

(C) Financial (self)
(D) Financial (family)
(H) I took a full-time job
(J) I planned to be married soon
(L) I was discouraged by low grades
(M) Military service (drafted)
(N) Military service (enlisted)
(O) I lacked interest in my studies
(Q) Placed on probation for academic reasons

Men rated enlistment for military service as the most important reason for discontinuing attendance, and the degree of importance increased as the standing in high school class went down from ratings of 1.161 for the top fifth to 1.420 for the fourth fifth (see table 74 in appendix C). The men respondents from the nonconforming bottom fifth of the high school graduating class did not support the trend. The reason rating second in level of importance among men was lack of interest in studies. But in contrast to the rating of the first ranking item, the ratings of

this reason decreased as standings in high school graduating class decreased. But again the bottom fifth did not conform and this time increased the rating.

Personal and family finances were rated of more importance by the men in the top fifth of the high school class than by any others. In fact, there is a downward trend in importance with lower standing in high school class. The reverse is true with reference to importance attached to being drafted for military service as a reason for discontinuance which had a general upward rating in importance as standing in high school class went down. The magnitude of the two relationships just mentioned is not of a degree which would permit broad generalizations. However, it is true that the "better" men, as measured by standing in high school class, were more concerned about finances than were the "poorer" men, as measured by the same standards, and they were less concerned about the draft than the "poorer" were.

Other mean ratings are given in tables 74 through 78 in appendix C which show differences between men and women by high school and placement-test standing. Some of the differences by standing will surely lead to conjecture. For example, the level of importance given by men to lonesomeness and unhappiness, item (i), as a reason for discontinuance generally decreased with the level of high school class standing. Sociologists probably would have one explanation for it, psychologists another, and football coaches still another. The progressively higher mean rating of reason (k), "Commuting took too long," by men is roughly paralleled in the rating by women of reason (u), "My housing situation caused trouble." Except for those in the bottom fifth there was a rapid rise in importance to women of the reason, "Dismissal for academic failure," with lowered standing in high school class.

Further comparisons can be found in tables 74 through 78 between men and women in their rating of levels of importance of the reasons for discontinuing college attendance by high school and placement test standing. Attention has been called to the decreasing importance with lower standing of lonesomeness and unhappiness on the part of men. The exact reverse did not quite hold true for women, but a trend in the opposite direction was very pronounced. Discouragement because of low grades became increasingly important to both sexes as the high school rank decreased. Concern about academic problems was more uniformly distributed among men that it was among women. Women showed more concern as standing in high school class went down.

Responses from 875 women who discontinued college attendance showed that by far the most important reason for discontinuance involved plans for early marriage. The "other" reasons, which were frequently given as footnotes, made it clear that many had married before discontinuing. Their explanatory notes also showed that, for a great many women respondents, reason (h), "I took a full-time job," was closely associated with the most important reason.

Further gross comparisons of the reactions of men and women are presented in table 48. The percentage of 1,450 men respondents who rated item (a), "Illness or physical disability (self)," of some importance—either slight, moderate, or great—was 7.32. The mean degree or level of importance was 0.178. Similarly, the corresponding percentage of 1,180 women who indicated that the item was of some importance was 10.07, and the mean rating was 0.339.

The figures speak for themselves and extended comments would be redundant, but it should be noted that the figures in the percentage columns of table 48 do not produce the same rankings of reasons for discontinuance as those in the mean rating columns. The percentages do not reflect relative importance beyond "none," that is, slight, moderate, and great, whereas the mean ratings are computed by using the weightings 0, for none; 1, for slight; 2, for moderate; and 3, for great importance.

The addition of 291 men and 255 women for whom standings in high school graduating class were not reported changes the mean ratings so that the top five reasons for men are, (n), (c), (o), (l), and (m), and for women (j), (h), (c), (d), and (o). The rank order for all men respondents placed personal finances in second place with a significantly higher mean rating than lack of interest in studies. The rank order for all women is the same as that for the women in the top fifth of the high school graduating class.

More than one-fourth of the men and nearly one-fifth of the women who discontinued college attendance indicated that difficulty with their college work had been a factor of some importance in their decision to discontinue. Comparison of the percentages and mean ratings on item (e), "I found college work too difficult," for men and women with the percentages of the two sexes from each fifth of the high school graduating class tends to support the hypothesis that men who are in the same fifth of the high school class as women will find college work less difficult than will the women. The hypothesis is further supported by the fact that,

of the students with the same high school standing, men have significantly higher placement-test standings that have women. If the ratings on item (e) represent realistic appraisals of the difficulty of college work, the admissions officer is justified in a differential appraisal of high school ranks of men and women.

Attempts to reconcile the foregoing hypothesis and the students' appraisals of items (l), (p), and (q), when compared by sex, will involve the introduction of new evidence. The percentages and ratings, by sex, for these items tend to indicate a high validity of high school rank regardless of the sex of the student. However, the mean ratings by fifths for men and women, as shown in table 77 in appendix C indicate that ranks of men in their high school classes and their appraisals of the importance of items (l), (p), and (q), are practically independent, whereas there is a relatively high degree of relationship for women.

The importance which students at different risk levels attach to reasons for discontinuing college attendance can be studied in detail in tables 74 to 78 in appendix C. Risk levels are synonymous with standings by fifths in high school graduating class and on college placement test. While placement-test results are not usually available to admissions officers or committees before decisions are made on admission, many institutions do have comparable test results which can be used to classify applicants, such as those of the College Entrance Examination Board and the statewide testing programs.

The data in table 49 are pertinent to the interpretation of the appendix tables. Note that of the 1,159 men for whom records of rank in high school graduating class were available, who had discontinued attendance at an institution of higher education, and who reported reasons for discontinuance, 21.5 percent were in the top fifth of their high school class as compared with 34.0 percent of all men in the study for whom high school rank was available. All nongraduates did not necessarily discontinue but, because of incomplete information for those who failed to respond, nongraduates reported in table 49 include transfers, late graduates, and all discontinuants.

The percentages in table 49 seem to show that standing in high school graduating class was a much better indicator of the probability of graduation than standing in the placement test. If the men in the bottom fifth of the high school class had not been admitted, 351 nongraduates and 50 graduates would have been eliminated. If the men in the bottom fifth of the placement test had been excluded, 332 nongraduates and 284 graduates would have been eliminated.

Table 49.—High school and placement test standing of graduates, nongraduates, and discontinuants, by sex

Group	Rank in high school graduating class						Rank on college placement test					
	Total number	Percent in each fifth					Total number	Percent in each fifth				
		Top fifth	2d fifth	3d fifth	4th fifth	Bottom fifth		Top fifth	2d fifth	3d fifth	4th fifth	Bottom fifth
ALL MEN[1]	6,180	34.0	27.0	19.7	12.8	6.5	6,486	20.8	20.7	21.5	19.8	17.2
Graduates[2]	2,399	49.1	26.2	15.2	7.4	2.1	2,397	26.7	22.7	21.2	17.5	11.9
Nongraduates[3]	3,781	24.4	27.5	22.5	16.3	9.3	4,089	17.4	19.5	21.7	21.1	20.3
Responding discontinuants[4]	1,159	21.5	28.3	23.8	16.2	10.2	1,271	16.8	20.9	22.0	20.2	20.1
Percent graduates are of total[5]	38.8	56.1	37.7	30.0	22.4	12.5	37.0	47.5	40.5	36.5	32.7	25.4
ALL WOMEN[1]	4,381	53.8	25.5	12.8	5.8	2.1	4,915	21.8	22.1	20.0	19.8	16.3
Graduates[2]	1,701	66.8	22.6	7.6	2.1	.8	1,792	28.2	24.1	21.8	16.4	9.5
Nongraduates[3]	2,680	45.4	27.4	16.0	8.2	3.0	3,126	18.1	20.9	19.0	21.8	20.2
Responding discontinuants[4]	875	46.3	27.8	14.9	9.1	1.9	1,023	18.6	22.2	19.7	21.6	17.9
Percent graduates are of total[5]	38.8	48.3	27.4	23.3	13.7	15.1	36.5	47.2	39.7	39.7	30.3	21.2

[1] All students for whom information on rank was available.
[2] Graduates in regular progression from the institution of first registration.
[3] Includes transfers and late graduates.
[4] Responding students who, up to the time of response, had not continued college attendance subsequent to dropping out.

The corresponding comparison for women students shows that exclusion of women from the bottom fifth of the high school class would have resulted in the elimination of 79 nongraduates and 14 graduates, while exclusion of the women in the bottom fifth in the placement test would have eliminated 633 nongraduates and 170 graduates. In contrast, exclusion of the men who graduated in the top fifth of their high school classes would have eliminated 923 nongraduates and 1,178 graduates. Thus admission of only the top fifth of the high school class would have raised the total percentage graduating from 38.8 to 56.1, not taking into account the intervention of other factors such as the grading system, increased competition, and more rigorous requirements.

Using graduation as the sole criterion for judging the success of admissions policies and practices is to assume that only graduates profit from college attendance. When the criterion of length of persistence was used to evaluate the relative effectiveness of selection on the basis of high school standing and placement-test results, it was found that the latter were more closely associated with length of attendance in the institution of original registration. In addition, many admissions officers take into consideration the performance of former graduates of a particular high school along with the student's standing in the graduating class. The introduction of this qualitative factor increases the difficulty of predicting from high school standing either length of persistence or graduation.

The interpretations with reference to the placement-test standing would, in practice, have to be transferred to tests administered prior to admission, and local rather than national distributions of scores would have to be used. The data suggest that high school standing is the better indicator of probable graduation from college and the college placement-test standing is the better index of probable length of persistence in college. A lower percentage of the students who had high placement test standing were casualties in colleges than were those who had high standing in secondary school.

Unless the projected increase in demands by students for admission to institutions of higher education is accompanied by increases in faculties and facilities, some of the admissions practices reflected in the present study will have to be modified if present retention rates are to be maintained. Extending the practice of faculty selection of students by sifting and sorting after the students have been admitted, registered, and entered

classes can be accompanied by serious risks for both institutions and students. In publicly controlled institutions where the practice of faculty rejection after admission and registration is acknowledged to be more common, the retention rate of able students, as indicated by every available criterion, is distressingly low. Students who ranked in the top 20 percent of the high school class, placement test, and in college grades, and who withdrew from publicly controlled institutions, showed marked dissatisfaction with size of classes and opportunity for conference with faculty members. Extending the practice of selection after admission will not alleviate these conditions.

Reasons for going to college and reasons for leaving college had a common characteristic namely, complexity. Few students identified an overriding reason for either action. The discovery of some semblance of order and design in the reasons for leaving college but practically nothing systematic in the reasons for going to college is frustrating to the investigators. Fortunately, improving the acuity of hindsight can contribute to the acuity of foresight. If the report helps in focusing the attention of the experts on factors most closely associated with the problem, the hundreds of workers in colleges and universities and the thousands of their students who contributed can experience a sense of achievement.

Chapter 11

Summary

OF THE STUDENTS who graduate in the upper half of their classes from the secondary schools in the United States about one-half go to college on a full-time basis and about three-fourths of them eventually receive a baccalaureate degree. No more than 60 percent of all students who enter degree granting institutions receive degrees. This study is concerned with the students who go to college, their qualifications, their performances, and their reasons for entering and leaving college.

College dropouts represent an alarming waste of our most competent manpower. Withdrawals cannot be completely eliminated, but they can be sharply reduced—or so many administrators and educators believe. If they can be reduced, the result will be a larger professional work force and a higher cultural and intellectual level of citizenry contributing to the advancement of society.

The figures in this study are based upon a sampling of approximately 13,700 men and women who enrolled in institutions of higher learning in the fall of 1950. The 3-year period from mid-1950 to mid-1953 was influenced by the United Nations action in Korea which led many men to place greater emphasis on military service as a cause of withdrawal than would normally be the case.

Universities, technological institutions, liberal arts colleges, teachers colleges, and junior colleges are represented in the study. Every effort was made to select students who were representative of the types of institutions they attended.

The number of all higher education students in the class entering in 1950, represented by respondents to the questionnaire on which a part of this study is based, ranged from 24 per 1,000 students in technological institutions to 5 per 1,000 in junior colleges. The latter is far below the next lowest (18 per 1,000 in liberal arts colleges) and means that the junior college data must be regarded with particular skepticism.

The response to questionnaires was most encouraging: 3 students completed and returned the questionnaires for 2 who did not respond. Among those who stayed in college long enough to graduate the results were even better—3 respondents to 1 nonrespondent. The type of institution apparently had slight effect on responsiveness. Junior colleges had a 56.4 percent response, the lowest, and technological institutions had 65.1 percent, the highest.

Based upon this sampling, it appears that slightly less than 40 percent of the freshman class will remain at the institution of first enrollment to graduate 4 years later. An additional 20 percent will either graduate later from the first institution or will go to other institutions where they will graduate in 4 years or more. Thus, about 6 out of 10 freshmen will eventually receive degrees. The level of importance to students of attaining a degree as a reason for going to college indicates that more than 6 out of 10 aspire to that goal.

The percentage of students graduating in normal progression varies by type of institution and type of control. In technological institutions 42.0 percent of the men graduated, whereas in teachers colleges only 28.8 percent of the men completed the 4-year program. A large percentage (43.3) of the men dropped out of teachers colleges during the first year. This may be an indication of dissatisfaction with the program of instruction which would be likely to show up early in the 4-year period. Proportionately fewer students completed 4-year programs in publicly controlled institutions (33 percent) than in privately controlled institutions (48 percent).

The first year of college is the most critical dropout period. This study found that 273 per 1,000 left school within the first year in comparison with 283 per 1,000 during the *next 3* years. After a student has passed the first-year hurdle, his chances of attaining a degree brighten considerably. Since 150 per 1,000 drop out during the second year, we might say that when a student has reached the rank of a junior, he is a good graduation risk—about 685 chances per 1,000.

Obviously, the reasons for going to college are important in any study of retention or withdrawal. A list of 25 reasons was developed for use in the study. Although not so indicated on the form, the reasons were classified for purposes of analysis into 5 general categories: Academic; occupational; personal—self; social service; and traditional. Some of the reasons overlapped into two categories.

Analyzed by these categories, some interesting differences in reasons appeared. Men stressed occupational reasons as of primary importance and placed academic reasons second. Women reversed the order, thereby attaching greater importance to "pure" intellectual pursuits than to occupational preparation.

Before going to college, women placed social service reasons in fifth place, but after attending college they moved them up to third place in importance, and men moved social service reasons from fourth to third. This change in rating might indicate that institutions of higher education develop a sense of social responsibility.

The most important academic reason for attending a particular institution was to specialize in a certain subject-field. It can be argued that, in many cases, interest in a subject-field is more indicative of an occupational than an academic motivation. For example, a student might not study advanced mathematics (or English literature, or physics, or any other subject) for the intellectual delight alone but because he intends to use that subject as the basis for making a living. But it is not possible to draw a clear line between occupational and academic motivation, so that we can say, "John or Mary is studying the calculus for occupational reasons 75 percent and for academic reasons 25 percent."

Only university students as a group rated the desire to prepare for a better paying job as the most important reason for going to college. Second in importance to university students was a compelling interest in a particular field in which they wanted to specialize. The second reason was ranked first in average rating by students in the other types of institutions and the better pay motive ranked third. University students as a group ranked the need of a college degree for the kind of work they wanted to do third in order of importance and students in other types of institutions ranked this need second.

Students planning to attend publicly controlled institutions evidently had more compelling interests in certain fields than those planning to enter privately controlled institutions. How-

ever after attending college, the differences between the groups were negligible. In other words, young people seemed more inclined to select an institution under public control when they knew what field they wanted to study. Apparently they believed that they were more likely to get what they wanted, or thought they wanted, there, perhaps because publicly controlled institutions are more likely to be universities with wide ranges of offerings not available in smaller privately controlled institutions.

All respondents were given an opportunity to grade their reactions to some 40 college facilities and services and to 11 facilities and services not directly related to college. One striking discovery in this part of the study was that students from institutions under different types of control tended to react differently. The ratings of students attending church-related institutions, particularly those affiliated with the Roman Catholic Church, varied sharply in certain areas from those of students attending institutions independent of church.

There was general agreement in the rating of some facilities and services, particularly those which ranked at the top and bottom of the list. There is certainly some significance attached to the fact that the item, "Opportunities for religious life," was generally ranked first. The fact that students who had attended institutions under public control placed this item first would tend to disprove a theory held by some that public institutions are deficient in opportunities for religious and spiritual development.

In general, students reacted most favorably to those services and facilities which were performed or provided by administrative officials. The services and facilities performed or provided by nonacademic deans ranked second and those by the faculty ranked third in student ratings. Of the 16 items related to faculty services, only 6 were ranked in the upper half of the 51 items. The two most highly regarded were "Opportunity to consult from time to time with major professor" and "Opportunity to have private conferences with instructors on academic questions stemming from course work." Women were inclined to be more generous than men in rating the faculty items. Many items were rated lower by students who attended the institutions for long periods than by those who attended for short periods.

Starting with the facility or service rated lowest in degree or level of satisfaction, these three items appear:

"Assistance from counselors on 'how to study' techniques;"
"Assistance from instructors on 'how to study' techniques;"
"Services of my faculty adviser in helping me select my first term courses."

Students were almost unanimous, regardless of their ability level or the type of institution in which they were enrolled, in expressing a low opinion of the performance of the counseling, guidance, and orientation functions in higher education. Their appraisal would suggest that colleges have been unable or unwilling to recognize, and to make adjustments for, the changing character of their student populations.

Changes in the social and intellectual composition of the college student population should be expected as larger proportions of the youth of the Nation enter and graduate from secondary school and enter college. The proportion of every age group above 2-year olds who attend some kind of school is increasing. College student respondents in this study have registered a comparatively low opinion of the instructional and guidance facilities and services which the students consider important to their adjustment in an unfamiliar and demanding environment.

A significant number of able students who go to large institutions—large in the sense of enrollments—are dissatisfied with services and facilities, particularly quality of teaching and size of classes. Many of those who are financially able transfer to smaller institutions, and others who cannot afford to change discontinue attendance or remain under protest, as is indicated by the low ratings assigned by graduates.

Junior college students reported the most satisfaction with class size. Teachers colleges and liberal arts colleges tied for second place, technological institutions were next, and universities last. Students in all types of institutions except universities considered class size as better than "fairly satisfactory." University students regarded class size as not even "fairly satisfactory," but there is no way of determining how much of this judgment is chargeable to higher standards and greater discrimination, and how much to actual differences in class size. At any rate, the existence of such dissatisfaction during the period from 1950 to 1954 does not augur well for the future when increased enrollments may increase the number of large classes.

The ratings of numerous facilities and services by students who remained to graduate indicate as much dissatisfaction as that expressed by students who withdrew. As is pointed out in the chapter devoted to student reactions to college experiences, it might be inferred that students withdraw because of inability or unwillingness to endure dissatisfactions rather than because of dissatisfactions.

Analyses of the subjects or fields of greatest interest to students

at the time of entering college show that with men engineering ranked first, business administration second, medicine third, chemistry fourth, and accounting fifth. With women, the order was education first, home economics second, English third, music fourth, and business administration fifth.

During this period of college attendance, more than half of the students changed their subject-fields of interest. Retention of interest in the same subject-fields by women students was slightly over 45 percent, and by men students, 42 percent. Women who started with interest in education, nursing, and home economics were least likely to change. Those with early ambitions for careers in social work, psychology, and medicine were most likely to shift to other fields. Men whose initial interests were in the subject-fields of engineering, physical education, business administration, and agriculture were least likely to change, while those starting college with an interest in mathematics, biology, chemistry, and English were most likely to change to other subject-fields. More changes were to related than to unrelated fields.

Publicly controlled institutions of higher education enrolled students whose family incomes were below the income level of the families of enrollees in privately controlled institutions. The average family income for students in publicly controlled institutions in 1953 was $5,243, in privately controlled, $6,570. The difference of $1,327 represents more than the average total cost in 1952–53 of attending the average publicly controlled institutions.

A significantly higher percentage of students in publicly controlled than in privately controlled institutions lived within convenient daily commuting distance during the first registration period. A total of 437 per 1,000 students in publicly controlled institutions lived close enough to go back and forth to class every day, as compared to 361 per 1,000 in privately controlled institutions. The major factor to consider in this comparison is the preponderance of publicly controlled institutions that are located in or near great centers of population, in comparison with the large number of small colleges that are located in villages and small towns.

No significant grade differential between fraternity and nonfraternity students was discovered. However, sorority members received significantly higher grades than nonmembers received. Apparently there is a relationship between the existence of chapters of national fraternities and sororities on the campus and student persistence in college. Institutions with no recognized

fraternities or sororities had a significantly lower persistence rate than had the institutions in which fraternities and sororities were recognized. Likewise, the institutions with national fraternal organizations had higher persistence rates than those with only local groups. "Opportunity to join a fraternal group of my liking," was ranked fifth most satisfactory among the reactions to college experiences by students as a whole.

Transfer percentages indicate that students who enrolled in teachers colleges and technological institutions understood more clearly what they wanted than did those who enrolled in universities or liberal arts colleges. The first two types lost 7.5 percent and 8.6 percent, respectively, by transfer. Universities lost 9.3 percent and liberal arts colleges 13.4 percent. Transfers, like dropouts, occur with the greatest frequency during the first 2 years. Nearly 40 percent of all transfers occur during or at the end of the first year, and more than 83 percent of the total by the end of the second year.

The major cause for student transfers was summed up in the expression, "I was generally dissatisfied." Dissatisfaction was highest among students who transferred from technological institutions and second highest among transfers from teachers colleges, closely followed by transfers from universities. Transfers from private church-related institutions expressed less general dissatisfaction than transfers from publicly controlled institutions and far less than was reported by transfers from privately controlled institutions independent of church.

The second most important reason for transfer was change in curricular interest. This reason seemed far more important in technological institutions than in other types. The curricular offerings are generally rather restricted in technological institutions, and a student whose interest changed would be less likely to find the curriculum fitting his new interest within the same school.

Transfer because of low grades ranked sixth in a list of 10 reasons. The reason was of little importance, apparently, in liberal arts colleges, teachers colleges, or junior colleges. It was of significantly greater importance in universities, and second only to general dissatisfaction in technological institutions.

Twenty-one possible reasons for discontinuing college attendance were listed on the questionnaire. The most important reason for discontinuance reported by men was enlistment in the military service. Much of the period under consideration was one of active military action which possibly gave unusual emphasis to that

reason for discontinuance. Lack of interest in studies ranked second in importance among men as a reason for leaving college and personal financial difficulties ranked third.

Marriage was the major reason for discontinuing college attendance among women students. Taking a full-time job was rated second in importance, and personal financial difficulties ranked third in importance among women.

There is evidence in the weight given to reasons for discontinuance by men and women that rank in high school graduating class has more significance in the admission of women to college than it has for men.

The reasons for discontinuance listed on the questionnaire were purposely limited to those reflecting on the student rather than on the institution which he left. However, each dropout had an opportunity to write in other reasons. The great majority of the additional reasons referred to personal problems and deficiencies rather than to deficiencies in the facilities of the institutions, further indicating the importance of greater attention to the services which can assist in solving these problems.

Many analyses of the data which have been assembled in the study have not been included in this report. Among these are five which come within the purview of the study but are not directly related to the main purpose. The five issues are presented in the form of questions. Brief statements summarize the findings.

1. *How do the persistence records of students who enrolled in institutions that operate on the semester system compare with the records of students in institutions operating on the quarter system?*

Measured both by the numbers remaining, and by length of persistence, the advantage is clearly with the institutions which operate on the semester basis. It might be inferred that the increase in the number of stopping places increases the probability of stopping. No information is available to check the corollary inference that increasing the number of starting places increases the probability of starting.

2. *How do the estimates of student ratings by institutional staff members compare with the actual student ratings of college facilities and services?*

Staff members in the participating institutions were asked to estimate the ratings that students from their institutions would give to the 51 items in part IB, "Reactions to College Experiences." Student ratings of the performance of administrative functions were significantly higher than were the estimates of

staff members. Student ratings of counseling and guidance services were significantly lower than the estimates of staff members. The same was true for the teaching and sociability of the faculty. In many individual institutions the averages of staff member estimates were in close agreement with the average ratings of students.

3. *How do the estimates of student ratings by different types of institutional staff members compare?*

In general, there is a high degree of concurrence in the estimates of ratings among administrators, nonacademic deans, and faculty. Administrators showed a slight tendency to rate the performance of their own functions above the ratings they gave the performance of nonacademic deans and faculty, but students, nonacademic deans, and faculty agreed with the superior rating. University administrators and nonacademic deans estimated a significantly higher rating of the performance of administrative functions than did university faculty members. University administrators and other estimators, unidentified as to functions, gave the performance of the functions of university nonacademic deans a significantly higher rating than the university faculty gave them. In teachers colleges, staff members, unidentified as to function, estimated the performance of their nonacademic deans significantly above the estimates of the nonacademic deans themselves. All other differences between the estimates were too low to be significant.

4. *What are the effects of enlarging the study sample picture to the dimensions of the total student population?*

The following tabulation, table 50, shows the estimated distribution of post-secondary school enrollments of high school graduates according to standing in their high school graduating classes. The percentages at the upper levels are higher than those found in most of the other studies in this field. The estimates in this table must be interpreted in the light of the earlier discussions of the study sample. The fact that the mean college placement percentile is 54 instead of 50 may indicate that the proportion of the sample from the upper tenths of the high school graduating class is also somewhat inflated. However, because of the difference in the character of the two distributions, it is obvious that the inflation would not amount to as much as 4 percentage points. It should also be noted that the estimates include all post-secondary enrollments, such as hospital schools of nursing, technical institutes, and proprietary schools.

About 32 percent of the approximately 1,200,000 graduates of

public and private secondary schools in the United States in 1950 continued their education in post-secondary institutions in the fall of 1950 as full-time students. Another 11 percent continued on a part-time basis. One half (50.3 percent) of the students who ranked in the upper half of the high school graduating class continued their education on a full-time basis and another sixth (16.5 percent) continued on a part-time basis. One-third of the students in the upper half of high school graduating classes did not continue their formal education beyond high school.

Table 50.—Full-time and part-time post-secondary school enrollments in terms of standing in high school graduating class

Rank in high school graduating classes	Percent enrolling in post-secondary institutions		Cumulative percentages through each tenth	
	Full-time	Part-time	Full-time	Part-time
Highest tenth	71.7	23.5	71.7	23.5
2d tenth	65.5	21.5	68.6	22.5
3d tenth	43.6	14.3	60.3	19.8
4th tenth	42.2	13.9	55.6	18.3
5th tenth	28.6	9.4	50.3	16.5
6th tenth	25.2	9.2	46.1	15.3
7th tenth	17.1	5.6	42.0	13.9
8th tenth	14.5	4.0	38.6	12.7
9th tenth	8.9	2.9	35.3	11.6
Lowest tenth	6.1	2.0	32.4	10.6

5. *How many high school graduates are granted a baccalaureate degree from the institution of higher education of original registration 4 years later?*

Estimates of the numbers from each tenth of the high school graduating class who graduated from the higher educational institutions in which they first registered can be made by applying the persistence rates found in this study. Out of 1,000 top-tenth high school graduates in 1950, 406 received baccalaureate degrees in 1954 from the institutions of higher education in which they first registered. The corresponding numbers per thousand for the succeeding tenths of the high school graduating class were as follows: 2d tenth, 332; 3d tenth, 169; 4th tenth, 162; 5th tenth, 92; 6th tenth, 70; 7th tenth, 40; 8th tenth, 31; 9th tenth, 13; and the lowest tenth, 7.

The data indicate that 1,000 high school graduates will produce 132 college graduates from the colleges in which they originally registered 4 years after high school graduation. A conservative

estimate of the effects of transfer and belated graduation places the total number of baccalaureate degrees per 1,000 high school graduates at approximately 200. It is impossible to predict future ratios because of the effects of higher admission standards in many privately controlled institutions and higher elimination rates in many publicly controlled institutions. The two factors will tend to offset each other, but probably not to the extent that the present quantitative relationship between high school graduation and college graduation will be maintained.

Student reports of reasons for going to college, interests in subject-fields, and financial resources plus institutional reports of student standing in high school graduating class and on college placement tests, showed that many students enrolled in institutions of higher education in which the prospects of completing their programs of study were very poor. A majority of the students who discontinued their higher educational programs attributed their withdrawal to factors identified with themselves rather than with the institutions they attended. Principal complaints centered on services, notably orientation and teaching, rather than institutional facilities.

No single reason for discontinuance could be identified as most important although the inference that the financial factor predominated is supported by its high rating of importance in combination with other high ranking factors having financial implications such as enlisting for military service by men and taking a full-time job by women. Significantly greater importance was assigned to the financial factor by students who transferred to less expensive institutions or dropped out after the first year than by dropouts from the institution of first registration during the first year.

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Appendix A

Consultants and Participants

American Association of Collegiate Registrars and Admissions Officers
Committee on Student Retention and Withdrawal

Participating Institutions

American Association of Collegiate Registrars and Admissions Officers

The Committee on Student Retention and Withdrawal

Past and present members

Chairmen

Alma H. Preinkert, University of Maryland 1952–54 (deceased)
R. F. Thomason, University of Tennessee 1954–57
Irene M. Davis, The Johns Hopkins University 1957—

Members

G. Watson Algire, University of Maryland
Joseph G. Connor, Georgetown University
Gladys D. Diggs, Smith College
Enoch Dyrness, Wheaton College, Illinois (ex officio)
Edward G. Groesbeck, University of Michigan
Ted McCarrell, State University of Iowa (ex officio)
John M. Rhoads, Temple University (ex officio)
Clarice Slusher, Virginia Polytechnic Institute
Rebecca C. Tansil, Maryland State Teachers College, Towson

Participating Institutions

Listed by Type of Institution

Universities

Institutions	*Original Representatives*
ALABAMA: University of Alabama, University	Williams F. Adams, *Dean of Admissions and Records*
ARIZONA: University of Arizona, Tucson	C. Zaner Lesher, *Registrar and Director of Admissions*
ARKANSAS: University of Arkansas, Fayetteville	Clifford M. Christensen, *Assistant Professor of Education*
CALIFORNIA: Stanford University, Stanford	Harvey Hall, *Registrar*

COLORADO: University of Colorado, Boulder	Katherine Malone, *Head of* *tration*
	W. F. Dyde, *Vice-President,* *the Faculties*
CONNECTICUT: University of Connecticut, Storrs	Franklin O. Fingles, *Registra*
DELAWARE: University of Delaware, Newark	William H. Bohning, *Registr*
	William G. Fletcher, *Direc* *Admissions*
DISTRICT OF COLUMBIA:	
George Washington University	Fred E. Nessell, *Registrar*
Howard University	Frederick D. Wilkinson, *Reg*
FLORIDA: University of Florida, Gainesville	R. S. Johnson, *Registrar*
ILLINOIS: University of Illinois, Urbana	George P. Tuttle, *Director of* *sions and Records*
	E. C. Seyler, *Recorder*
INDIANA:	
Indiana University, Bloomington	Charles E. Harrell, *Registra* *Director, Office of Admissio* *Records*
University of Notre Dame, Notre Dame	Rev. Philip S. Moore, C.S.C., *President, Academic Affairs*
	Rev. Robert J. Lochner, *Assistant to the Vice Pre* *for Academic Affairs*
IOWA: Iowa State College of Agriculture and Mechanic Arts, Ames	Arthur M. Gowan, *Registrar*
KENTUCKY: University of Kentucky, Lexington	Richard L. Tuthill, *University* *istrar*
	Robert L. Mills, *Registrar*
	Maple Moores, *Assistant Regis*
MAINE: University of Maine, Orono	James A. Harmon, *Registrar*
	Evelyn Taylor, *Assistant Regi*
MARYLAND:	
The Johns Hopkins University, Baltimore	Irene M. Davis, *Registrar*
University of Maryland, College Park	Alma H. Preinkert, *Registrar*
	G. Watson Algire, *Director of* *missions and Registrations*
	Norma J. Axlein, *Associate R* *trar*
MICHIGAN:	
University of Michigan, Ann Arbor	Edward Groesbeck, *Director* *of Registration and Records*
	Ira M. Smith, *Registrar*
Wayne State University, Detroit	Margaret Ruth Smith, *Rese* *Analyst, Division of Admis* *and Records*
	Henry H. Pixley, *Dean of Ad* *sions*

MINNESOTA: University of Minnesota, Minneapolis	R. E. Summers, *Dean of Admissions and Records*
	Paul McCoy, *Assistant to Dean of Admissions and Records*
MISSISSIPPI: University of Mississippi, University	Leston L. Love, *Dean of Student Personnel*
MISSOURI: St. Louis University, St. Louis	Paul T. McDonald, *Registrar*
MONTANA: Montana State University, Missoula	Leo Smith, *Registrar*
NEBRASKA: Creighton University, Omaha	Jack N. Williams, *Registrar*
NEW MEXICO: University of New Mexico, Albuquerque	J. C. MacGregor, *Director of Admissions and Registrar*
	Sherman E. Smith, *Director of Student Affairs*
NEW YORK:	
Cornell University, Ithaca	Eugene F. Bradford, *Registrar*
New York University, New York	Elwood C. Kastner, *Dean of Admissions and Registration*
	Howard E. Wahlert, *Office of the Dean of Admissions*
University of Buffalo, Buffalo	Emma E. Deters, *Registrar*
NORTH CAROLINA: University of North Carolina, Chapel Hill	Roy Armstrong, *Director of Admissions*
	Charles Bernard, *Assistant Director*
NORTH DAKOTA: University of North Dakota, Grand Forks	Ruby M. McKenzie, *Registrar*
OHIO:	
Miami University, Oxford	Bernard W. Fuhr, *Director of Student Counseling Service*
The Ohio State University, Columbus	Ronald B. Thompson, *Registrar*
The University of Akron, Akron	Bruce W. Alderman, *Registrar*
Western Reserve University, Cleveland	Edward T. Downer, *Registrar*
OREGON: Oregon State College, Corvallis	D. T. Ordeman, *Registrar*
PENNSYLVANIA:	
Duquesne University, Pittsburgh	Maurice J. Murphy, *Registrar*
Lehigh University, Bethlehem	Wray H. Congdon, *Director of Student Personnel Services*
	Rodney E. Ressler, *Administrative Assistant to the Registrar*
The Pennsylvania State University, University Park	C. O. Williams, *Dean of Admissions and Registrar*
	R. M. Koser, *Assistant to the Registrar*
Temple University, Philadelphia	John M. Rhoads, *Registrar*

University of Pittsburgh, Pittsburgh	J. Gilbert Quick, *Registrar* E. A. Batchelder, *Assistant Registrar*
RHODE ISLAND: Brown University, Providence	Milton E. Noble, *Recorder*
TENNESSEE:	
University of Tennessee, Knoxville	R. F. Thomason, *Dean of Admissions*
Vanderbilt University, Nashville	James L. Buford, *Director of Admissions and Registrar* William O. Batts, Jr., *Acting Dean of Students*
UTAH: University of Utah, Salt Lake City	Frank B. Jex, *Associate Professor of Educational Psychology*
WASHINGTON: University of Washington, Seattle	Ethelyn Toner, *Registrar*
WEST VIRGINIA: West Virginia University, Morgantown	J. Everett Long, *Registrar*
WISCONSIN: University of Wisconsin, Madison	J. Kenneth Little, *Vice President, Student Affairs* L. J. Lins, *Director, Student Personnel Statistics*
WYOMING: University of Wyoming, Laramie	R. E. McWhinnie, *Registrar and Director of Admissions*

Technological Institutions

Institutions	*Original Representatives*
ALABAMA: Tuskegee Institute, Tuskegee	T. C. Burnette, *Registrar*
CALIFORNIA: California Institute of Technology, Pasadena	John R. Weir, *Director of Student Counseling*
GEORGIA: Georgia Institute of Technology, Atlanta	William L. Carmichael, *Registrar*
MASSACHUSETTS: Massachusetts Institute of Technology, Cambridge	Joseph MacKinnon, *Registrar* Warren D. Wells, *Assistant Registrar*
NEW JERSEY: Newark College of Engineering, Newark	Frank A. Grammer, *Dean of Students and Director of Admissions* Robert K. Haubner, *Assistant to the Dean of Students*
NEW YORK:	
Clarkson College of Technology, Potsdam	Frederick A. Ramsdell, *Registrar*
Pratt Institute, Brooklyn	Holman J. Swinney, *Registrar and Director of Admissions* Louis Rabineau, *Registrar and Director of Admissions*
OHIO: Case Institute of Technology, Cleveland	Willard E. Nudd, *Registrar*

SOUTH DAKOTA: South Dakota School of Mines and Technology, Rapid City	Robert H. Moore, *Registrar*
VIRGINIA: Virginia Polytechnic Institute, Blacksburg	William H. Cato, *Director of Guidance and Placement* Louis A. Pardue, *Vice President*

Liberal Arts Colleges

Institutions	*Original Representatives*
ALABAMA:	
Alabama College, Montevallo	Virginia Hendrick, *Registrar*
Birmingham-Southern College, Birmingham	W. E. Glenn, *Registrar*
ARKANSAS: Hendrix College, Conway	Victor D. Hill, Jr., *Registrar*
CALIFORNIA:	
George Pepperdine College, Los Angeles	Richard A. Hogan, *Dean of Students*
Mills College, Oakland	Rosa Berdrow, *Recorder* Ora Dale Gillette, *Recorder*
Occidental College, Los Angeles	Florence N. Brady, *Registrar*
COLORADO: Colorado College, Colorado Springs	Henry E. Mathias, *Director of Admissions*
CONNECTICUT: Wesleyan University, Middletown	John W. Spaeth, Jr., *Dean of the Faculty*
DISTRICT OF COLUMBIA:	
Dunbarton College of Holy Cross	Sister Mary Georgina, C.S.C., *Registrar*
Georgetown University	Joseph G. Connor, *University Registrar*
FLORIDA: Stetson University, Deland	Barbara Rowe, *Registrar*
GEORGIA: Mercer University, Macon	Hoy Taylor, *Dean of Instruction*
IDAHO: Idaho State College, Pocatello	Anna C. Nunn, *Registrar*
ILLINOIS:	
The Principia, Elsah	Gretchen M. Happ, *Registrar*
Southern Illinois University, Carbondale	Charles D. Tenney, *Vice President* Robert A. McGrath, *Registrar*
Wheaton College, Wheaton	Enock C. Dyrness, *Registrar* Vivian Barnett, *Assistant Registrar*
INDIANA:	
De Pauw University, Greencastle	Robert H. Farber, *Dean* Value M. Williams, *Registrar*
Evansville College, Evansville	Everett Walker, *Director of Student Personnel Services* G. R. McCoy, *Registrar and Director of Admissions*
Valparaiso University, Valparaiso	Albert F. Scribner, *Business Manager and Registrar* Paul E. Thune, *Associate Registrar*

IOWA: Grinnell College, Grinnell	Bethana McCandless, *Registrar*
KANSAS: University of Wichita, Wichita	Jackson O. Powell, *Dean of Education*
KENTUCKY: Berea College, Berea	Adelaide Gundlach, *Registrar*
MAINE: Bowdoin College, Brunswick	Nathaniel D. Kendrick, *Dean* Helen B. Johnson, *Registrar*
MARYLAND:	
Morgan State College, Baltimore	Edward N. Wilson, *Registrar*
Western Maryland College, Westminster	Martha E. Manahan, *Registrar*
MASSACHUSETTS:	
Amherst College, Amherst	Eugene S. Wilson, *Director of Admission* John C. Esty, Jr., *Asistant Director of Admission*
Smith College, Northampton	Gladys D. Diggs, *Registrar*
MINNESOTA: St. Olaf College, Northfield	Peter E. Fossum, *Dean of the College* Inez Frayseth, *Registrar*
MISSISSIPPI: Mississippi State College, State College	T. K. Martin, *Registrar*
NEW JERSEY: Drew University, Madison	Walter A. Glass, *Registrar*
NEW YORK:	
Colgate University, Hamilton	William J. Everts, *Registrar*
Ithaca College, Ithaca	Ben Light, *Director of Admissions* Florence M. Howland, *Registrar*
NORTH CAROLINA: Shaw University, Raleigh	Marguerite M. Adams, *University Counselor*
OHIO:	
Bowling Green State University, Bowling Green	Glenn Van Wormer, *Registrar and Director of Admissions*
Ohio Wesleyan University, Delaware	Allen C. Conger, *Registrar* Allan C. Ingraham, *Registrar*
OREGON: Reed College, Portland	Margaret A. Scott, *Registrar*
PENNSYLVANIA: Gettysburg College, Gettysburg	Charles R. Wolfe, *Registrar and Dean of Admissions*
SOUTH CAROLINA: Clemson Agricultural College, Clemson	G. E. Metz, *Registrar*
SOUTH DAKOTA: Yankton College, Yankton	Adolph Schock, *Dean* Gregg Evans, *Dean and Registrar*
TENNESSEE:	
Carson-Newman College, Jefferson City	Warren L. Weierman, *Director of Public Relations*
University of Chattanooga, Chattanooga	Reuben W. Holland, *Registrar and Dean of Students*
TEXAS: Our Lady of the Lake College, San Antonio	Sister Mary Pia, *Registrar* Sister M. Annunciata, *Assistant Registrar*

VERMONT: Middlebury College, Middlebury	Donald H. Bullou, *Associate Professor of Mathematics*
VIRGINIA:	
Hampton Institute, Hampton	William M. Cooper, *Registrar* Louise S. Sniffen, *Recorder*
Madison College, Harrisonburg	Helen M. Frank, *Registrar* Alfred K. Eagle, *Director of Student Guidance*
Mary Washington College of the University of Virginia, Fredericksburg	Louis C. Guenther, *Registrar* Edward Alvey, Jr., *Dean*
WASHINGTON: Whitman College, Walla Walla	Douglas V. McClane, *Director of Admissions and Registrar* Alta I. Glenny, *Registrar*
WEST VIRGINIA: Marshall College, Huntington	Luther E. Bledsoe, *Registrar and Director of Admissions*
WISCONSIN: Carroll College, Waukesha	Royanna Benjamin, *Registrar*

Teachers Colleges

Institutions	*Original Representatives*
ALABAMA: State Teachers College, Troy	C. B. Smith, *President*
ARIZONA:	
Arizona State College, Flagstaff	Win R. Hensley, *Registrar*
Arizona State College, Tempe	Alfred Thomas, Jr., *Registrar*
COLORADO: Colorado State College of Education, Greeley	Jack Shaw, *Director of Student Personnel*
ILLINOIS:	
Concordia Teachers College, River Forest	Wilfred F. Kruse, *Registrar*
Illinois State Normal University, Normal	Esther Kirchhoefer, *Registrar*
National College of Education, Evanston	Linford A. Marquart, *Registrar*
INDIANA: Ball State Teachers College, Muncie	Leo M. Hauptman, *Registrar*
IOWA: Iowa State Teachers College, Cedar Falls	Marshall R. Beard, *Registrar*
KENTUCKY: Murray State College, Murray	Cleo Gillis Hester, *Registrar*
MARYLAND: State Teachers College, Towson	Rebecca C. Tansil, *Director of Admissions*
MICHIGAN: Eastern Michigan College, Ypsilanti	Everett L. Marshall, *Registrar*
MINNESOTA: State Teachers College, Winona	Helen Pritchard, *Registrar* F. R. Adams, *Registrar*

NEBRASKA: Concordia Teachers College, Seward	Willa Koenig, *Registrar*
NEW JERSEY: New Jersey State Teachers College, Trenton	Lycia Martin, *Director of Admissions*
NORTH CAROLINA: East Carolina College, Greenville	Orval L. Phillips, *Registrar*
OHIO: Saint John College, Cleveland	Rose Mary Bland, *Registrar*
PENNSYLVANIA: State Teachers College, Slippery Rock	N. N. Weisenfluh, *Director of Student Personnel*
TENNESSEE: George Peabody College for Teachers, Nashville	William H. Vaughan, *Director of Admissions and Registrar*
WASHINGTON: Western Washington College of Education, Bellingham	Donald A. Ferris, *Registrar*
WISCONSIN: Wisconsin State College, Milwaukee	Lurlyn Williams, *Registrar*

Junior Colleges

Institutions	*Original Representatives*
CALIFORNIA:	
Bakersfield College, Bakersfield	Burns L. Finlinson, *Dean of Records*
Riverside College, Riverside	Earl A. McDerment, *Registrar*
COLORADO: Pueblo Junior College, Pueblo	Lulu Cuthbertson, *Registrar*
FLORIDA: St. Petersburg Junior College, St. Petersburg	Charles O. Smout, *Registrar*
GEORGIA: South Georgia College, Douglas	Irby Dell Engram, *Registrar*
ILLINOIS: Morton Junior College, Cicero	Harold J. White, *Dean*
IOWA: Burlington College, Burlington	Harry W. Kingham, *Principal*
	Louise K. Casper, *Registrar*
MAINE: Westbrook Junior College, Portland	Arthur L. Freundlich, *Director of Testing*
	Betty Allan, *Alumni Secretary*
MINNESOTA: Rochester Junior College, Rochester	Hazel Creal, *Registrar*
MISSISSIPPI: Jones County Junior College, Ellisville	J. B. Young, *President*
MISSOURI:	
Stephens College, Columbia	J. Scott Henry, *Chairman, Board on Admissions*
	Mary D. Bigelow, *Assistant to the Dean of Student Personnel*
William Woods College, Fulton	W. Marshon DePoister, *Dean of the Faculty*
	Audrey Crump, *Registrar*
NEW JERSEY: Jersey City Junior College, Jersey City	Ernest L. Cox, *Director of Guidance*

PENNSYLVANIA: Hershey Junior College, Hershey	Pauline E. Copp, *Registrar*
UTAH: Dixie College, St. George	B. Glen Smith, *Registrar*
VIRGINIA: Averett College, Danville	Mary C. Fugate, *Dean and Registrar*
WASHINGTON: Everett Junior College, Everett	Gertrude T. Van Arkel, *Registrar*
WYOMING: Casper Junior College, Casper	A. Walter Bailey, *Director, Student Personnel and Guidance*

Appendix B

Schedules and Forms

Student Report Forms and Master Data Sheet Headings

BSH-46

Inst. _____
Budget Bureau No. 51-4819.1.
Expires Dec. 31, 1964.
Student: _____

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON 25, D. C.

STUDY OF COLLEGE STUDENT RETENTION AND WITHDRAWAL

In cooperation with the

American Association of Collegiate Registrars and Admissions Officers

PART I—STUDENT OPINIONNAIRE FORM (Tear off along perforation and fill in both sides of this sheet)

Part I is to be mailed directly to the Office of Education when completed. A franked addressed envelope requiring no postage is attached. All responses will be treated in strict confidence.

Your name (as you registered in 1950) _____

Present address _____

College entered in 1950 _____

A. Reasons for Going to College

Some of the reasons students give for going to college are listed below. Looking back to the period *before* you entered college, show the degree of importance each of the reasons had in influencing your decision to attend college. After each statement write the appropriate code symbol in Column A. Some find it easier to go through the statements and mark all of the 0's first, then the 1's, and so on. Do it the way it is easiest for you.

DEGREE OR LEVEL OF IMPORTANCE	Code
Of no importance, or does not apply	(0)
Of slight importance	(1)
Of moderate importance	(2)
Of great importance	(3)

Try to record your reactions, not according to what you consider now to be "good" reasons, but according to what you feel were your reasons *at the time you decided to go to college*. Add any you wish.

You will find instructions for column B when you come to the end of the section.

REASONS	CODE SYMBOL Column A	Column B	
1. I felt a college degree was necessary for the kind of work I wanted to do			1
2. Business, church, or other community leaders encouraged me to go to college			2
3. I hoped to make many new friends in college			3
4. It had always been expected that I would go to college			4
5. The persons I respected most in my community had gone to college			5
6. I had serious intellectual curiosities which only college could satisfy			6
7. I wanted to prepare myself for a better paying job than I would otherwise be able to get			7
8. I wanted to learn how to get along with other people			8
9. I hoped to acquire some qualifications for leadership in civic affairs			9
10. My parents insisted on my going to college			10
11. Most of my friends were going to college			11
12. I thought college life would help me to develop socially			12
13. I wanted the close fellowship of living in a dormitory, sorority house, or fraternity house			13
14. I had a compelling interest in one particular field in which I wanted to specialize, namely: _____			14
15. I wanted to explore several lines of work to see what I would be most interested in			15
16. I felt I could live an easier life if I had a college education			16
17. I wanted to find out more about certain fields of knowledge			17
18. I felt college acquaintances and contacts would prove advantageous in finding a position after graduation			18
19. I thought a college education would enable me to be more influential in community affairs			19
20. I thought that college would be a good place to meet the type of person I'd like to marry			20
21. I hoped that college training would enable me to be a better husband or wife			21
22. I enjoyed studying and wanted to continue academic work			22
23. There was not much for me to do around home			23
24. My teachers thought I was good college material			24
25. In my family young people had always gone to college			25
Other (write in) _____			
_____			
_____			

INSTRUCTIONS FOR USE OF COLUMN B

Please go back over the reasons and write the code number, 0, 1, 2, or 3, to show how you *now* rate the importance of each reason as a motive for going to college or for remaining in college.

(OVER)

16—[illegible]-1

B. Reactions to College Experiences

The statements in this section refer to certain of the facilities and services in colleges and universities. Repeated evaluations of these facilities and services have been made by accrediting agencies, survey groups, administrators, and college faculties. An attempt is being made in this study to get realistic appraisals by college students themselves of their experiences while in college. There is no intention nor will any effort be made to appraise any institution on the basis of student responses to these items. If you transferred from one college to another record your reactions to the *first institution only*.

Use the following code to show the degree or level of satisfaction you experienced in connection with each facility or service described:

DEGREE OR LEVEL OF SATISFACTION	Code
Does not apply to me, or no opinion	(0)
Very unsatisfactory	(1)
Somewhat unsatisfactory	(2)
Fairly satisfactory	(3)
Very satisfactory	(4)

COLLEGE FACILITIES AND SERVICES	Code Symbol
1. Services of the admissions office prior to enrollment	_____ 1
2. Orientation program at the start of my freshman year	_____ 2
3. Services of my faculty adviser in helping me select my first term courses	_____ 3
4. Teaching abilities of my instructors	_____ 4
5. Size of my classes	_____ 5
6. Opportunity to take elective courses along with required program	_____ 6
7. Assistance from instructors on "how to study" techniques	_____ 7
8. Assistance from counselors on "how to study" techniques	_____ 8
9. Assistance from college officials in receiving part-time employment	_____ 9
10. Opportunity to have private conferences with instructors on academic questions stemming from course work	_____ 10
11. Opportunity to have private conferences with instructors on personal questions stemming from college life in general	_____ 11
12. Opportunity for informal social contacts with faculty members	_____ 12
13. Services of student health department	_____ 13
14. Opportunity for testing and counseling to help determine educational and vocational goals	_____ 14
15. Opportunity to consult from time to time with major professor	_____ 15
16. Opportunity to consult from time to time during freshman year with faculty adviser	_____ 16
17. Opportunity to participate in organized student activities outside of the classroom	_____ 17
18. Quality of help usually available from major professor	_____ 18
19. Opportunity to secure adequate housing	_____ 19
20. Services and facilities of library	_____ 20
21. Opportunity for informal social contacts with students	_____ 21
22. Quality of counseling assistance received on problems of educational and vocational choice	_____ 22
23. Assistance from academic deans on problems related to course work	_____ 23

24. Availability of courses and facilities for training in my major field 24
25. Availability of occupational information for help in choosing an occupation 25
26. Degree of emphasis in college on intellectual and cultural pursuits outside of the classroom 26
27. Opportunity to join a fraternal group of my liking 27
28. Opportunity to receive help on important spiritual and moral problems 28
29. Opportunity to secure loans from the college 29
30. Opportunity to compete for scholarship aid 30
31. Study conditions in the library 31
32. Study conditions in my room 32
33. Ability of instructors to set forth clear-cut and interesting course objectives 33
34. Degree of emphasis in college on vocational guidance 34
35. Opportunity to consult with personnel deans (dean of students, dean of women, dean of men) on personal problems 35
36. Quality of help generally available from personnel deans 36
37. Recreational facilities on campus 37
38. Services of the business office 38
39. Services of the registrar's office 39
40. Compulsory chapel and assembly attendance 40

Other (write in) _____ _____

_____ _____

_____ _____

The factors listed below are not necessarily related to college facilities and services. Use the same code.

1. College rules relating to social activities 1
2. College rules governing academic life, such as class cuts 2
3. Hazing by students 3
4. Customs and practices regarding campus apparel 4
5. Emphasis on social fraternities (sororities) 5
6. General type of students attending the college 6
7. General intellectual life around the college 7
8. Treatment by townspeople 8
9. Emphasis on intercollegiate athletics 9
10. Recreational facilities in town 10
11. Opportunities for religious life 11

Other (write in) _____ _____

_____ _____

16—68880-1 U. S. GOVERNMENT PRINTING OFFICE

RSR–45

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON 25, D. C.

Inst. _____
Budget Bureau No. 51–6818–1.
Expires Dec. 31, 1964.
Student _____

STUDY OF COLLEGE STUDENT RETENTION AND WITHDRAWAL

PART II—STUDENT REPORT FORM

Part II, when completed, is to be returned to the college in accordance with the instructions in the covering letter.

Please report on the first six (6) items in this section in terms of your status in the fall of 1950 when you enrolled or registered at an institution of higher learning for the first time.

1. Institution _____ (Name) _____ (P. O.) _____ (State)

2. Your name _____ (First) _____ (Middle) _____ (Last)

3. Date of birth: Month _____ Year _____ Sex: M _____ F _____

4. Status (Fall 1950): Nonveteran _____ Veteran, no educational benefits _____ PL 16 Vet. _____ PL 346 Vet. _____

5. Number living brothers and sisters (Count a twin as older): Number older _____ Number younger _____

6. Date of secondary school graduation: Month _____ Year _____ If not a graduate, indicate how you qualified for college entrance _____

7. If *both* parents are deceased, check here ☐ and omit item 8.

8. In the table below, check the bracket that represents your best estimate of your parent's or parents' 1953 income (wages, salaries, profits, interest, dividends). *17* (Disregard the small printed numbers in italics. They refer to tabulating card columns.)

Loss	☐ *0*	$4,000–4,999	☐ *5*
0– 999	☐ *1*	5,000–5,999	☐ *6*
$1,000–1,999	☐ *2*	6,000–6,999	☐ *7*
2,000–2,999	☐ *3*	7,000–9,999	☐ *8*
3,000–3,999	☐ *4*	10,000 or more	☐ *9*

9. Write the number 1 before the subject in the list below in which you had the greatest interest at the time you entered college. If your major interest changed while in college write the number 2 before the subject in which you next became interested. If your interest changed to still another field, write the number 3 before that subject, and so on. Then draw a circle around the number before the subject in which you are now majoring or were majoring when you dropped out of college. (*27–28, 43–44, 12–13, 28–29, 45–46.*)

____ 1. Accounting
____ 2. Agriculture
____ 3. Anatomy
____ 4. Animal husbandry
____ 5. Anthropology
____ 6. Architecture
____ 7. Astronomy
____ 8. Bacteriology
____ 9. Biochemistry
____ 10. Biology
____ 11. Botany
____ 12. Business administration
____ 13. Chemistry
____ 14. Dental technology
____ 15. Economics
____ 16. Education
____ 17. Engineering, aeronautical
____ 18. Engineering, civil
____ 19. Engineering, chemical
____ 20. Engineering, electrical
____ 21. Engineering, mechanical
____ 22. Engineering, other ____________
____ 23. English
____ 24. Entomology
____ 25. Fine arts
____ 26. Forestry
____ 27. Geography
____ 28. Geology
____ 29. History
____ 30. Home economics
____ 31. Industrial arts
____ 32. International relations
____ 33. Journalism
____ 34. Language
____ 35. Library science
____ 36. Mathematics
____ 37. Metallurgy
____ 38. Meteorology
____ 39. Music
____ 40. Nursing
____ 41. Optometry
____ 42. Osteopathy
____ 43. Pharmacy
____ 44. Philosophy
____ 45. Physical education
____ 46. Physics
____ 47. Physiology
____ 48. Political science
____ 49. Predentistry
____ 50. Prelaw
____ 51. Premedicine
____ 52. Psychology
____ 53. Public administration
____ 54. Public health
____ 55. Religious education and Bible
____ 56. Social work
____ 57. Sociology
____ 58. Speech and dramatic arts
____ 59. Theology
____ 60. Veterinary medicine
____ 61. Zoology
____ 62. ____________

13—[illegible]

10. Report, *for the total period of your college attendance*, your estimates of the amounts and percentages of funds, in terms of sources, that were devoted to defraying your total college expenses. (Include in total expenses such items as tuition, fees, books and supplies, room rent, meals, fraternity or sorority dues, recreation and entertainment, health, grooming, clothing, laundry, travel, and contributions to church and charity. If, for example, you waited on tables for part or all of your meals, estimate the cash equivalent of such work.) Write 0 on the lines for each item that was not a source of funds.

Source of Funds	Amount	Percent
(*a*) Family	$	18
(*b*) Personal earnings		19
(*c*) Personal savings		20
(*d*) Scholarship		21
(*e*) Loan		22
(*f*) Other (list)		
Total	23	100

The next few items relate to conditions or situations during certain periods while you were in college. The most important period for this study is that immediately preceding the time you withdrew from or completed college. Please try to give as accurate a report as you can for that period, then, if you can remember with reasonable accuracy the conditions during earlier periods of college attendance, it will be appreciated if you report on them as well.

If you attended or are attending a college that operates on a quarter or term basis, use the second column to check either the second or third quarter or both.

If two or more conditions existed during a given period, but could not exist simultaneously, check the item that describes the major or dominant situation for that period. In Item 13 two or more conditions could exist at the same time so more than one check would be proper in the column that applies.

11. Location of home in relation to college

PERIODS OF ATTENDANCE

	Freshman Year		Sophomore Year	Junior Year	Senior Year
	36 1st Semester or Quarter	48 2d Semester 2d and/or 3d Quarter	11	27	44
Within convenient daily traveling distance:					
(*a*) In same city or county .... (1)					
(*b*) Out of same city or county, same State .... (2)					
(*c*) Out of State .... (3)					
Beyond convenient daily traveling distance:					
(*d*) In same city or county .... (4)					
(*e*) Out of same city or county, same State .... (5)					
(*f*) Out of State .... (6)					

12. College housing during all or a major part of each period

PERIODS OF ATTENDANCE

	Freshman Year		Sophomore Year	Junior Year	Senior Year
	30 1st Semester or Quarter	36 2d Semester 2d and/or 3d Quarter	14	30	47
(*a*) At home with parents—convenient daily traveling distance .... (1)					
(*b*) At home with parents—inconvenient daily traveling distance .... (2)					
(*c*) With relatives or friends—convenient daily traveling distance .... (3)					
(*d*) With relatives or friends—inconvenient daily traveling distance .... (4)					
(*e*) Rooming house .... (5)					
(*f*) College dormitory or other college-operated housing .... (6)					
(*g*) Fraternity or sorority house .... (7)					
(*h*) Student cooperative .... (8)					
Other (write in) ________ (9)					

16—[illegible]—1

13. **Fraternity or sorority membership** (check as many times as apply)

PERIODS OF ATTENDANCE

	Freshman Year		Sophomore Year	Junior Year	Senior Year
	1st Semester or Quarter	2d Semester 3d and/or 4th Quarter			
	32	33	34	35	36
(a) None recognized on campus ..... (1)					
(b) Existed but I was not a member ..... (2)					
Member or pledge of a local fraternity or sorority:					
(c) Social ..... (3)					
(d) Professional ..... (4)					
(e) Honorary ..... (5)					
Member or pledge of a national fraternity or sorority:					
(f) Social ..... (6)					
(g) Professional ..... (7)					
(h) Honorary ..... (8)					
(i) Member of a club that made same demands on time and resources as social fraternity or sorority ..... (9)					

Instead of placing checks in the boxes for Item 14, write your best estimates of the average number of hours per week you devoted to each type of noncredit activity. Averages for seasonal activities such as football should be spread over the period indicated (Sophomore year, for example). Time spent in management activities (c) should be recorded as a unit without reference to the activity or agency managed-sports, business, etc. Write 0 for each type in which you did not participate.)

14. Participation in organized extracurricular activities (average number of hours per week)

PERIODS OF ATTENDANCE

	Freshman Year: 1st Semester or Quarter	Freshman Year: 2d Semester and/or 3d Quarter	Sophomore Year	Junior Year	Senior Year
(a) Intercollegiate athletics (player)	30	46	15	31	48
(b) Intramural sports (player)	30	46	15	31	48
(c) Management	27	47	16	32	49
(d) Student government (boards, committees, etc.)	27	47	16	32	49
Curriculum-related (music, debate, dramatics, publications, etc.):					
(e) Institutionwide	32	48	17	33	50
(f) Departmental only	32	48	17	33	50
Total	33	49	18	34	51

For each period that you can remember, write in the figures that represent your best estimates for items 15 and 16. If none, write 0.

Self-support in college (while actually enrolled)

PERIODS OF ATTENDANCE

	Freshman Year: 1st Semester or Quarter	Freshman Year: 2d Semester and/or 3d Quarter	Sophomore Year	Junior Year	Senior Year
15. Estimated percentage of total expenses earned	34	50	19	35	52
16. Estimated number of hours per week devoted to self-support	35	51	20	36	53

If you are still attending the institution in which you first enrolled in the fall of 1950 and you expect to graduate, omit items 17 through 19.

17. If you *transferred* to another college or university, give the date of transfer and the name and address of the institution to which you transferred.

(Name of institution)

(Date of transfer)

(Address)

Use the following code to record your feelings or opinions regarding the relative importance of the several listed reasons as they affected your decision to transfer *from the institution of original registration*. Write the appropriate code symbol after each statement to indicate your reaction.

DEGREE OR LEVEL OF IMPORTANCE

	Code
Of no importance, or does not apply	(0)
Of slight importance	(1)
Of moderate importance	(2)
Of great importance	(3)

REASON FOR TRANSFER

	Code Symbol
(a) I was enrolled in a junior college and had completed my course	_____ (a)
(b) My curricular interests changed	_____ (b)
(c) I wished to attend a less expensive institution	_____ (c)
(d) My grades were too low to continue	_____ (d)
(e) I wanted to be in a: smaller _____; larger _____; institution	_____ (e)
(f) I wanted to be nearer my home town	_____ (f)
(g) I was generally dissatisfied	_____ (g)
(h) I had completed my preprofessional requirements	_____ (h)
(i) I was not interested in what I was studying	_____ (i)
Other (write in) _____	_____
_____	_____

18. If you *discontinued* college attendance, check the statement below ow that best represents your intention at the time of discontinuance in column A. In column B check the statement that best represents your intention now.

	Column A	Column B	
(a) No plans to attend college again	_____	_____	(a)
(b) Plans to resume college work later	_____	_____	(b)
(c) Undecided regarding future plans to attend college	_____	_____	(c)

19. Regardless of how you checked item 18, column A, indicate the relative importance of each of the listed reasons for discontinuing college attendance. Use the following code.

DEGREE OR LEVEL OF IMPORTANCE	Code
Of no importance, or does not apply	(0)
Of slight importance	(1)
Of moderate importance	(2)
Of great importance	(3)

REASON FOR DISCONTINUANCE	Code Symbol
(a) Illness or physical disability (self)	____ (a)
(b) Illness or physical disability (family)	____ (b)
(c) Financial (self)	____ (c)
(d) Financial (family)	____ (d)
(e) I found college work too difficult	____ (e)
(f) I was needed at home	____ (f)
(g) I had marital difficulties	____ (g)
(h) I took a full-time job	____ (h)
(i) I was lonesome and unhappy	____ (i)
(j) I planned to be married soon	____ (j)
(k) Commuting took too long	____ (k)
(l) I was discouraged by low grades	____ (l)
(m) Military service (drafted)	____ (m)
(n) Military service (enlisted)	____ (n)
(o) I lacked interest in my studies	____ (o)
(p) Dismissal for academic failure	____ (p)
(q) Placed on probation for academic reasons	____ (q)
(r) Placed on probation for reasons other than academic	____ (r)
(s) Dismissal for reasons other than academic	____ (s)
(t) Suspended for disciplinary reasons	____ (t)
(u) My housing situation caused trouble	____ (u)
Other (write in) _____	____
_____	____

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
Washington 25, D.C.

COLLEGE STUDENT RETENTION AND WITHDRAWAL – MASTER DATA SHEET A

College or University

Code

Name of Student

Background Data

Freshman Year

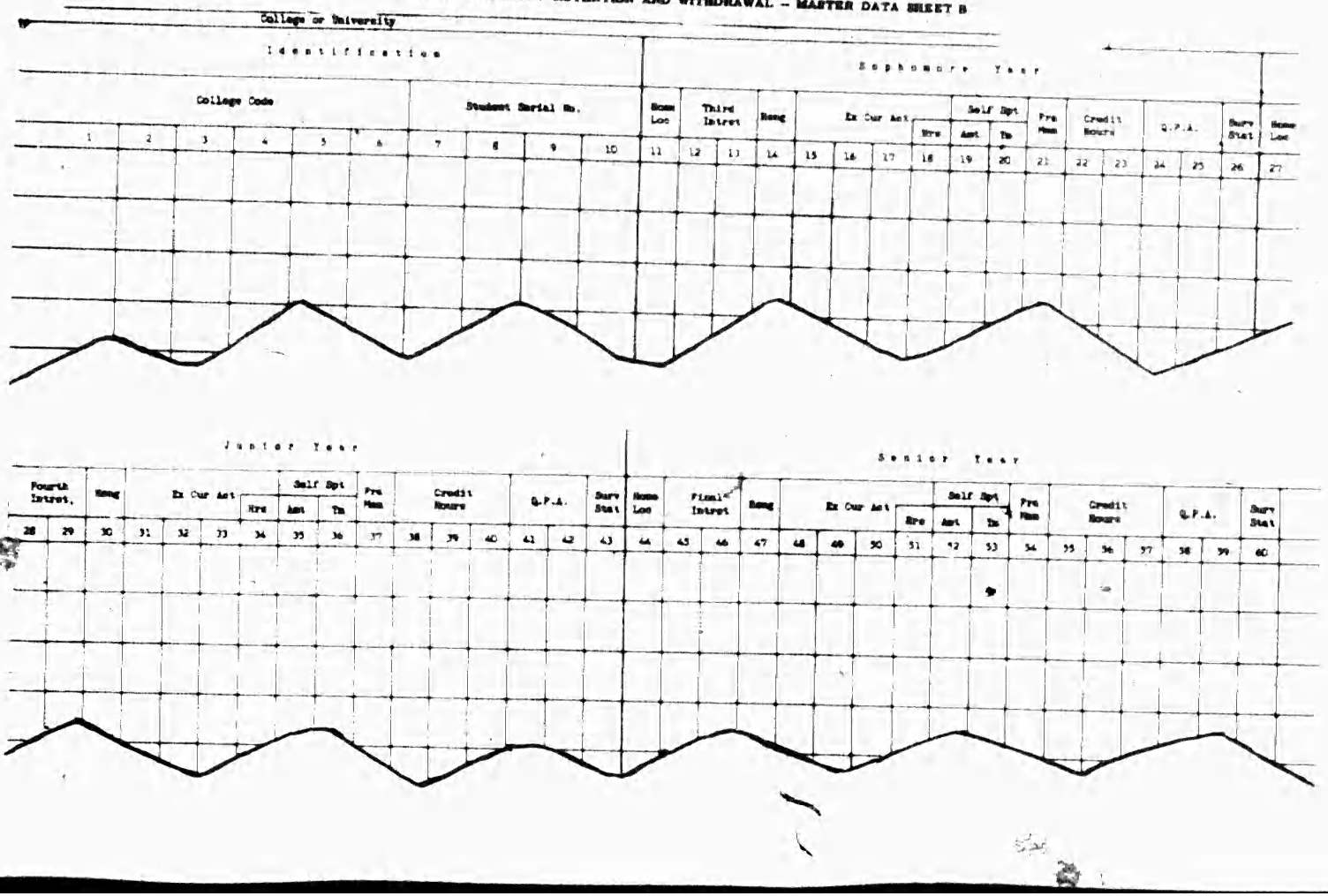
First Semester (Qtr.)

Second Semester (2nd or 3rd Qtr.)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
Washington 25, D.C.

COLLEGE STUDENT RETENTION AND WITHDRAWAL – MASTER DATA SHEET B

College or University



Appendix C

Tables

THE TABLES in appendix C are arranged according to the chapters in the report, but not exclusively so. Occasionally the content of an appendix table applies to the subject matter of more than one chapter. (See chapter 2, page 13, for explanation of differences in numbers of students.)

TABLE 51

DISTRIBUTIONS OF 1950 FIRST TIME ENROLLMENT
BY TYPE OF INSTITUTION, U. S. TOTAL AND STUDY SAMPLE

TYPE OF INSTITUTION	U. S. TOTAL		TOTAL STUDY SAMPLE		RESPONDENTS IN STUDY SAMPLE	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
UNIVERSITIES	171,777	34.3	5,776	42.2	3,380	41.4
TECHNOLOGICAL INST.	21,582	4.3	769	5.6	486	5.9
LIBERAL ARTS COLL.	147,974	29.6	4,197	30.7	2,591	31.7
TEACHERS COLLEGES	52,395	10.5	1,913	14.0	1,160	14.2
JUNIOR COLLEGES	106,511	21.3	1,021	7.5	556	6.8
TOTAL	500,219	100.0	13,676	100.0	8,173	100.0

TABLE 52

DISTRIBUTIONS OF 1950 FIRST TIME ENROLLMENT
IN 4-YEAR INSTITUTIONS, BY TYPE OF INSTITUTION
U. S. TOTAL AND STUDY SAMPLE

TYPE OF INSTITUTION	U. S. TOTAL		TOTAL STUDY SAMPLE		RESPONDENTS IN STUDY SAMPLE	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
UNIVERSITIES	171,777	43.6	5,776	45.6	3,380	44.4
TECHNOLOGICAL INST.	21,582	5.5	769	6.1	486	6.4
LIBERAL ARTS COLL.	147,974	37.6	4,197	33.2	2,591	34.0
TEACHERS COLLEGES	52,395	13.3	1,913	15.1	1,160	15.2
TOTAL	393,708	100.0	12,655	100.0	7,617	100.0

TABLE 53

PERCENTAGE DISTRIBUTIONS SHOWING RETENTION AND WITHDRAWAL RATES
BY SEX AND BY TYPE OF INSTITUTION
ALL IN RELATION TO INSTITUTION OF FIRST REGISTRATION

LENGTH OF ATTENDANCE	TOTAL	SEX		TYPE OF INSTITUTION					
		MALE	FEMALE	UNIVERSITIES	TECHNO. INSTIT.	L.A. COLLEGES	TEACHERS COLLEGES	TOTAL	JUNIOR COLLEGES
NOT BEYOND 1ST REGISTRATION	10.8	13.3	7.4	9.8	9.9	10.6	14.3	10.7	12.0
NOT MORE THAN 1 YEAR*	17.5	14.9	20.9	14.9	12.6	17.4	22.1	16.7	28.3
NOT MORE THAN 2 YEARS*	18.0	14.1	23.6	14.9	9.9	16.0	14.2	14.9	56.8
NOT MORE THAN 3 YEARS*	5.6	6.0	5.0	6.7	7.1	5.4	4.8	6.0	-
ENTERED 4TH YEAR, NOT GRADUATED	6.7	9.3	3.2	9.8	11.5	4.6	3.6	7.3	-
GRADUATED IN 1964	36.6	37.0	36.0	39.0	42.7	41.3	36.0	39.5	-
OTHER	4.8	5.4	3.9	4.9	6.3	4.7	5.0	4.9	2.9
TOTAL NUMBER OF STUDENTS	13,612	7,877	5,797	5,778	765	4,164	1,884	12,591	1,021

* EXCLUSIVE OF THE PRECEDING GROUP

TABLE 54

RECORD OF STUDENT PERSISTENCE
IN 4-YEAR INSTITUTIONS OF HIGHER EDUCATION
FALL OF 1950 TO FALL OF 1954

RECORD OF STUDENT	PERCENT HAVING RECORD DURING OR AT END OF EACH PERIOD				
	1 ST YEAR	2 ND YEAR	3 RD YEAR	4 TH YEAR	TOTAL*
GRADUATED IN REGULAR PROGRESSION FROM INSTITUTION OF FIRST REGISTRATION	-	-	-	84.46	39.53
COMPLETED 4TH YEAR BUT NOT GRADUATED	-	-	-	11.91	5.58
TRANSFERRED TO ANOTHER INSTITUTION	21.26	28.16	19.07	.08	11.95
TRANSFERRED TO SMALLER INSTITUTION	9.45	9.60	6.36	.05	4.84
TRANSFERRED TO LARGER INSTITUTION	9.14	14.83	9.40	.02	5.50
DISCONTINUED (NO KNOWN TRANSFER)	78.04	73.07	81.72	3.11	41.46
WITHDREW DURING PERIOD	19.40	20.96	30.86	1.73	12.82
WITHDREW AT END OF PERIOD	58.64	52.11	50.86	1.38	28.64
DROPPED OUT AND RETURNED	.17	.96	.93	.29	3.83
NO INFORMATION	2.26	2.08	2.91	.24	1.40
NUMBER OF STUDENTS	3,448	1,875	755	5,893	12,591

* TOTAL INCLUDES 620 IN "OTHER" CATEGORY. NOTE THAT PERCENTAGES ADD TO MORE THAN 100 BECAUSE A FEW STUDENTS FALL IN MORE THAN ONE CLASSIFICATION.

TABLE 55

STANDING IN HIGH SCHOOL GRADUATING CLASS IN RELATION TO LENGTH OF COLLEGE ATTENDANCE, BY SEX

LENGTH OF ATTENDANCE	MEAN STANDING IN HIGH SCHOOL GRADUATING CLASS		
	TOTAL	MEN	WOMEN
NOT BEYOND 1ST REGISTRATION PERIOD	4.91	5.30	3.88
BEYOND 1ST REGISTRATION PERIOD, NOT MORE THAN 1 YEAR.	4.21	4.96	3.48
BEYOND 1 YEAR, NOT MORE THAN 2 YEARS	3.88	4.45	3.36
BEYOND 2 YEARS, NOT MORE THAN 3 YEARS	3.64	4.10	2.90
BEYOND 3 YEARS, NOT GRADUATED	3.88	4.14	2.93
GRADUATED IN 1954	2.87	3.22	2.37
OTHER	4.20	4.76	3.04

TABLE 56

FINAL CUMULATIVE QUALITY POINT AVERAGES ACCORDING TO LENGTH OF SURVIVAL IN INSTITUTION OF FIRST REGISTRATION

	LENGTH OF SURVIVAL							
	FIRST REGIST. PERIOD	1 ST YEAR	2 ND YEAR	3 RD YEAR	4 TH YEAR NON-GRAD.	GRAD-UATES	TOTAL NON-GRAD.	TOTAL
NUMBER	847	1,915	1,941	738	895	4,934	6,336	11,270
1ST QUARTILE	1.023	1.434	1.700	1.838	1.971	2.379	1.605	1.938
MEDIAN	1.605	1.966	2.142	2.194	2.233	2.693	2.074	2.392
3RD QUARTILE	2.193	2.496	2.616	2.636	2.552	3.085	2.532	2.847
MEAN	1.540	1.882	2.064	2.158	2.190	2.643	1.968	2.263

TABLE 57

MEAN RATINGS OF IMPORTANCE OF REASONS FOR GOING TO COLLEGE BEFORE ATTENDANCE, BY MEN STUDENTS, BY TYPE OF INSTITUTIONAL CONTROL

REASON NUMBER*	MEAN RATINGS BY TYPE OF INSTITUTIONAL CONTROL				
	ALL TYPES	PUBLICLY CONTROLLED	PRIVATELY CONTROLLED		
			TOTAL	INDEPENDENT OF CHURCH	CHURCH-RELATED
1	2.432	2.388	2.485	2.491	2.466
2	.882	.883	.881	.817	1.068
3	1.164	1.189	1.134	1.119	1.176
4	1.624	1.526	1.741	1.827	1.489
5	.773	.777	.768	.787	.713
6	1.115	1.030	1.215	1.248	1.120
7	2.257	2.310	2.193	2.228	2.093
8	1.281	1.329	1.223	1.205	1.277
9	1.067	1.116	1.008	.963	1.140
10	.994	.995	.992	1.011	.938
11	1.063	1.040	1.091	1.144	.934
12	1.309	1.345	1.265	1.288	1.198
13	.549	.537	.564	.576	.529
14	1.949	2.020	1.865	1.859	1.883
15	1.092	1.033	1.162	1.191	1.077
16	1.540	1.615	1.449	1.474	1.377
17	1.799	1.774	1.829	1.844	1.784
18	1.193	1.223	1.149	1.160	1.176
19	1.004	1.040	.961	.928	1.059
20	.543	.563	.520	.502	.573
21	.879	.944	.800	.750	.945
22	1.435	1.383	1.497	1.526	1.410
23	.327	.360	.288	.274	.328
24	1.307	1.292	1.325	1.357	1.233
25	.551	.520	.589	.622	.491
TOTAL NUMBER	4,841	2,637	2,204	1,639	565

* SEE PART I--STUDENT OPINIONNAIRE FORM--APPENDIX B

TABLE 58

MEAN RATINGS OF IMPORTANCE OF REASONS FOR GOING TO COLLEGE BEFORE ATTENDANCE, BY WOMEN STUDENTS, BY TYPE OF INSTITUTIONAL CONTROL

REASON NUMBER*	MEAN RATINGS BY TYPE OF INSTITUTIONAL CONTROL				
	ALL TYPES	PUBLICLY CONTROLLED	PRIVATELY CONTROLLED		
			TOTAL	INDEPENDENT OF CHURCH	CHURCH-RELATED
1	2.267	2.387	2.117	2.084	2.175
2	.838	.883	.782	.643	1.030
3	1.730	1.712	1.753	1.738	1.780
4	1.848	1.782	1.931	1.984	1.837
5	.875	.876	.874	.902	.825
6	1.337	1.261	1.433	1.532	1.259
7	1.899	2.017	1.753	1.751	1.755
8	1.520	1.543	1.492	1.417	1.625
9	.992	1.030	.945	.859	1.095
10	.942	.939	.946	.912	1.007
11	1.233	1.198	1.289	1.361	1.161
12	1.658	1.668	1.645	1.609	1.708
13	1.120	1.095	1.151	1.074	1.288
14	1.929	2.054	1.772	1.677	1.942
15	1.011	.867	1.192	1.264	1.066
16	1.126	1.168	1.074	1.081	1.063
17	1.949	1.849	2.075	2.134	1.970
18	1.114	.920	1.358	1.602	.932
19	.860	.887	.826	.752	.955
20	1.120	1.061	1.193	1.216	1.153
21	1.723	1.676	1.782	1.707	1.913
22	1.938	1.910	1.972	2.070	1.800
23	.544	.589	.488	.478	.505
24	1.609	1.617	1.600	1.661	1.491
25	.826	.777	.887	.982	.719
TOTAL NUMBER	3,596	2,000	1,596	1,020	576

* SEE PART I--STUDENT OPINIONNAIRE FORM--APPENDIX B

TABLE 59

DEGREE OR LEVEL OF SATISFACTION
WITH AVAILABILITY OF COURSES AND FACILITIES
FOR TRAINING IN MAJOR FIELD

MEN GRADUATES OF FOUR YEAR INSTITUTIONS

TYPE OF INSTITUTION	PERCENT OF TOTAL	PERCENTAGES BY LEVEL OF SATISFACTION: VERY UNSATISFACTORY	SOMEWHAT UNSATISFACTORY	FAIRLY SATISFACTORY	VERY SATISFACTORY	DOES NOT APPLY OR NO OPINION	MEAN RATING
UNIVERSITIES	49.1	46.3	49.8	44.3	52.8	92.3	3.305
TECH. INSTIT.	10.2	6.0	3.8	7.1	15.2	-	3.581
LIB. ARTS COLL.	32.3	34.3	38.3	38.8	25.1	7.7	3.142
TEACHERS COLL.	8.4	13.4	8.1	9.8	6.9	-	3.156
TOTAL NUMBER OF STUDENTS	2,220	67	261	892	987	13	3.268

THE MEN WHO GRADUATED FROM TECHNOLOGICAL INSTITUTIONS SHOWED THE HIGHEST LEVEL OF SATISFACTION WITH COURSES AND FACILITIES FOR TRAINING IN THEIR MAJOR FIELD. UNIVERSITIES PLACED SECOND; TEACHERS COLLEGES THIRD; AND LIBERAL ARTS COLLEGES LAST.

TABLE 60

DEGREE OR LEVEL OF SATISFACTION
WITH OPPORTUNITY TO COMPETE FOR SCHOLARSHIP AID

MEN GRADUATES OF FOUR YEAR INSTITUTIONS

TYPE OF INSTITUTION	PERCENT OF TOTAL	PERCENTAGES BY LEVEL OF SATISFACTION: VERY UNSATISFACTORY	SOMEWHAT UNSATISFACTORY	FAIRLY SATISFACTORY	VERY SATISFACTORY	DOES NOT APPLY OR NO OPINION	MEAN RATING
UNIVERSITIES	49.1	47.7	48.8	46.0	44.9	54.3	3.179
TECH. INSTIT.	10.2	15.9	13.3	11.2	10.9	7.8	3.099
LIB. ARTS COLL.	32.3	24.3	23.5	34.5	37.1	30.2	3.332
TEACHERS COLL.	8.4	12.1	14.4	8.3	7.1	7.7	2.975
TOTAL NUMBER OF STUDENTS	2,220	107	166	446	660	838	3.203

THE MEN WHO GRADUATED FROM LIBERAL ARTS COLLEGES RATED THE OPPORTUNITY TO COMPETE FOR SCHOLARSHIP AID AT A HIGHER LEVEL OF SATISFACTION THAN DID THE MEN WHO GRADUATED FROM THE OTHER TYPES OF INSTITUTIONS. THE UNIVERSITIES WERE SECOND IN RANK; THE TECHNOLOGICAL INSTITUTIONS THIRD; AND THE TEACHERS, FOURTH. NEARLY 38 PERCENT OF ALL MEN GRADUATES RATED THIS ITEM: "DOES NOT APPLY TO ME, OR NO OPINION"; 41.8 PERCENT FROM UNIVERSITIES, 35.2 PERCENT FROM LIBERAL ARTS COLLEGES, 34.9 PERCENT FROM TEACHERS COLLEGES, AND 28.6 PERCENT FROM TECHNOLOGICAL INSTITUTIONS. IT CANNOT BE INFERRED THAT ALL OF THOSE WHO SAID THE ITEM DID NOT APPLY TO THEM OR THAT THEY HAD NO OPINION, HAD NO INTEREST IN SCHOLARSHIP AID BUT THERE ARE IMPLICATIONS IN THE FIGURES THAT A RELATIVELY LARGE NUMBER OF MEN GRADUATES HAD NOT BEEN SERIOUSLY CONCERNED ABOUT THE PROBLEM OF OBTAINING SCHOLARSHIP FUNDS.

TABLE 61

DEGREE OR LEVEL OF SATISFACTION WITH ABILITY OF INSTRUCTORS TO SET FORTH CLEAR-CUT AND INTERESTING COURSE OBJECTIVES

MEN GRADUATES OF FOUR YEAR INSTITUTIONS

TYPE OF INSTITUTION	PERCENT OF TOTAL	PERCENTAGES BY LEVEL OF SATISFACTION: VERY UNSATISFACTORY	SOMEWHAT UNSATISFACTORY	FAIRLY SATISFACTORY	VERY SATISFACTORY	DOES NOT APPLY OR NO OPINION	MEA RATI
UNIVERSITIES	49.1	55.5	55.0	48.4	36.3	70.6	2.
TECH. INSTIT.	10.2	10.1	9.2	10.4	11.8	5.9	2.
LIB. ARTS COLL.	32.3	26.3	25.0	33.6	44.3	23.5	2.
TEACHERS COLL.	8.4	8.1	10.8	7.6	7.6	-	2.
TOTAL NUMBER OF STUDENTS	2,220	99	564	1,249	269	17	2.

THE TEACHERS COLLEGE FACULTY MAY BE THE VICTIMS OF THEIR OWN TEACHING IN THE SENSE THAT THEY HAVE ASSISTED IN THE DEVELOPMENT OF THE ABILITY TO DISCRIMINATE BETWEEN GOOD AND POOR EXPOSITION OF COURSE OBJECTIVES. THE INSTRUCTIONAL STAFFS OF THE TEACHERS COLLEGES AND UNIVERSITIES WERE RATED SIGNIFICANTLY LOWER THAN THOSE OF THE TECHNOLOGICAL INSTITUTIONS AND PARTICULARLY THE LIBERAL ARTS COLLEGES IN THEIR ABILITY TO SET FORTH CLEAR-CUT AND INTERESTING COURSE OBJECTIVES. HOW EVEN AS MANY AS 17 MEN GRADUATES OUT OF 2,220 COULD SAY THAT THEY HAD NO OPINION, OR THAT THE MATTER DID NOT APPLY TO THEM, IS DIFFICULT TO UNDERSTAND. THE PROBLEM OF WEIGHING THE GOOD AGAINST THE POOR MAY HAVE BEE TOO DIFFICULT TO SOLVE.

TABLE 62

SUMMARY OF RATINGS OF FACULTY
BY WOMEN GRADUATES

TYPE OF INSTITUTION	RATINGS OF FACULTY BY WOMEN GRADUATES OF UNIVERSITIES, LIBERAL ARTS COLLEGES AND TEACHERS COLLEGES					
	MEAN	SD	SEM		DIFF.	CR
1. UNIVERSITIES	2.886	.986	.000121	(5-1)	.239	17.1
5. LIBERAL ARTS COLLEGES	3.125	.916	.000086	(5-6)	.214	13.6
6. TEACHERS COLLEGES	2.911	.942	.000163	(6-1)	.025	1.5

LEVEL	PERCENT OF TOTAL RATINGS AT EACH LEVEL		
	UNIVERSITIES	LIBERAL ARTS COLL.	TEACHERS COLLEGES
0. DOES NOT APPLY TO ME, OR NO OPINION	10.9	9.3	11.2
1. VERY UNSATISFACTORY	10.4	6.5	8.9
2. SOMEWHAT UNSATISFACTORY	17.6	13.6	17.3
3. FAIRLY SATISFACTORY	32.9	32.7	35.5
4. VERY SATISFACTORY	28.2	37.9	27.1
NUMBER OF RATINGS	8,873	10,650	6,044

TABLE 63
DEGREE OR LEVEL OF SATISFACTION
WITH COLLEGE RULES GOVERNING ACADEMIC LIFE
SUCH AS CLASS CUTS

MEN GRADUATES OF FOUR YEAR INSTITUTIONS

TYPE OF CONTROL	PERCENT OF TOTAL	PERCENTAGES BY LEVEL OF SATISFACTION: VERY UNSATISFACTORY	SOMEWHAT UNSATISFACTORY	FAIRLY SATISFACTORY	VERY SATISFACTORY	DOES NOT APPLY OR NO OPINION	MEAN RATING
PUBLIC	42.4	47.5	46.2	43.6	36.1	55.3	2.843
PRIVATE	57.6	52.5	53.8	56.4	63.9	44.7	2.992
INDEPENDENT	43.8	30.5	36.7	42.0	54.8	42.1	3.093
CHURCH-RELATED	13.8	22.0	17.1	14.4	9.1	2.6	2.675
TOTAL NUMBER OF STUDENTS	2,220	200	422	892	668	38	2.929

THE TABLE IS READ AS FOLLOWS: MEN GRADUATES FROM PUBLICLY CONTROLLED INSTITUTIONS MADE UP 42.4 PERCENT OF THE TOTAL BUT 47.5 PERCENT OF THE "VERY UNSATISFACTORY" RATINGS WERE GIVEN BY THESE MEN, AND ONLY 36.1 PERCENT OF THE "VERY SATISFACTORY" RATINGS. CONVERSELY, 57.6 PERCENT OF MEN GRADUATES WERE ENROLLED IN PRIVATELY CONTROLLED INSTITUTIONS BUT 52.5 PERCENT OF THE LOWEST, AND 63.9 PERCENT OF THE HIGHEST RATINGS WERE MADE BY THESE MEN.

MEN GRADUATES OF INSTITUTIONS UNDER PUBLIC CONTROL REPORTED GREATER DISSATISFACTION WITH "COLLEGE RULES GOVERNING ACADEMIC LIFE, SUCH AS CLASS CUTS" THAN DID MEN WHO WERE GRADUATES OF INSTITUTIONS UNDER PRIVATE CONTROL. THE MEN STUDENTS IN CHURCH-RELATED INSTITUTIONS EXPRESSED GREATER DISSATISFACTION ON THIS SCORE THAN DID THE STUDENTS IN PUBLICLY CONTROLLED INSTITUTIONS. PRIVATELY CONTROLLED INSTITUTIONS, INDEPENDENT OF CHURCH, SEEM TO HAVE DEVELOPED ACADEMIC RULES MORE TO THE LIKING OF THEIR STUDENTS THAN HAVE THE PUBLICLY CONTROLLED AND CHURCH-RELATED INSTITUTIONS.

TABLE 64

FAMILY INCOME AS ESTIMATED BY STUDENTS ATTENDING PUBLICLY AND PRIVATELY CONTROLLED HIGHER EDUCATIONAL INSTITUTIONS

TYPE OF CONTROL	1953 INCOME			
	NUMBER REPORTING	LOWER QUARTILE	MEDIAN	UPPER QUARTILE
ALL INSTITUTIONS	7,644	$3,984	$5,706	$ 9,221
PUBLICLY CONTROLLED	4,253	3,739	5,243	7,522
PRIVATELY CONTROLLED	3,391	4,434	6,570	10,000+
INDEPENDENT OF CHURCH	2,393	4,547	6,816	10,000+
CHURCH RELATED	998	4,219	6,009	10,000+

TABLE 65

MEAN PERCENT OF TOTAL COLLEGE EXPENSES DEFRAYED FROM SCHOLARSHIP FUNDS BY STANDING IN HIGH SCHOOL GRADUATING CLASS AND STANDING ON COLLEGE PLACEMENT TEST

(BASED ON REPORTS OF STUDENTS RECEIVING SCHOLARSHIP FUNDS)

TENTH IN HIGH SCHOOL GRADUATING CLASS	MEAN PERCENT OF TOTAL COLLEGE EXPENSES PAID FROM SCHOLARSHIP FUNDS		
	TOTAL	MEN	WOMEN
TOP	19.23	21.59	16.98
2	16.09	17.72	13.41
3	17.00	18.00	14.60
4	17.11	18.41	13.14
5	22.18	22.81	19.29
6	16.94	16.12	28.75
7	14.76	15.00	12.50
8	21.72	21.85	20.00
9	28.21	28.21	
BOTTOM	28.50	27.63	45.00

TENTH ON COLLEGE PLACEMENT TEST	MEAN PERCENT OF TOTAL COLLEGE EXPENSES PAID FROM SCHOLARSHIP FUNDS		
	TOTAL	MEN	WOMEN
TOP	19.11	19.25	18.91
2	18.31	20.82	14.67
3	15.41	16.67	13.69
4	17.83	18.26	17.21
5	15.66	17.37	12.50
6	17.55	20.51	13.17
7	16.16	16.72	15.19
8	19.47	22.39	13.05
9	20.05	24.55	9.83
BOTTOM	18.31	19.72	14.50

TABLE 66

PERCENTAGE DISTRIBUTIONS OF ALL STUDENTS ACCORDING TO HOME LOCATION IN RELATION TO COLLEGE LOCATION DURING FIRST REGISTRATION PERIOD BY TYPE OF CONTROL

LOCATION OF HOME IN RELATION TO COLLEGE	PERCENT IN EACH TYPE					
	GRAND TOTAL	PUBLICLY CONTROLLED	PRIVATELY CONTROLLED			
			TOTAL	INDEPEN.	NON-CATH.	CATHOLIC
WITHIN CONVENIENT DAILY TRAVELING DISTANCE	40.4	43.7	36.1	37.4	25.6	47.2
IN SAME CITY OR COUNTY	26.1	27.5	24.3	26.5	9.3	39.2
OUT OF SAME CITY OR COUNTY, SAME STATE	11.6	15.0	7.1	6.4	11.2	3.6
OUT OF STATE	2.7	1.2	4.7	4.5	5.1	4.4
BEYOND CONVENIENT DAILY TRAVELING DISTANCE	59.6	56.3	63.9	62.6	74.4	52.8
IN SAME CITY OR COUNTY	2.0	2.0	2.1	2.7	.7	.6
OUT OF SAME CITY OR COUNTY, SAME STATE	32.1	43.1	17.6	17.5	23.7	6.9
OUT OF STATE	25.5	11.2	44.2	42.4	50.0	45.3
LOCATION WITHOUT REFERENCE TO DISTANCE	100.0	100.0	100.0	100.0	100.0	100.0
IN SAME CITY OR COUNTY	28.1	29.5	26.4	29.2	10.0	39.8
OUT OF SAME CITY OR COUNTY, SAME STATE	43.7	58.1	24.7	23.9	34.9	10.5
OUT OF STATE	28.2	12.4	48.9	46.9	55.1	49.7
TOTAL NUMBER OF STUDENTS	8,331	4,730	3,601	2,517	722	362

TABLE 67

PERSISTENCE OF MEN STUDENTS IN TERMS OF THE LOCATION OF THEIR HOMES IN RELATION TO COLLEGE DURING THE FIRST REGISTRATION PERIOD OF THE FIRST YEAR

ENTERED BUT NOT ATTENDING BEYOND	PERCENT IN EACH PERSISTENCE GROUP BY HOME LOCATION							
	CONVENIENT TRAVELING DISTANCE				INCONVENIENT TRAVELING DISTANCE			
	SAME CITY OR COUNTY	SAME ST. OUT OF COUNTY	OUT OF STATE	TOTAL	SAME CITY OR COUNTY	SAME ST. OUT OF COUNTY	OUT OF STATE	TOTAL
1 ST REGISTRATION PERIOD	9.8	7.9	4.3	8.9	4.3	9.5	6.5	8.1
1 ST YEAR	14.0	12.8	15.5	13.8	15.1	13.0	9.9	11.7
2 ND YEAR	19.4	14.4	11.2	17.6	11.8	11.2	11.1	11.2
3 RD YEAR	5.7	5.4	6.0	5.6	9.7	5.0	5.9	5.6
4 TH YEAR	9.0	10.8	7.8	9.4	4.3	10.7	7.0	8.9
GRADUATION	36.2	43.1	50.0	38.9	47.3	45.7	55.8	50.0
OTHER	5.9	5.6	5.2	5.8	7.5	4.9	3.8	4.5
NUMBER ENTERING FIRST REGISTRATION PERIOD	1,372	556	116	2,044	93	1,508	1,167	2,768

TABLE 68

PERSISTENCE OF WOMEN STUDENTS IN TERMS OF THE LOCATION OF THEIR HOMES IN RELATION TO COLLEGE DURING THE FIRST REGISTRATION PERIOD OF THE FIRST YEAR

ENTERED BUT NOT ATTENDING BEYOND	PERCENT IN EACH PERSISTENCE GROUP BY HOME LOCATION							
	CONVENIENT TRAVELING DISTANCE				INCONVENIENT TRAVELING DISTANCE			
	SAME CITY OR COUNTY	SAME ST. OUT OF COUNTY	OUT OF STATE	TOTAL	SAME CITY OR COUNTY	SAME ST. OUT OF COUNTY	OUT OF STATE	TOTAL
1 ST REGISTRATION PERIOD	4.6	5.4	6.5	5.0	3.9	4.7	4.2	4.5
1 ST YEAR	18.9	14.2	18.5	17.4	21.1	16.8	14.3	15.8
2 ND YEAR	23.6	15.4	24.1	21.1	15.8	18.3	29.6	23.1
3 RD YEAR	7.2	6.3	5.5	6.8	5.3	4.3	3.8	4.1
4 TH YEAR	4.0	3.4	3.7	3.8	3.9	3.1	1.8	2.6
GRADUATION	36.0	50.7	38.9	40.8	46.1	48.6	44.5	46.8
OTHER	5.7	4.6	2.8	5.1	3.9	4.2	1.8	3.1
NUMBER ENTERING FIRST REGISTRATION PERIOD	805	410	108	1,323	76	1,170	956	2,202

TABLE 69

LOCATION OF HOME IN RELATION TO COLLEGE
DURING FIRST REGISTRATION PERIOD BY PERSISTENCE GROUPS
MEN STUDENTS

LOCATION OF HOME IN RELATION TO COLLEGE DURING FIRST REGISTRATION PERIOD	PERCENT IN EACH GROUP ENTERING BUT NOT ATTENDING BEYOND						
	1 ST SEMS.	1 ST YEAR	2 ND YEAR	3 RD YEAR	4 TH YEAR	GRADU- ATION	ALL MEN*
WITHIN CONVENIENT DAILY TRAVELING DISTANCE	44.9	46.5	53.7	42.7	43.8	36.5	42.5
IN SAME CITY OR COUNTY	32.9	31.8	39.8	29.0	28.0	22.8	28.5
OUT OF SAME CITY OR COUNTY, SAME STATE	10.8	11.7	12.0	11.1	13.7	11.0	11.6
OUT OF STATE	1.2	3.0	1.9	2.6	2.1	2.7	2.4
BEYOND CONVENIENT DAILY TRAVELING DISTANCE	55.1	53.5	46.3	57.3	56.2	63.5	57.5
IN SAME CITY OR COUNTY	1.0	2.3	1.6	3.3	.9	2.0	1.9
OUT OF SAME CITY OR COUNTY, SAME STATE	35.4	32.3	25.3	28.3	36.7	31.6	31.3
OUT OF STATE	18.7	18.9	19.4	25.7	18.7	29.9	24.3
LOCATION WITHOUT REFERENCE TO DISTANCE	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IN SAME CITY OR COUNTY	33.9	34.1	41.4	32.3	28.9	24.8	30.4
OUT OF SAME CITY OR COUNTY, SAME STATE	46.2	44.0	37.3	39.4	50.4	42.6	42.9
OUT OF STATE	19.9	21.9	21.3	28.3	20.8	32.6	26.7
TOTAL NUMBER OF STUDENTS	407	607	669	269	439	2,179	4,812

* INCLUDES "OTHER" MEN STUDENTS

TABLE 70

PERSISTENCE OF MEN STUDENTS IN TERMS OF THE LOCATION OF THEIR HOMES IN RELATION TO COLLEGE DURING THE SECOND REGISTRATION PERIOD OF THE FIRST YEAR

ENTERED BUT NOT ATTENDING BEYOND	PERCENT IN EACH PERSISTENCE GROUP BY HOME LOCATION							
	CONVENIENT TRAVELING DISTANCE				INCONVENIENT TRAVELING DISTANCE			
	SAME CITY OR COUNTY	SAME ST. OUT OF COUNTY	OUT OF STATE	TOTAL	SAME CITY OR COUNTY	SAME ST. OUT OF COUNTY	OUT OF STATE	TOTAL
2 ND REGISTRATION PERIOD	14.5	13.4	18.1	14.4	14.9	13.4	10.1	12.0
2 ND YEAR	22.1	15.8	11.2	19.7	12.7	13.0	12.2	12.6
3 RD YEAR	6.3	5.6	6.0	6.1	10.3	5.2	6.4	5.9
4 TH YEAR, NON-GRADUATES	9.8	11.7	7.8	10.2	4.6	11.8	6.9	9.5
GRADUATION	41.1	48.1	50.9	43.7	49.4	51.7	60.6	55.4
OTHER	6.2	5.4	6.0	5.9	8.1	4.9	3.8	4.6
NUMBER ENTERING SECOND REGISTRATION PERIOD	1,204	501	116	1,821	87	1,301	1,048	2,436

TABLE 71

PERCENTAGE DISTRIBUTIONS OF ALL STUDENTS ACCORDING TO HOUSING ARRANGEMENTS DURING FIRST REGISTRATION PERIOD, BY TYPE OF INSTITUTIONAL CONTROL

WHERE STUDENTS LIVED DURING FIRST REGISTRATION PERIOD	PERCENT IN EACH TYPE					
	GRAND TOTAL	PUBLICLY CONTROLLED	PRIVATELY CONTROLLED			
			TOTAL	INDEPEN.	NON-CATH.	CATHOLIC
AT HOME WITH PARENTS-CONVENIENT DAILY TRAVELING DISTANCE	24.5	25.6	23.0	24.6	8.7	40.8
AT HOME WITH PARENTS-INCONVENIENT DAILY TRAVELING DISTANCE	2.2	1.9	2.7	3.5	.4	1.4
WITH RELATIVES OR FRIENDS-CONVENIENT DAILY TRAVELING DISTANCE	1.7	2.1	1.2	1.3	.8	1.1
WITH RELATIVES OR FRIENDS-INCONVENIENT DAILY TRAVELING DISTANCE	.4	.5	.2	.3	-	-
ROOMING HOUSE	8.1	10.8	4.5	5.0	3.8	2.8
COLLEGE DORMITORY OR OTHER COLLEGE-OPERATED HOUSING	58.4	52.9	65.6	62.6	82.6	52.3
FRATERNITY OR SORORITY HOUSE	3.1	4.1	1.8	1.9	2.5	-
STUDENT COOPERATIVE	.6	.9	.3	.2	.4	.5
OTHER	1.0	1.2	.7	.6	.8	1.1
TOTAL NUMBER OF STUDENTS	8,216	4,614	3,602	2,520	719	363

TABLE 72

RELATIVE PERSISTENCE OF WOMEN STUDENTS IN TERMS OF PLACE OF RESIDENCE WHILE IN COLLEGE

WHERE WOMEN STUDENTS LIVED DURING 2ND SEM. OF FRESHMAN YR.	PERCENT IN EACH GROUP ENTERING BUT NOT ATTENDING BEYOND					
	2 ND* SEMS.	2 ND YEAR	3 RD YEAR	4 TH YEAR	GRADU-ATION	ALL WOMEN
AT HOME WITH PARENTS-CONVENIENT DAILY TRAVELING DISTANCE	21.7	23.3	24.5	31.7	17.2	20.7
AT HOME WITH PARENTS-INCONVENIENT DAILY TRAVELING DISTANCE	1.6	.5	2.8	1.9	2.1	1.6
WITH RELATIVES OR FRIENDS-CONVENIENT DAILY TRAVELING DISTANCE	3.5	1.3	.6	2.9	1.6	1.9
WITH RELATIVES OR FRIENDS-INCONV. DAILY TRAVELING DISTANCE	.7	.4	.6	-	-	.3
ROOMING HOUSE	5.0	1.8	4.4	2.9	3.4	3.4
COLLEGE DORMITORY OR OTHER COLLEGE OPERATED HOUSING	64.0	69.2	62.2	52.9	72.3	68.2
SORORITY HOUSE	1.2	1.8	2.8	2.9	2.1	1.9
STUDENT COOPERATIVE	.7	.4	2.2	1.0	.4	.7
OTHER	1.6	1.3	-	3.8	.9	1.3
TOTAL NUMBER	575	789	180	104	1,556	3,337

* SECOND SEMESTER (SECOND OR THIRD QUARTER) OF THE FRESHMAN YEAR.

TABLE 73

RELATIVE PERSISTENCE OF MEN STUDENTS IN TERMS OF PLACE OF RESIDENCE WHILE IN COLLEGE

WHERE MEN STUDENTS LIVED DURING 2ND SEM. OF FRESHMAN YR.	PERCENT IN EACH GROUP ENTERING BUT NOT ATTENDING BEYOND					
	2 ND* SEMS.	2 ND YEAR	3 RD YEAR	4 TH YEAR	GRADU-ATION	ALL MEN**
AT HOME WITH PARENTS-CONVENIENT DAILY TRAVELING DISTANCE	27.6	35.4	29.1	26.2	22.3	26.3
AT HOME WITH PARENTS-INCONVENIENT DAILY TRAVELING DISTANCE	1.6	1.7	5.1	3.6	2.2	2.4
WITH RELATIVES OR FRIENDS-CONVENIENT DAILY TRAVELING DISTANCE	2.5	3.3	.4	1.7	1.1	1.4
WITH RELATIVES OR FRIENDS-INCONV. DAILY TRAVELING DISTANCE	.5	.2	.4	.5	.3	.4
ROOMING HOUSE	13.5	10.6	8.3	6.9	9.1	9.8
COLLEGE DORMITORY OR OTHER COLLEGE OPERATED HOUSING	45.8	41.6	49.6	48.2	57.2	51.2
FRATERNITY HOUSE	5.8	4.4	5.9	10.9	6.6	6.5
STUDENT COOPERATIVE	1.1	.8	.4	1.0	.4	.6
OTHER	1.6	2.0	.8	1.0	.8	1.3
TOTAL NUMBER	554	660	254	419	2,152	4,259

* SECOND REGISTRATION PERIOD OF THE FRESHMAN YEAR

** INCLUDES ALL MEN STUDENTS ENTERING AT SECOND REGISTRATION PERIOD REGARDLESS OF SUBSEQUENT PERSISTENCE OR STATUS RECORD.

TABLE 74

IMPORTANCE OF REASONS FOR DISCONTINUING COLLEGE ATTENDANCE

REASONS FOR DISCONTINUANCE	MEAN LEVEL OF IMPORTANCE BY STANDING IN HIGH SCHOOL CLASS — MEN ONLY					WOMEN ONLY				
	TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH	TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH
(A) ILLNESS OR PHYSICAL DISABILITY (SELF)	.237	.190	.185	.120	.178	.300	.372	.427	.396	.167
(B) ILLNESS OR PHYSICAL DISABILITY (FAMILY)	.207	.154	.233	.152	.119	.215	.268	.214	.136	.167
(C) FINANCIAL (SELF)	1.041	.885	.811	.906	.712	.874	.848	.725	.765	.333
(D) FINANCIAL (FAMILY)	.805	.592	.571	.560	.415	.707	.668	.710	.642	.278
(E) I FOUND COLLEGE WORK TOO DIFFICULT	.328	.417	.378	.398	.483	.186	.340	.443	.753	.444
(F) I WAS NEEDED AT HOME	.328	.151	.313	.199	.169	.271	.248	.229	.321	.056
(G) I HAD MARITAL DIFFICULTIES	.037	.060	.073	.105	.051	.104	.056	.046	.074	-
(H) I TOOK A FULL-TIME JOB	.573	.589	.581	.539	.254	.949	.920	.901	1.025	1.000
(I) I WAS LONESOME AND UNHAPPY	.406	.299	.243	.191	.254	.190	.284	.282	.483	.177
(J) I PLANNED TO BE MARRIED SOON	.185	.216	.261	.144	.186	1.422	1.428	1.338	.975	1.588
(K) COMMUTING TOOK TOO LONG	.088	.095	.105	.118	.161	.101	.082	.115	.100	.176
(L) I WAS DISCOURAGED BY LOW GRADES	.631	.777	.786	.798	.992	.244	.601	.646	.963	.765
(M) MILITARY SERVICE (DRAFTED)	.679	.729	.746	.734	.831	-	-	-	-	-
(N) MILITARY SERVICE (ENLISTED)	1.161	1.226	1.417	1.420	1.186	.015	.033	.054	-	-
(O) I LACKED INTEREST IN MY STUDIES	1.108	.966	.953	.926	1.000	.521	.597	.792	.913	.882
(P) DISMISSAL FOR ACADEMIC FAILURE	.478	.537	.486	.479	.627	.094	.156	.346	.475	.294
(Q) PLACED ON PROBATION FOR ACADEMIC REASONS	.297	.543	.533	.372	.669	.089	.210	.338	.686	.529
(R) PLACED ON PROBATION FOR REASONS OTHER THAN ACADEMIC	.044	.043	.043	.046	.051	.007	.012	.023	.025	-
(S) DISMISSAL FOR REASONS OTHER THAN ACADEMIC	.048	.091	.082	.048	.051	.015	.012	.023	.075	-
(T) SUSPENDED FOR DISCIPLINARY REASONS	.040	.046	.040	.016	.025	.007	-	-	.050	-
(U) MY HOUSING SITUATION CAUSED TROUBLE	.064	.143	.127	.118	.153	.106	.119	.123	.238	-
NUMBER OF RESPONDENTS	249	328	276	188	118	406	243	130	80	17

TABLE 75

ANALYSIS OF FINANCIAL REASONS FOR DISCONTINUING COLLEGE ATTENDANCE BY STANDING IN HIGH SCHOOL GRADUATING CLASS AND ON COLLEGE PLACEMENT TEST

REASONS	SEX	MEAN LEVEL OF IMPORTANCE OF REASONS: STANDING IN HIGH SCHOOL GRADUATING CLASS: TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH	STANDING ON COLLEGE PLACEMENT TEST: TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH
(C) FINANCIAL (SELF)	MEN	1.041	.885	.811	.906	.712	1.014	.943	.857	1.019	.679
	WOMEN	.874	.848	.725	.765	.333	.932	.824	.703	.810	.847
(D) FINANCIAL (FAMILY)	MEN	.805	.592	.571	.560	.415	.799	.630	.539	.646	.490
	WOMEN	.707	.668	.710	.642	.278	.732	.692	.594	.688	.743
(F) I WAS NEEDED AT HOME	MEN	.328	.151	.313	.199	.169	.266	.242	.189	.315	.282
	WOMEN	.271	.248	.229	.321	.056	.300	.282	.208	.244	.301
(H) I TOOK A FULL-TIME JOB	MEN	.573	.589	.581	.539	.254	.584	.645	.621	.669	.482
	WOMEN	.949	.920	.901	1.025	1.000	.974	.978	.931	.923	.995
NUMBER OF RESPONDENTS	MEN	249	328	276	188	118	214	265	280	257	255
	WOMEN	405	243	130	80	17	190	227	202	221	183

TABLE 76

ANALYSIS OF HEALTH, FAMILY, AND HOUSING REASONS FOR DISCONTINUING COLLEGE ATTENDANCE BY STANDING IN HIGH SCHOOL GRADUATING CLASS AND ON COLLEGE PLACEMENT TEST

REASONS	SEX	MEAN LEVEL OF IMPORTANCE OF REASONS: STANDING IN HIGH SCHOOL GRADUATING CLASS: TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH	STANDING ON COLLEGE PLACEMENT TEST: TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH
(A) ILLNESS OR PHYSICAL DISABILITY (SELF)	MEN	.237	.190	.185	.120	.178	.252	.181	.129	.113	.231
	WOMEN	.300	.372	.427	.395	.167	.316	.383	.218	.371	.404
(B) ILLNESS OR PHYSICAL DISABILITY (FAMILY)	MEN	.207	.154	.233	.152	.119	.224	.177	.139	.230	.196
	WOMEN	.215	.268	.214	.136	.167	.221	.238	.188	.217	.273
(G) I HAD MARITAL DIFFICULTIES	MEN	.037	.060	.073	.105	.051	.061	.140	.039	.019	.083
	WOMEN	.104	.056	.046	.074	.000	.111	.062	.069	.077	.098
(J) I PLANNED TO BE MARRIED SOON	MEN	.185	.216	.261	.144	.186	.137	.260	.275	.253	.195
	WOMEN	1.422	1.428	1.338	.975	1.588	1.283	1.605	1.550	1.190	1.127
(K) COMMUTING TOOK TOO LONG	MEN	.088	.095	.105	.118	.161	.090	.111	.082	.121	.129
	WOMEN	.101	.082	.115	.100	.176	.096	.121	.094	.093	.122
(U) HOUSING SITUATION CAUSED TROUBLE	MEN	.064	.143	.127	.118	.153	.090	.145	.111	.078	.168
	WOMEN	.106	.119	.123	.238	.000	.086	.081	.104	.134	.177
NUMBER OF RESPONDENTS	MEN	249	328	276	188	118	214	265	280	257	255
	WOMEN	405	243	130	80	17	190	227	202	221	183

TABLE 7.7

ANALYSIS OF ACADEMIC REASONS FOR DISCONTINUING COLLEGE ATTENDANCE
BY STANDING IN HIGH SCHOOL GRADUATING CLASS AND ON COLLEGE PLACEMENT TEST

REASONS	SEX	MEAN LEVEL OF IMPORTANCE OF REASONS									
		STANDING IN HIGH SCHOOL GRADUATING CLASS					STANDING ON COLLEGE PLACEMENT TEST				
		TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH	TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH
(E) I FOUND COLLEGE WORK TOO DIFFICULT	MEN	.328	.417	.378	.398	.483	.285	.321	.446	.350	.525
	WOMEN	.186	.340	.443	.753	.444	.189	.110	.163	.443	.738
(L) I WAS DISCOURAGED BY LOW GRADES	MEN	.631	.777	.786	.798	.992	.621	.706	.732	.837	.957
	WOMEN	.244	.601	.646	.963	.765	.257	.242	.356	.648	.917
(O) I LACKED INTEREST IN MY STUDIES	MEN	1.108	.966	.953	.926	1.000	.981	.832	1.036	.981	1.000
	WOMEN	.521	.597	.792	.913	.882	.658	.489	.540	.667	.878
(P) DISMISSAL FOR ACADEMIC FAILURE	MEN	.478	.537	.486	.479	.627	.332	.416	.450	.502	.566
	WOMEN	.094	.156	.346	.475	.294	.064	.037	.124	.347	.376
(Q) PLACED ON PROBATION FOR ACADEMIC REASONS	MEN	.297	.543	.533	.372	.669	.384	.336	.518	.482	.555
	WOMEN	.089	.210	.338	.688	.529	.091	.063	.153	.338	.541
NUMBER OF RESPONDENTS	MEN	249	328	276	188	118	214	265	280	257	255
	WOMEN	405	243	130	80	17	190	227	202	221	183

TABLE 78

ANALYSIS OF MISCELLANEOUS REASONS FOR DISCONTINUING COLLEGE ATTENDANCE BY STANDING IN HIGH SCHOOL GRADUATING CLASS AND ON COLLEGE PLACEMENT TEST

REASONS	SEX	MEAN LEVEL OF IMPORTANCE OF REASONS: STANDING IN HIGH SCHOOL GRADUATING CLASS: TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH	STANDING ON COLLEGE PLACEMENT TEST: TOP FIFTH	2 ND FIFTH	3 RD FIFTH	4 TH FIFTH	BOTTOM FIFTH
(I) I WAS LONESOME AND UNHAPPY	MEN	.406	.299	.243	.191	.254	.275	.244	.229	.249	.289
	WOMEN	.190	.284	.262	.463	.177	.251	.247	.248	.352	.387
(M) MILITARY SERVICE (DRAFTED)	MEN	.679	.729	.746	.734	.831	.725	.660	.711	.732	.758
	WOMEN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(N) MILITARY SERVICE (ENLISTED)	MEN	1.161	1.226	1.417	1.420	1.186	1.156	1.347	1.407	1.237	1.305
	WOMEN	.015	.033	.054	.000	.000	.021	.022	.040	.023	.028
(R) PLACED ON PROBATION FOR REASONS OTHER THAN ACADEMIC	MEN	.044	.043	.043	.048	.051	.085	.046	.011	.039	.066
	WOMEN	.007	.012	.023	.025	.000	.016	.013	.030	.009	.028
(S) DISMISSAL FOR REASONS OTHER THAN ACADEMIC	MEN	.048	.091	.062	.048	.051	.109	.088	.057	.074	.059
	WOMEN	.015	.012	.023	.075	.000	.005	.000	.845	.023	.061
(T) SUSPENDED FOR DISCIPLINARY REASONS	MEN	.040	.046	.040	.016	.025	.066	.095	.014	.031	.016
	WOMEN	.007	.000	.000	.050	.000	.005	.000	.015	.009	.011
NUMBER OF RESPONDENTS	MEN	249	328	276	188	118	214	265	280	257	255
	WOMEN	405	243	130	80	17	190	227	202	221	183

TABLE 79

IMPORTANCE OF REASONS FOR DISCONTINUING ATTENDANCE AT COLLEGE, BY TYPE OF INSTITUTION

REASONS	MEAN RATINGS BY TYPE OF INSTITUTION					
	TOTAL*	UNIVERSITIES	TECHNO. INSTIT.	L. A. COLLEGES	TEACHERS COLLEGES	JUNIOR COLLEGES
A. ILLNESS OR PHYSICAL DISABILITY (SELF)	.251	.254	.229	.265	.226	.292
B. ILLNESS OR PHYSICAL DISABILITY (FAMILY)	.203	.186	.042	.242	.223	.262
C. FINANCIAL (SELF)	.872	.879	.907	.851	.876	.881
D. FINANCIAL (FAMILY)	.658	.625	.712	.701	.651	.619
E. I FOUND COLLEGE WORK TOO DIFFICULT	.361	.389	.653	.321	.282	.258
F. I WAS NEEDED AT HOME	.265	.253	.093	.280	.315	.250
G. I HAD MARITAL DIFFICULTIES	.069	.063	.068	.054	.111	.115
H. I TOOK A FULL-TIME JOB	.721	.721	.288	.642	.946	1.035
I. I WAS LONESOME AND UNHAPPY	.280	.297	.308	.247	.288	.211
J. I PLANNED TO BE MARRIED SOON	.729	.743	.265	.762	.765	.697
K. COMMUTING TOOK TOO LONG	.111	.115	.145	.081	.137	.068
L. I WAS DISCOURAGED BY LOW GRADES	.667	.729	1.043	.651	.449	.343
M. MILITARY SERVICE (DRAFTED)	.387	.416	.453	.408	.274	.494
N. MILITARY SERVICE (ENLISTED)	.757	.770	1.231	.722	.662	.657
O. I LACKED INTEREST IN MY STUDIES	.836	.924	1.085	.748	.704	.618
P. DISMISSAL FOR ACADEMIC FAILURE	.357	.425	.863	.268	.204	.183
Q. PLACED ON PROBATION FOR ACADEMIC REASONS	.377	.477	.504	.311	.215	.159
R. PLACED ON PROBATION FOR REASONS OTHER THAN ACADEMIC	.024	.022	.026	.031	.018	.071
S. DISMISSAL FOR REASONS OTHER THAN ACADEMIC	.043	.052	.000	.039	.040	.107
T. SUSPENDED FOR DISCIPLINARY REASONS	.019	.020	.000	.020	.022	.071
U. MY HOUSING SITUATION CAUSED TROUBLE	.118	.121	.120	.094	.148	.104
TOTAL NUMBER OF STUDENTS	2,347	1,065	118	703	461	260

* TOTAL FOR 4-YEAR INSTITUTIONS ONLY. DOES NOT INCLUDE JUNIOR COLLEGES

* U.S. GOVERNMENT PRINTING OFFICE: 1958—443972

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