

STUDENTS AT THE MIDWAY

A Survey of the Graduate Study Plans of
The University of Chicago Class of June, 1961

by

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CHAPTER I

INTRODUCTION AND OVERVIEW

A. Introduction

Our society develops an ever stronger demand for highly trained personnel to man an ever larger number of positions in scientific and professional fields. For better or for worse we look to our institutions of higher learning to provide the cadres for these positions. We expect our undergraduate schools to provide the proper academic preparation for such careers and to induce sufficient motivation to launch a good proportion of their students into career lines leading into these critical occupations. Increasingly, we look to our graduate and professional schools to provide the advanced training and specialized skills specific to the occupations in question.

These manpower demands are reshaping American higher education. The undergraduate colleges are providing pools of educated men and women from among whom are recruited those who will attend graduate and professional schools to receive advanced and specialized training for scientific and professional careers. The extent to which an undergraduate education is a way station in the total educational process can be seen dramatically in the results of a recent study of the postgraduate career plans of the June, 1961 graduating class of American colleges and universities. The NORC⁷ study,* based on a sample of 135 schools and 34,000 graduating seniors, found that more than three-quarters of the seniors had plans eventually to attend graduate or professional schools and close to a third were planning to enter upon such training in the Fall of 1961. American undergraduates are apparently responding to the labor market

* Davis, James A. and Norman Bradburn, GREAT ASPIRATIONS, the NORC Report No. 82, September, 1961.

demands for scientific and professional personnel, although we can safely anticipate that many of these ambitious plans will deteriorate over the next few years.

Postgraduate training is playing an increasingly important role in the career lines of scientists and professionals; so much so that a critical measure of the character of an undergraduate school is the extent to which its graduates go on to seek advanced training. The purpose of this report is to look at the College of the University of Chicago from this perspective.

This report concerns the Class of June, 1961 and raises the following general questions:

How many of Chicago's June, 1961 graduates were going on to post-graduate training?

What are the career lines which Chicago graduates are entering?

What are the "special" characteristics of Chicago graduates, compared to those of other schools?

Properly to answer these questions requires a frame of reference in which the University of Chicago seniors can be compared with graduates from other schools. This reference frame is provided by the very extensive data collected by the NORC from the June, 1961 graduates of a sample of American colleges and universities. In the Spring of 1961 the Center, under a grant from the National Institutes of Health, the National Science Foundation and the Office of Education, undertook a study of the career plans and aspirations of the June, 1961 graduating class of American universities and colleges. A probability sample of 135 schools granting the BA degree was drawn and questionnaires were obtained from

a sample of students within these schools. Close to 34,000 students returned questionnaires, a copy of which is appended to this report.

The vagaries of chance left the University of Chicago out of our probability sample. However, Dean John P. Netherton and Mr. William J. Van Cleve, Registrar, both felt that there would be sufficient interest in comparing Chicago with other schools to support a supplementary data collection effort here on the campus.

Mr. Van Cleve was responsible for the distribution and collection of questionnaires from seniors graduating in June, 1961. He collected 252 questionnaires representing 90 per cent of eligible students. These questionnaires form the basis for statements about the University of Chicago, supplemented by data obtained in an earlier study of the June, 1960 class.¹ Data on other schools and on the June, 1961 graduating class in general come, of course, from the larger study.

B. The Reference Frame

The diversity of American undergraduate education as carried out in the close to 1,500 institutions granting the bachelor's degree is a wonder to behold. American colleges and universities vary in size, control, curriculum, quality of faculty and students, physical location, and in almost every conceivable dimension. To compare the University of Chicago with the national norms is to contrast it with a heterogeneous mass, most of which would be irrelevant as reference points. We all know that Chicago differs from Drexel

¹McKinlay, Richard J. and James A. Davis, "A Survey of the University of Chicago Class of 1960," the NORC Report No. 77, May, 1961.

Institute or from the University of Maryland. More interesting would be comparisons with schools with which our undergraduate school share some quality in common.

Every school has its special style and "climate" and the College is no exception. Partisans and detractors would differ undoubtedly in identifying its characteristic qualities, but both would agree that Chicago's particular flavor is only faintly revealed in its classification as "private, non-denominational, coeducational and liberal arts." In deference to the diversity of views concerning Chicago we have constructed several comparison groups of schools so that the reader may choose his own reference frame. These groups are listed below:

As a start, eleven schools (Columbia, Cornell, Haverford, Oberlin, Stanford, Tulane, University of Pennsylvania, Harvard-Radcliffe, Princeton, Dartmouth, Brown, and Williams) were grouped together on the basis of a) high standing on an index of school quality based on mean scores achieved by entering students who took the National Merit Scholarship Qualifying test,² b) private, non-sectarian control, and c) being non-technical institutions.

Within this group five institutions were separated out as an "Ultra-Ivy" group. The grouping is impressionistic and cuts across actual membership in the Ivy athletic league (Williams is not in the same athletic conference, Columbia and Penn. are). It was felt that in terms of their recruitment, campus culture,

²John Holland and his associates at the National Merit Scholarship Corporation kindly made available the necessary data for construction of this index, which is described in detail in Great Aspirations.

and national image, these institutions serve as a particular comparison frame within the high quality private schools. On the whole, it will be shown that the students in these institutions are rather like students in the other high quality private group, but enough exceptions turn up to justify the distinction.

The first two groups, then, are: The "High Quality Private" and "Ultra-Ivy."

The remaining two comparison groups are largely self-explanatory:

1. High Quality Private: Columbia, Cornell, Haverford, Oberlin, Stanford, Tulane, University of Pennsylvania. One hundred and forty seniors are included in this group.³
2. Ultra-Ivy: Harvard-Radcliffe, Princeton, Dartmouth, Brown, and Williams. There are 81 students from the schools representing this group.
3. Mid-Western Non-Catholic Liberal Arts and Sciences Colleges: This group includes only liberal arts colleges in the mid-west, since it can be argued that such a group of schools is to some degree competing for students with the University of Chicago. All but two have some degree of Protestant religious affiliation, although the degree of control is considerably diluted. These schools constitute the "typical" mid-west liberal arts and sciences college: Albion, Beloit, Blackburn, Evansville, Greenville, Hamline, Huron, McKendree, Northland, Lake Erie, Lake Forest, and Ohio Wesleyan. Three hundred and thirty-nine graduates are included in the sub-sample of these colleges.
4. Big Ten: The "Big Ten" schools in our sample are: Illinois, Indiana, Iowa State, University of Michigan, Michigan State, Ohio State, Wisconsin, and Northwestern University. There are 211 graduates of these institutions included in this category.

³ For purposes of mechanical efficiency in data processing, these groups were drawn not from the total sample, but from a representative sub-sample of 3,397 cases. Consequently the numbers in each group represent neither the total number of graduates in the component institutions nor the total number in our sample from these institutions.

C. An Overview of Findings

The University of Chicago stands out against the comparison schools. Our data validate its reputation as a high producer of future scientists, scholars, and professionals, but at the same time put some qualifications on attributing this productivity directly to the efforts of the school itself.

Our main findings can be summarized as follows:

1. The University of Chicago is a very high producer of future scientists, scholars and professionals. Nine out of ten June, 1961 seniors were planning to go on to postgraduate study and seven out of ten were planning to do so in the Fall of 1961. None of the comparison school groups do as well in this respect, and these proportions are far above the national averages.
2. The University of Chicago is a particularly high producer of future scientists and scholars. Three out of five seniors were planning to enter careers in the traditional arts and sciences, twice the proportion in the next highest comparison group and more than four times the national average.
3. The University of Chicago stands out as a particularly high producer of physical scientists, one out of five seniors heading for careers in these fields. Reputation notwithstanding, future humanists number fewer than social scientists although both groups are higher than either national averages or comparison group schools.

These are characteristics about which the University community may well be proud. These are also qualities to which attention should be drawn in this period of growing critical shortages of personnel in those fields in which Chicago is particularly fertile. Especially important to emphasize is Chicago's position as an outstanding producer of physical scientists.

Chicago does well as an undergraduate school not so much because it transforms radically students through its curriculum and faculty but because it attracts students to begin with who are oriented towards scientific, scholarly and professional careers. Chicago is different primarily because the students it attracts are different, a fact which lays a heavy burden on recruitment policy and popular "images" of the school as major determinants of its character.

Our main findings in this respect are as follows:

1. Chicago's students enter upon undergraduate work with arts and sciences careers in mind. Over half planned to enter such careers. In contrast, the comparable proportion for "Ultra-Ivy" students is three out of ten and for the national sample, two out of ten.
2. Chicago's main effect on its students is to reinforce their predilections for careers involving postgraduate training, and to convert a significant proportion of the small minority of students entering with career aspirations of another sort into fields in which postgraduate training is usually called for.
3. Most of the differences between Chicago and comparison schools in respect to career aspirations reflect the fact that Chicago recruits heavily students with career plans in the arts and sciences. However, Chicago students with such career plans are slightly more likely to be planning postgraduate study than similar students in the comparison schools.

Chicago's students are recruited from different social backgrounds and manifest different attitudes and values than students in the comparison schools.

Some of the main findings are:

1. Chicago students are drawn from large metropolitan areas to a much greater degree than students in the comparison schools.
2. Chicago students had different religious backgrounds, recruiting more heavily from among Jews, but Chicago students show a greater tendency to drop away from the faith in which they were reared.

3. Family socio-economic backgrounds of Chicago students show that they come mainly from professional families (like other students in the comparison schools) but their families tend to have less income than their counterparts.
4. Chicago students reflect faintly the bohemian quality which popular mythology has attributed to them. They are more likely to rate themselves as unconventional, liberal, and non-religious.
5. In occupational values, Chicago students tend towards the "intellectual" and "artistic," tendencies which are reflected in their occupational choices.

Unlike undergraduate study for which parents usually take a major responsibility for financing, graduate study (except for medicine) is usually financed by the student himself either with the aid of stipends received from his school or from employment of himself or spouse.⁵ Financial factors are therefore quite important in determining whether a student will be able to carry through his plans for graduate study. Unfortunately, Chicago students do not fare very well in this respect.

Our main findings here are as follows:

1. Chicago students not going on to postgraduate work cite financial obstacles more frequently than their counterparts in the comparison schools. While this explanation is an "easy way out" type of reason, it does bear some attention.
2. Chicago students going on to postgraduate work were much less likely to be awarded a stipend than students from the other schools.
3. The major reason for such low level of support for Chicago graduates lies in the fact that so many were planning to go on to postgraduate study at Chicago. Students planning to go elsewhere fared much better in obtaining financial support.

⁵ See James A. Davis, et. al., Stipends and Spouses, University of Chicago Press, 1962, which reports on the financial situation of a national sample of arts and science graduate students.

Our findings indicate that there is much of which the University may be justly proud in its undergraduate student body. Our undergraduates contribute to the ranks of science and scholarship proportionately more than the better quality schools of the country. We attract students who initially are oriented in this direction and we maintain and deepen these career aspirations. Particularly noteworthy because it tends to be neglected in the popular and academic stereotypes of Chicago undergraduates is their strong orientation towards the physical sciences.

There are implications in these findings for academic policy which the authors pose in the form of the questions listed below:

- ...What can be done to publicize generally and make widely known to the academic community the orientation and laudable characteristics of our undergraduates?
- ...How can these findings be used to influence recruitment procedures?
- ...How can the situation of our graduates be improved so that attendance at the University of Chicago graduate and professional schools is not a financial detriment to them?

CHAPTER II
AFTER GRADUATION

A. Plans for Fall, 1961

Two out of every three of America's new BA's expected to be working full time in the Fall of 1961 and one out of every two expected to be working at their anticipated long-run career field. Another 17 per cent expected to either be in military service or in domestic service (as housewives). Only one out of every three expected to be attending a graduate or professional school. The mode for the average new BA was to leave the academic world and enter the labor force.

Not so, however, for Chicago's new BA's: Seven out of ten intended to enter graduate or professional school and half expected to enter graduate school in the traditional liberal arts and sciences. The mode for Chicago's graduates is to continue in the academic halls and to pursue arts and science graduate work.

Table II.1 presents these data in detail. University of Chicago graduates stand out conspicuously in this table. More Chicago BA's are going on in their education; and more are going on in arts and science graduate work. Although the "High Quality Private" and "Ultra-Ivy" graduates also stand out in these respects in comparison to the "Big Ten" and the total graduating class, the University of Chicago group can be clearly differentiated as being particularly strongly oriented towards advanced training and towards the arts and sciences. With respect to specific plans:

TABLE II.1

FALL, 1961 PLANS

Fall Plans	U. of C.	Comparison Group				National Average of All June, 1961 Graduates ^a
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Working full time: Career field . . .	15%	18%	20%	49%	55%	49%
Working full time: Non-Career field .	11	12	10	13	14	16
Non-Career military service	3	9	15	5	9	8
Housewife	10	2	6	13	8	9
Grad. School: Arts and Sciences . . .	48	25	21	15	9	12
Grad. School: Professional . . .	23	36	27	13	15	16
Grad. Schools: Unspecified	0	2	4	4	2	4
Other	5	5	9	6	4	5
Total per cent	115% ^b	109% ^b	112% ^b	118% ^b	116% ^b	119% ^b
N	252	138	81	336	209	3,364
NA Fall Plans.	0	2	0	3	2	33
Total N	252	140	81	339	211	3,397*

^aHereafter referred to as "National Average."

^bThe total percentages exceed 100 because more than one response was permitted.

*Representative sub-sample.

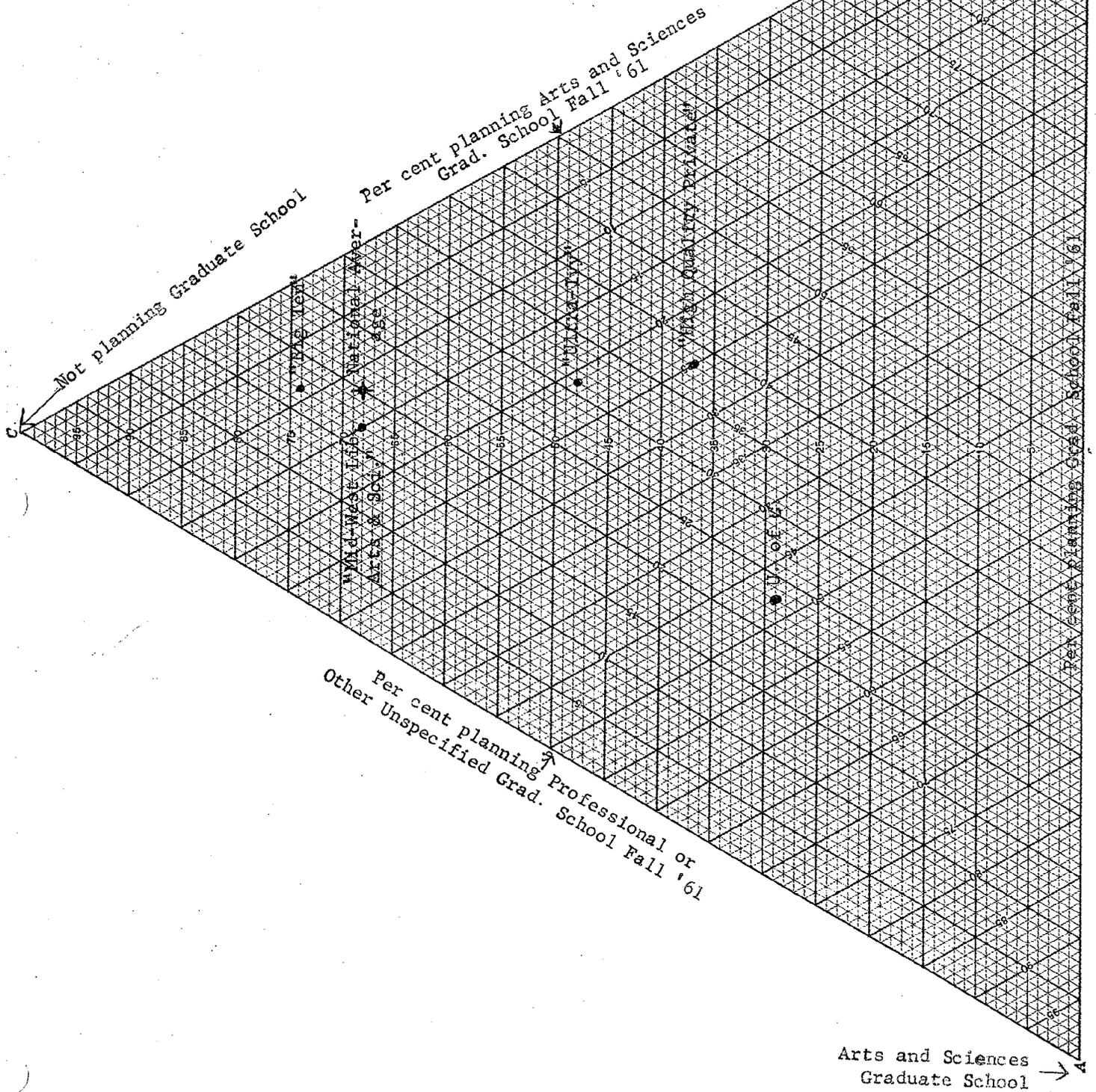
1. Plans for full time work: Graduates of the University of Chicago, "High Quality Private" and "Ultra-Ivy" schools are less likely to have been planning full time work of any kind than the graduates of the sample as a whole, or the graduates of the "Mid-Western Liberal Arts and Sciences" and the "Big Ten" colleges, specifically. Interestingly enough, there is little variation from one group to the next in the proportion who planned full time work unrelated to their anticipated long-run career field, differences existing primarily in those planning to begin immediately working at their long-run career jobs.
2. Plans for postgraduate study: The graduates of the U. of C., "High Quality Private" and "Ultra-Ivy" institutions are considerably more likely to be planning to go to graduate school next fall than the sample as a whole, or the graduates of the "Mid-Western Liberal Arts and Sciences" and the "Big Ten" schools. The University of Chicago graduates were particularly conspicuous, being more likely to be planning graduate school of any kind, and graduate work in the arts and sciences, than any of the comparison schools.

These findings can be presented graphically by the use of triangular coordinate graph paper, as in Figure II.1. The graph consists of an equilateral triangle with a column of numbers running from each corner to bisect the opposite side. Each of these columns is divided into one hundred units and is used as the ordinate upon which a given proportion can be located. In order to describe something in terms of three mutually exclusive attributes (represented as percentages totaling to 100) one and only one point can be found on the graph where these given proportions intersect. The interpretation of the graph is simply a matter of turning the triangle successively on each one of its sides and reading the value of the dimension in question. Thus Figure II.1 represents three categories of plans for the Fall of 1961: "Planning to attend graduate school in an Arts and Sciences Field," "Planning to attend Professional School, or other unspecified graduate school," and "Not planning to attend graduate school." Since these three categories are mutually exclusive, the proportions falling into each category can be represented by one point for each one of the schools or school groups in Table II.1.

Other Graduate School →

FIGURE II.1

FALL PLANS, BY INSTITUTION (INSTITUTIONAL GROUP)



B. Long Range Postgraduate Plans

Although we usually think of graduate and professional study following ordinarily right upon the heels of obtaining the bachelor's degree, a good proportion of students enter upon postgraduate study a year or more after graduation from college. The Class of June, 1961 can be expected to contribute members to professional and graduate schools over the next decade, even though its largest contribution may be to the group beginning such study in the Fall of 1961.

Indeed if we consider the long range plans of America's June, 1961 graduates, more than three out of four intend to go on to postgraduate study eventually, although only a third expect to start in the Fall of 1961. For the nation's graduates as a whole, long range postgraduate plans were as follows:

TABLE II.2

LONG RANGE POSTGRADUATE TRAINING PLANS OF THE NATION'S
JUNE, 1961 GRADUATES¹

	<u>Per cent</u>
A. <u>Expecting to go on next year</u>	32.6
1. Planning to go on in Fall, 1961 and accepted by at least one school	20.2
2. Planning to go on in Fall, 1961 but not yet accepted by a school	12.4
B. <u>Planning to attend later</u>	44.6
3. Planning to attend in 1962-1963 or some later <u>specific</u> date	29.9
4. Planning to attend sometime in the future, but with no specific date in mind	14.7
C. <u>Not planning to go on ever</u>	22.9
5. Not planning to attend, but answered "Yes" to "Would you <u>like</u> to go on if there were no obstacles?"	5.5
6. Not planning to attend and answered "No" or "Maybe" to question on preference	17.4

¹James A. Davis and Norman Bradburn, op. cit., p. 5.

From these data the following inferences may be drawn:

- "1. College seniors have a favorable orientation toward post-graduate study. Eighty-three per cent either plan to attend or would like to.
2. Twenty per cent of the graduating class had been admitted to a postgraduate school by Spring, 1961.
3. Not far from half of the seniors (45 per cent) planned to attend graduate or professional school after a lapse of a year or more from the bachelor's degree.
4. Considering groups 1 through 5 as positively oriented toward graduate school, a very few of the students oriented to graduate or professional school feel they cannot attend. Only seven per cent of the "oriented group" do not expect further study. Three-quarters of the oriented group have a specific plan (at least in terms of a date) to attend.
5. Of those planning to attend next year or later, three-quarters had not been admitted for study in Fall, 1961, by Spring, 1961. Even among those who planned to attend in Fall, 1961, 38 per cent had not been admitted as graduation drew near."²

How do the graduates of the University of Chicago and the four comparison groups of schools fit into this overall picture? We can paraphrase the outline above and draw the following conclusions from the data presented in Tables II.3 and II.4 below:

1. The University of Chicago, "High Quality Private," and "Ultra-Ivy" graduates display a more favorable orientation towards postgraduate work than either the national average or the graduates of the "Mid-Western Liberal Arts and Sciences Colleges" and the "Big Ten." While the range is not extreme (the unexpectedly high orientation to graduate study is one of the major characteristics of the nation's graduates) the University of Chicago graduates rank higher than any of the comparison groups: ninety-six per cent of the U. of C. graduates were either planning to attend or would like to attend. The comparison groups rank, respectively, "High Quality Private," 90 per cent; "Ultra-Ivy," 87 per cent; "Mid-Western Liberal Arts and Sciences Colleges," 83 per cent; "Big Ten," 78 per cent--the national average was 82.6 per cent.

²James A. Davis and Norman Bradburn, op. cit., p. 6.

2. Fifty-four per cent of the University of Chicago graduates had been accepted to a school by the Spring of 1961. This figure is comparable to the proportion accepted among the graduates of the "High Quality Private" (51 per cent) and the "Ultra-Ivy" group of schools (44 per cent) but higher than either the national average (20 per cent), the "Mid-Western Liberal Arts and Sciences Colleges" (23 per cent) or the "Big Ten" (17 per cent).
3. Roughly one-quarter of the University of Chicago graduates planned to go to graduate or professional school after the lapse of a year or more. Again a comparable proportion of the graduates of the "High Quality Private" and "Ultra-Ivy" schools intended to defer their postgraduate studies to a later date. The graduates of the "Mid-Western Liberal Arts and Sciences Colleges" and the "Big Ten" were much more likely to defer their studies.
4. Fewer than one per cent of the University of Chicago graduates who were positively oriented towards graduate or professional training feel they cannot attend because of personal or financial obstacles. There is very little variation among the four comparison groups in this respect. What difference there is places the "Ultra-Ivy" graduates lowest--two per cent say that there are such obstacles, and the "Big Ten" highest--10 per cent.
5. Out of every ten U. of C. graduates who intend to go on for further education next year or later, about four had not yet been accepted by a school for the Fall term of 1961. The four comparison groups of schools distribute in the same pattern as above: Less than half of the graduates of the "High Quality Private" and "Ultra-Ivy" schools had not yet been accepted as opposed to 76 per cent of the "Mid-Western Liberal Arts and Sciences Colleges" and the "Big Ten" graduates.

In sum, the University of Chicago's typical 1961 graduate is, in some major respects, similar to his confreres at the "High Quality Private" and "Ultra-Ivy" schools in our sample: He was highly likely to be planning to continue his education in the Fall of 1961, very unlikely to plan never to go for further study, and less likely to defer his postgraduate studies to some later or indefinite future date. This similarity emerges when one compares

these schools with the national average. However, comparing the Chicago graduates with "High Quality Private" and "Ultra-Ivy," Chicago students stand out as being more oriented to postgraduate study.

This picture is different than the one presented by the graduates of the "Mid-Western Liberal Arts and Sciences Colleges" and the "Big Ten" universities. The typical graduate of these school groups was, much like the national average, less likely to be planning to go on next year, and more likely to be planning to defer his educational plans. (These findings are graphically shown in Figure II.2.) This does not, of course, imply that fewer of the Big Ten or Liberal Arts college applicants were refused acceptance to postgraduate school. Table II.4 shows that with very little variation the overwhelming majority of those who applied to go to a school were accepted in each of the school groups. In fact, regardless of the application status, there is a consistent difference in the proportion not yet accepted to school among those who said they were planning to go in 1961-62. What these findings demonstrate, then, is a pattern of high orientation towards postgraduate school among both the University of Chicago graduates and those of all four comparison groups--but the graduates of the University of Chicago, the "High Quality Private" and the "Ultra-Ivy" school groups are planning to continue their education immediately after graduation while the graduates of the other two comparison groups are more likely to either defer their postgraduate studies or never go on for them.

TABLE II.3

POSTGRADUATE PLANS INDEX AMONG GRADUATES OF THE UNIVERSITY OF CHICAGO
AND FOUR COMPARISON GROUPS

Postgraduate Plans	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West. Lib. Arts and Sciences"	"Big Ten"	
A. Expecting to go on in 1961-1962	71%	64%	50%	31%	26%	32.6%
1. Accepted by at least one school	54	51	44	23	17	20.2
2. Not yet accepted by a school	17	13	6	8	9	12.4

B. Planning to attend later	24%	25%	34%	48%	45%	44.6%
1. 1962-63 or some later specific date	17	21	28	29	31	29.9
2. No specific date in mind	7	4	6	19	14	14.7

C. Not planning to go on ever	5%	12%	15%	21%	29%	22.8%
1. Would like to go if there were no obstacles	1	2	2	4	7	5.5
2. Would not particularly like to go on, even if there were no obstacles	4	10	13	17	22	17.4
Total per cent	100%	101%	99%	100%	100%	100.0%
N	252	133	79	323	204	54,236
NA	0	7	2	16	7	2,428
Total N	252	140	81	339	211	56,664*

*Totals "weighted" to be representative of universe of schools.

TABLE II.4

PROPORTIONS APPLYING TO AND ACCEPTED BY POSTGRADUATE SCHOOL

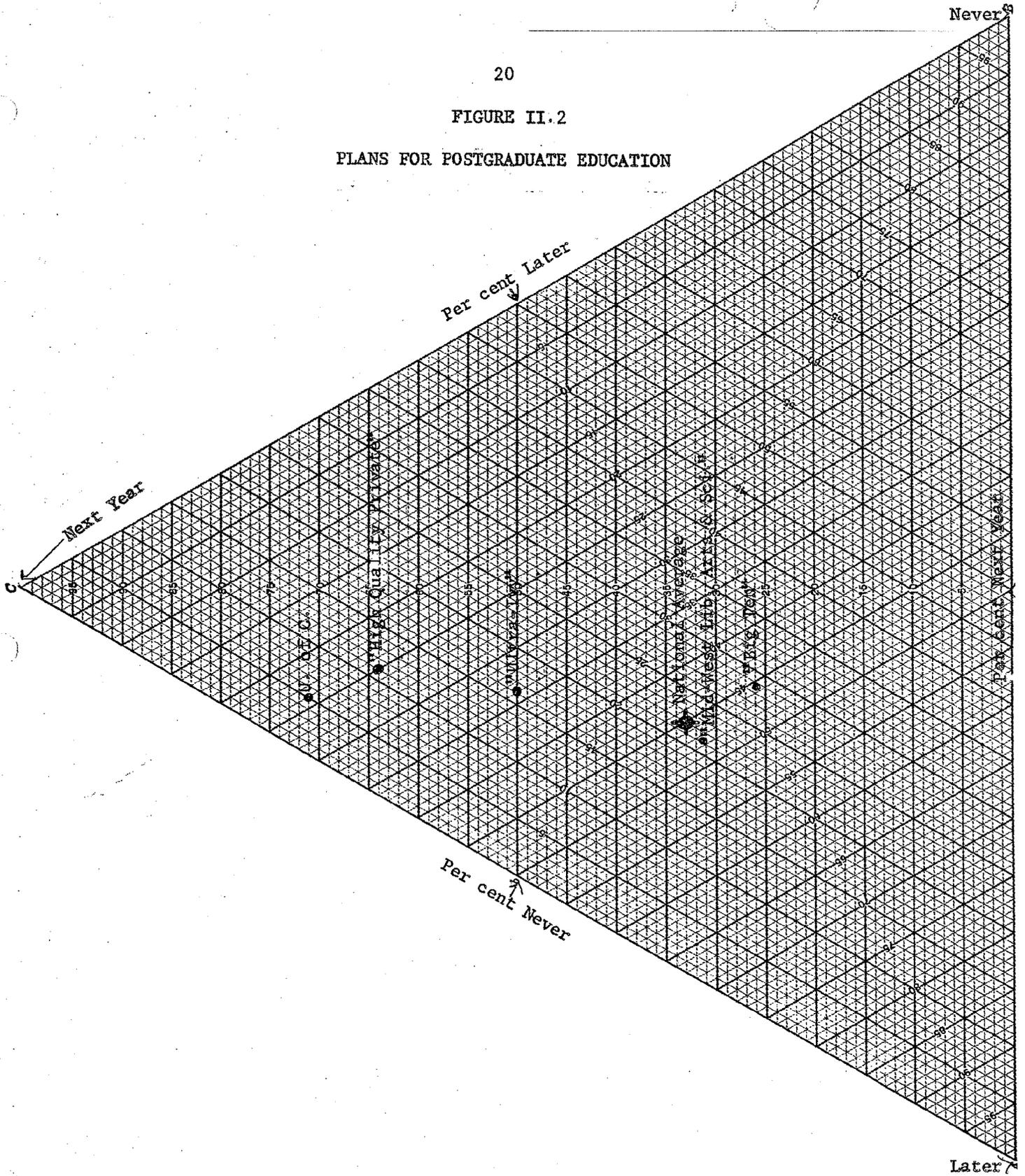
Application and Acceptance Status	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Per cent of total intending to go who applied to school for 1961-62	67% (250)*	62% (140)	52% (81)	31% (335)	23% (209)	26%** (3,377)
Per cent not accepted among those who applied	10% (162)	11% (83)	0% (38)	16% (99)	14% (42)	15%** (824)
Per cent not accepted among total <u>planning</u> to attend in 1961-62	23% (179)	20% (85)	12% (40)	26% (100)	35% (52)	38% (17,655)
Per cent not accepted among total planning to attend either 1961-62 or later	43% (240)	42% (118)	48% (67)	71% (156)	76% (143)	74% (41,853)

* Figures in parentheses are bases of percentages shown.

** Representative sub-sample.

FIGURE II.2

PLANS FOR POSTGRADUATE EDUCATION



CHAPTER III

OCCUPATIONAL CAREERS AND POSTGRADUATE STUDY

The evidence displayed so far indicates that the University of Chicago stands out against the schools compared in the degree to which its graduates are oriented to postgraduate study. A large part of the reason for this singular characteristic lies in the kinds of long-run careers to which Chicago graduates aspire.

Postgraduate training is largely vocational in the sense that such training ordinarily prepares one for rather specific occupations and for some occupations postgraduate training is an absolute prerequisite. At one extreme, a student aspiring to be a doctor must plan to go to medical school, while those intending to be business managers or elementary school teachers can easily arrive at those occupational destinations without being routed through advanced training. Hence, schools whose students aspire to occupations which require advanced training necessarily send many students on to such training while those schools whose students are headed for other types of careers contribute little to the contingent in postgraduate study.

Most college graduates hold long-run career aspirations in fields for which postgraduate education is not necessary or, at best, optional. For example, for the national group as a whole:

1. Roughly one out of every three (32.2 per cent) of the nation's graduates were planning careers in education (both primary and secondary, but excluding college and junior college). Education is by far the most popular career field.
2. Business and administrative careers claim slightly less than one out of every five of the nation's graduates (18.2 per cent).

3. Engineering (8.3 per cent) and the "Other Professions"¹ (16.4 per cent) together account for the career of one-quarter of the nation's graduates.
4. The fields which are primarily semi-professional in nature (Education, Business, Engineering, and the "Other Professions") account for the plans of three-quarters of the nation's graduates. Of the remainder:
5. About one-fifth (18.0 per cent) of the nation's graduates expect to enter one of the traditional arts and science fields (Physical Science, Biological Science, Social Science and Humanities).
6. One of every fifteen graduates plans to enter one of the two major professions of Medicine (2.8 per cent) or Law (3.9 per cent).

Compared to the national average the University of Chicago stands out in sharp contrast. Compared to any of the comparison group of schools, Chicago is strikingly different even though some of the comparison schools themselves are different from the national average. Chicago's outstanding characteristics can be highlighted as follows:

1. Six out of ten Chicago graduates were planning careers in the arts and sciences.
2. One out of every five Chicago graduates was planning a career in the physical sciences--the largest career group for this school.
3. Chicago is also a high producer of prospective social scientists and humanists with 18 and 14 per cent of its graduates respectively headed for such careers.

¹These figures plus data on the University of Chicago and comparison group of schools are shown in Table III.1.

TABLE III.1

ANTICIPATED FUTURE CAREER PLANS, AMONG GRADUATES OF THE
UNIVERSITY OF CHICAGO AND FOUR COMPARISON GROUPS

Anticipated Future Career Field	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
A. Major Professions	11.9%	20.7%	14.9%	5.3%	10.3%	6.7%
1. Medicine	6.8	8.9	8.1	3.1	4.9	2.8
2. Law	5.1	11.8	6.8	2.2	5.4	3.9
-----	-----	-----	-----	-----	-----	-----
B. Traditional Arts and Sciences . .	60.6%	26.6%	29.7%	27.2%	12.8%	18.0%
1. Physical Sci..	20.0	6.7	10.8	5.4	3.0	5.4
2. Bio. Sciences.	8.4	2.9	5.4	2.5	1.4	2.1
3. Soc. Sciences.	17.8	5.2	5.4	8.8	3.4	4.0
4. Humanities . .	14.4	11.8	8.1	10.0	5.0	6.5
-----	-----	-----	-----	-----	-----	-----
C. Semi-Professional and Other	27.6%	52.6%	55.4%	67.5%	76.7%	75.1%
1. Education . . .	14.0	10.4	6.8	34.7	30.5	32.2
2. Business	8.1	18.5	27.0	13.4	17.2	18.2
3. Engineering . .	0.0	7.4	9.4	2.2	12.8	8.3
4. Other Professions*	5.5	16.3	12.2	17.2	16.2	16.4
Total per cent	100.1%	99.9%	100.0%	100.0%	99.8%	99.8%
N	236	135	74	320	203	54,172
NA, Future Career or Do Not Expect to Work . .	16	5	7	19	7	2,492
Total N	252	140	81	339	211	56,664

*The "Other Professions" category includes a large number of diverse professional and semi-professional occupations which, individually, account for a very small proportion of the entire career distribution. These are in part: Architecture, City Planning, Dentistry, Pharmacy, Nursing, Optometry and Other Health Fields, Agricultural and related professions, Library and Archival Science, Theology and Religion, Journalism and Communications, Social Work, Foreign Service, Home Economics and Military Science. For a more specific breakdown of the proportion in these fields see Great Aspirations, op. cit., Table 27.

4. Compared to the national average and to comparison schools Chicago's graduates show the following patterns:

Field	Compared to National Average	Compared to Comparison Schools
Physical Sciences	Very High	Very High
Biological Sciences	High	High
Social Sciences	Very High	Very High
Humanities	High	High
Medicine	High	Average
Law	High	Somewhat Low
Education	Low	Very Low
Engineering*	Very Low	Very Low
Business	Very Low	Very Low
Other Professions	Very Low	Very Low

*Chicago, of course, has no engineering school.

In sum, Chicago is a high producer of academic men and scientists, outstanding in these respects compared to the national average and compared to other high quality schools throughout the country. It is particularly outstanding in its production of future physical scientists, despite its widespread reputation as one of the last holdouts for the humanistic traditions in undergraduate training.

These findings are presented graphically in Figure III-1, where Chicago's unique position is shown as a point far removed from the others.

Given these career patterns, we can see more clearly some of the reasons for the large proportions of Chicago graduates planning postgraduate work, as in Table III-2.

TABLE III.2

FUTURE CAREER GROUPING AND POSTGRADUATE PLANS

(Per cent planning to go to graduate or professional school in 1961-62)

Anticipated Future Career Field	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West. Lib. Arts and Sciences"	"Big Ten"	
Major Professions.	96% (28)	97% (27)	82% (11)	88% (17)	70% (20)	81.5% (3,494)
Traditional Arts and Sciences . . .	80% (143)	80% (35)	50% (22)	55% (82)	54% (24)	50.6% (9,634)
Semi-Professions and Other	50% (65)	44% (71)	49% (41)	20% (216)	16% (157)	25.1% (37,695)
1. Education . . .	36 (33)	50 (14)	- (5)	14 (111)	15 (62)	25.0% (16,683)
2. Business . . .	58 (19)	20 (25)	40 (20)	9 (43)	9 (35)	16.4% (9,545)
3. Engineering and Other Prof. . . .	69 (13)	56 (32)	56 (16)	32 (62)	20 (59)	32.6% (4,393)
Over All Fields . . .	71% (252)	64% (133)	50% (81)	31% (323)	26% (204)	32.7% (50,553)

Because of the small numbers electing some of the career fields, we have grouped together the careers into larger aggregates in Table III.2.

There are no major differences among schools in the proportions going on to postgraduate study among students in arts and science or major professional career lines. The primary differences in Table III.2 lie in semi-professional careers: Graduates of Chicago, the "High Quality Private" and "Ultra-Ivy" schools are much more likely to plan graduate study if they are in such career lines than either the national average or graduates from the "Mid-Western Liberal Arts and Sciences" and "Big Ten" schools. Thus, even in the semi-professional fields graduates from these schools were planning to enter these careers with more in the way of advanced training, perhaps supplying for that reason the elite leadership cadres of the future.

The outstandingly different career orientations of the Chicago undergraduate are a major reason for this school's graduates' orientations towards postgraduate study. But this is not the complete story, as we can see in Table III.3. By and large, women are much less likely to plan postgraduate study than men, but University of Chicago women undergraduates are much more likely to be oriented toward graduate training than women enrolled at other schools. We can almost make a case that Chicago imparts an especially serious cast to its graduates' career choices.

TABLE III.3

FUTURE CAREER FIELD, SEX, AND PLANS FOR POSTGRADUATE STUDY

(Per cent planning to go on in 1961-62)

Career Field	Sex	U. of C.	Comparison Group				National Average
			"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Major Professions	M	100% (23)	92% (25)	82% (11)	88% (17)	68% (19)	82.8% (3,272)
	F	- (5)	- (2)	- (0)	- (0)	- (1)	63.1% (222)
Arts and Sciences	M	82% (108)	90% (19)	- (9)	65% (46)	67% (12)	58.2% (5,685)
	F	71% (35)	50% (16)	23% (13)	45% (36)	25% (12)	38.2% (3,647)
Semi-Professions and Others	M	62% (29)	42% (52)	49% (35)	22% (92)	19% (83)	28.4% (21,217)
	F	33% (36)	50% (16)	- (4)	17% (115)	12% (69)	21.0% (16,478)
N		236	130	72	306	196	50,521
NA Plans		0	5	2	14	7	2,130
NA Career		16	3	7	17	7	3,683
NA Both		0	1	0	2	1	330
Total N		252	139	81	339	211	56,664

CHAPTER IV

FINANCIAL SUPPORT FOR GRADUATE STUDY

Even though Chicago is sending on a very large proportion of its students to postgraduate study, one out of four Chicago graduates found it necessary to postpone the postgraduate training that he desired. What were the reasons for this postponement? In particular, what role did financial factors play in this postponement?

For those Chicago graduates who were planning to go on to graduate work, how were they going to support themselves during graduate study? How did they fare compared to graduates of other schools?

In order to tap the reasons for not continuing on to professional or graduate study a very straightforward question was asked of those not going-- "Which of the following best explains why you do not anticipate going on to graduate or professional school next year?" The most frequent answers to this question are presented in Table IV.1 below.

TABLE IV.1

MOST FREQUENT REASONS FOR NOT GOING TO GRADUATE SCHOOL

Reasons for Not Going to Graduate School	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West. Lib. Arts and Sciences"	"Big Ten"	
Financial obstacles	43%	22%	8%	28%	33%	31%
Tired of being a student	39%	40%	41%	28%	34%	26%
Want practical experience first	30%	38%	26%	33%	36%	30%
Family responsibilities	20%	6%	10%	18%	14%	19%
Can get a good job without it	19%	16%	10%	26%	26%	22%
No desire to	13%	14%	15%	13%	16%	13%
N	70	50	39	229	153	2,329
NA	3	2	0	4	3	44
Total N	73	52	39	233	156	2,373

TABLE IV.2

IMPORTANCE OF FINANCIAL OBSTACLES

(Per cent saying...)

Financial Obstacles	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
...is the major reason I am not going on next year	15%	10%	10%	18%	17%	19%
...played some part in my decision	50	31	13	31	35	34
...had nothing to do with my decision . . .	35	60	77	50	48	47
Total per cent	100%	101%	100%	99%	100%	100%
N	72	52	39	232	153	2,306
NA	1	0	0	1	3	23
Total N	73	52	39	233	156	2,329

The most frequent reason for not continuing given by Chicago students was "financial obstacles," a reply voiced by more than four out of every ten who were not planning to go on immediately. Slightly lower in frequencies were the responses "I am tired of being a student" and "I want to get practical experience first." In addition, one out of five claimed "family responsibilities."

"Financial Obstacles" is an easy way out for a student as a response to a question which asks why he is not going on to postgraduate study. It is easy to see why this would be a popular response, but it is not as easy to explain away the differences between Chicago graduates and graduates of other schools. Chicago's graduates are much more likely to point to financial obstacles; for example, twice as likely as graduates from other "High Quality Private" schools and five times more likely than graduates of "Ultra-Ivy" schools, and ten per cent more likely than the national average. Given this pattern of differences among schools we must pay more detailed attention to this reason.¹

Even though "financial obstacles" is a frequent reason given for not going on, Chicago students, like other students, do not accord to such reasons a major role in their decision, as is shown in Table IV.2. Only 15 per cent claim such obstacles to be a major reason for not going on, compared to a national average of 19 per cent and "High Quality Private" and "Ultra-Ivy" percentages of 10. Yet the Chicago graduates stand out in this table as having the highest proportion claiming that such obstacles played "some part" in their decision not to go on. The contrast is particularly stark when Chicago graduates are compared with "High Quality Private" and "Ultra-Ivy" schools where the vast majority claim that financial obstacles had "nothing" to do with their decision.

¹ Giving "financial obstacles" as a reason probably refers to anticipated financial support from non-family sources, for we found that the poorer Chicago students were no less likely to go on to postgraduate work than the richer.

"Financial obstacles" apparently plays a role, at least as seen by the students themselves. But this must be taken with a liberal salting, since we know a great deal about the characteristics of such students which tend to emphasize other factors. For example, over half of Chicago graduates not going on to graduate school had overall averages of C+ or less, while fewer than 25 per cent of those planning to go on had grade averages this low. Note, in contrast, that only one per cent of those not going on say they don't have the ability. An additional consideration is that few of these students were planning to go on in fields where graduate study is a necessity: half were planning careers in either education or business compared to less than 20 per cent for those going on to graduate study.

Given Chicago's high productivity in postgraduate students, a more important topic is how well do those who go on fare financially? In this connection we can consider how frequently stipend support is offered Chicago graduates as compared with graduates of other schools. In order to do so, however, it is necessary to consider the chain of decisions which must be taken before stipends enter the picture. In order to be turned down on a stipend request, a student must have applied to a school, been accepted by that school and applied for a stipend. Table IV.3 arranges our data in this fashion.

Chicago graduates, "High Quality Private" and graduates from "Ultra-Ivy" schools resemble each other and stand out in contrast from the "Mid-Western Liberal Arts and Sciences" and "Big Ten" schools. The majority of the former schools had been accepted by the schools to which they had applied

while only a minority had been accepted among the graduates of the latter group. In part, this difference reflects the high desirability of the prospective graduate students from the first group of schools, but it also reflects the fact that our survey² was taken before the complete returns were in. In addition, some state universities do not require that their own graduates make additional application for postgraduate study in their own professional and graduate schools.

TABLE IV.3
STIPEND APPLICATION AND RECEIPT

Stipend Application and Receipt	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Per cent applied to a school	67% (250)	62% (140)	52% (81)	31% (337)	23% (210)	26% (3,377)
Per cent accepted of those who applied	90% (162)	89% (83)	100% (38)	89% (99)	86% (42)	85% (824)
Per cent who applied for a stipend among those planning to go	62% (192)	46% (92)	53% (47)	57% (124)	39% (62)	42% (1,194)
Per cent receiving a stipend among those who applied for one	62% (117)	73% (41)	72% (25)	65% (66)	71% (24)	69% (487)

²Students were surveyed between the 15th of April and the middle of June, 1961. Returns tended to come in sooner from the smaller schools.

Among those who had been accepted, the vast majority had applied for a stipend and in every group of schools about two-thirds had been granted one. Note, however, that Chicago graduates are least likely to be granted a stipend, although this difference is not striking.

Chicago undergraduates show a strong loyalty to their alma mater when they apply for postgraduate study.

TABLE IV.4
STIPEND APPLICATION AND RECEIPT BY
INTENDED GRADUATE INSTITUTION
AMONG U. OF C. SENIORS

Stipend Application and Receipt	University of Chicago Seniors Planning to Attend...	
	U. of C.	Other Institution
Per cent applied for stipend	66% (100)	61% (69)
Per cent of those above who applied to their intended school	91% (66)	67% (42)
Per cent offered a stipend from their in- tended school among those who applied to their school	51% (60)	75% (28)
Total per cent receiving a stipend from their intended school, of those who applied for a stipend from any source . .	48% (66)	50% (42)

TABLE IV.5

REASONS FOR NOT APPLYING FOR STIPEND

Reason for Not Applying for Stipend	U. of C. Planning to Attend		Comparison Group			
	U. of C.	Other	"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"
No hopes of getting one	79% (37)	41% (23)	29% (49)	32% (22)	36% (52)	37% (38)
Did not need stipend	27% (37)	59% (23)	63% (49)	50% (22)	40% (52)	47% (38)

Close to 60 per cent of those planning postgraduate study in 1961-62 were intending to continue at their alma mater. How does the pattern of stipend applications and awards we have noted above hold up when we consider whether the graduate was intending to continue here or go elsewhere? Table IV.4 shows that the proportion of stipend applicants is practically the same among those planning to continue at the U. of C. as it is among those intending to go elsewhere, but over 90 per cent of those who applied for a stipend in the "loyal" group applied to the U. of C., compared to two-thirds of those going elsewhere who had applied to their intended schools.

More important, of those who applied to the U. of C. for a stipend, only half were offered one, while three-quarters of those who applied to their other intended schools were offered a stipend. This finding does not point to an essential difference in academic performance between those going elsewhere and those remaining at the U. of C.: 77 per cent of those remaining at the U. of C. and 78 per cent of those going elsewhere had achieved at least a B- grade average.

Apparently stipends are harder to come by at the University of Chicago even though there is a higher demand for them. We can see this reflected in the reasons offered for not applying for a stipend. We could assume that the most important reason would be that there was no need, but in Table IV.5 we see that this is the case everywhere but among those planning to go to graduate school at the University of Chicago--here the major reason for not applying is that there were no hopes of getting any.

These findings are also probably related to an otherwise mysterious finding--of the U. of C. graduates planning to continue at the U. of C., fewer of those with high grade averages are happy with their choice of schools:

TABLE IV.6

PER CENT WHO ACTUALLY PREFER THE SCHOOL THEY WERE
PLANNING TO ATTEND AMONG THE U. OF C. GRADU-
ATES PLANNING TO ATTEND

Grade Point Average	U. of C.	Other
B- or better	58% (76)	77% (53)
C+ or lower	83% (23)	20% (15)
N		167
NA GPA		2
NA School Plans		10
Not going to Grad. or Prof. School, 1961-62		73
Total N		252

The implications of these findings are that Chicago graduates fare worse financially at the hands of the U. of C.'s graduate and professional schools than at other schools, despite the fact that their needs for financial support are greater than those of the graduates from "High Quality Private" and "Ultra-Ivy" schools. Chicago graduates' complaints about financial obstacles appear in this light to be less a complaint masking other reasons than a straightforward accounting of their plight.

The factors underlying these findings cannot be uncovered through these data alone, however. For example, we cannot tell from this study whether Chicago graduates are being discriminated against compared to graduates from other schools who apply to Chicago for postgraduate study, or whether the amount of financial support available at Chicago is generally low for both outsiders and old graduates. However, from what we know from other studies of graduate students,³ we suspect that the problem lies primarily in the low level of support available to graduate students, regardless of their origins. One of the major sources of financial support for graduate students is teaching assistantships which are virtually non-existent at Chicago. Graduate schools which are separate administratively from their undergraduate schools (as is the case for Columbia and partly for Chicago) and which have small undergraduate enrollments (as is the case for Chicago, Columbia and Johns Hopkins) tend to have little or no need for teaching assistantships and hence such schools show a much lower level of support for their graduate students than would be the case for the large state universities or the larger private schools (e.g., Harvard and Princeton).

³See James A. Davis, et. al., Stipends and Spouses, University of Chicago Press, 1962. A recent report by the Woodrow Wilson Fellowship program noted strong complaints about finances among Wilson fellows at Chicago.

CHAPTER V

THE INFLUENCE OF CHICAGO ON CAREER CHOICE

It is clear that in 1961, as in past years, the University of Chicago is outstanding among American schools in terms of the proportion of its graduates planning postgraduate training in scientific, scholarly, and professional fields. Such a record is indeed creditable, but there is some question about the proper recipient for the credit. Does the experience of study at Chicago influence students towards graduate fields, or does Chicago merely recruit students destined for graduate study and serve as a pipeline along which they flow for four years?

An examination of the students' undergraduate majors shows clearly that Chicago students study in fields which are gateways to graduate work and do not major in the semi-professional fields which have low rates of postgraduate education. If we compare, as in Table V.1, the undergraduate major fields of the students from the several types of schools, it is seen that Chicago, the "High Quality Private" group, and the "Ultra-Ivy" stand out as almost completely arts and science schools. In each more than 70 per cent of the students report an arts and science major in contrast to 47 per cent of the "Mid-western Liberal Arts" group and 27 per cent in the "Big Ten." In both of the latter groups 32 per cent majored in Education, in contrast to less than 10 per cent in the former groups and Chicago.

Within this arts and science area, however, Chicago shows some interesting differences:

- a. Chicago students have high concentration in the sciences, 23 per cent being in Physical Science as compared with 11 per cent in the "High Quality Private" and 13 per cent in the "Ultra-Ivy" group.
- b. Chicago students have a low proportion in the Humanities, 24 per cent being in the Humanities in comparison with 34 per cent in the "High Quality Private" and 40 per cent in the "Ultra-Ivy" group.

TABLE V.1
 UNDERGRADUATE MAJOR FIELD
 (Per cent with given Undergraduate Major)

Undergraduate Major Field	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
A. Major Professions	7%	2%	1%	3%	2%	1%
1. Pre-Med. . . .	6	1	0	2	1	1
2. Pre-Law . . .	1	1	0	1	1	0
B. Arts and Sciences	83%	72%	85%	47%	27%	39%
1. Phy. Sci. . .	33 (23	17 (11	23 (13	14 (9	9 (6	12 (8
2. Bio. Sci. . .	10	6	10	5	3	4
3. Soc. Sci. . .	26	21	22	16	8	10
4. Humanities . .	24	34	40	17	10	17
C. Semi-Prof. and Others	11%	25%	15%	51%	72%	60%
1. Education . .	8	2	1	32	32	28
2. Business . .	2	7	4	9	12	13
3. Engineering .	0	9	10	1	14	9
4. Other	1	7	0	9	14	9
Total per cent	101%	99%	101%	101%	101%	100%
N	247	139	79	334	205	3,285
NA	5	1	2	5	6	112
Total N . . .	252	140	81	339	211	3,397

Despite Chicago's image as a hotbed of Humanists and a citadel of Social Sciences, its outstanding characteristic is its high proportion of Physical Science students.

Chicago students do concentrate in fields which are stepping stones to graduate study, but this fact does not answer our question. Perhaps their curriculum exposes them to influences which shape their career choices, but it is equally plausible to assume that such an institution would tend to attract freshmen who already were aiming for such careers.

A more direct answer to the question of college influence can be gained by examining the seniors' reports on their career intentions when they began college (Table V.2). To the extent that their reports are reliable, it would appear that Chicago freshmen come to the institution with high professional aims. Fifty-six per cent report an Arts and Science field as their freshman choice, which is head-and-shoulders above the next highest group, the "Ultra-Ivy" students whose percentage is 31. In terms of choice of Law and Medicine, the two professions with the highest graduate study expectations, Chicago appears similar to the "High Quality Private" and "Ultra-Ivy" group, and higher than the "Mid-Western Liberal Arts and Sciences" and the "Big Ten" schools.

Thus, in comparison with the "Mid-Western Liberal Arts and Sciences" students, Chicago freshmen are more likely to aim for Law and Medicine, and in comparison with any other group they are strikingly more likely to aspire to an arts and science occupation.

TABLE V.2

FRESHMAN CAREER PLANS

Freshman Career Field	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra- Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
A. Major Professions	21%	25%	23%	10%	9%	8.8%
1. Medicine . . .	16	17	16	6	6	5.6
2. Law	5	8	7	4	3	3.2
B. Traditional Arts and Sciences . . .	56%	21%	31%	20%	9%	17.5%
1. Phy. Sci. . . .	29	9	18	6	3	6.5
2. Bio. Sci. . . .	8	3	6	1	0	2.0
3. Soc. Sci. . . .	7	2	3	5	2	2.4
4. Humanities . .	12	7	4	8	4	6.6
C. Semi-Prof. and Others	23%	54%	46%	70%	81%	73.6%
1. Education . . .	10	9	7	30	28	27.6
2. Business . . .	2	15	12	7	11	12.3
3. Engineering . .	5	17	13	7	20	15.7
4. Other Prof. . .	7	13	13	26	22	18.0
Total per cent.	100%	100%	100%	100%	99%	99.9%
N	235	124	68	299	187	2,959
No Freshman Plans	10	8	2	18	12	339
NA. Fresh. Plans	7	8	11	22	12	99
Total N	252	140	81	339	211	3,397

These data tend to corroborate the "pipeline" theory that Chicago's high productivity comes mostly from recruitment of students who have already chosen a career field for which postgraduate work is essential. However,

Table V.2 does not allow for turnover or shifting in career plans. Even though Chicago students start out with high aspirations, their University experience may still provide a definite increment or decrement. We lack sufficient cases to treat specific fields but we can get somewhere by dividing the career fields into Law, Medicine, and Arts and Sciences versus all other. Since this classification essentially divides fields into those where more than half of the students in the total sample were planning immediate graduate study versus those where half or fewer had such plans, we will call these, respectively, "Hi go" and "Lo go" career fields.

TABLE V.3

CAREER FIELD CHANGE

"Hi go" Career Fields	U. of C.	Comparison Group			
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"
Per cent Freshmen in "Hi go" Career Fields	77.4 (221)	46.0 (114)	54.7 (62)	30.0 (276)	17.8 (169)
Per cent Loss*	18.3	14.8	28.6	30.6	30.3
Per cent Gain*	11.6	24.1	5.7	40.0	51.5
Net Change* . .	-6.7	+9.3	-22.9	+9.4	+21.2

*Definitions:

Per cent Loss = Number shifting from a "Hi go" field as freshmen to a "Lo go" field as seniors divided by a total number of freshmen in "Hi go" fields.

Per cent Gain = Number shifting from a "Lo go" field as freshmen to a "Hi go" field as seniors divided by a total number of freshmen in "Hi go" fields.

Net Change = Per cent Gain minus Per cent Loss.

Table V.4 does suggest that study at the University of Chicago has an effect on career plans. Eighty-two per cent of the Chicago freshmen with a "Hi go" career preference also had a "Hi go" preference as seniors (although not necessarily the same field) compared with about 70 per cent in the "Ultra-Ivy," "Mid-West Liberal Arts" and "Big Ten" schools. The "High Quality Private" schools have a favorable retention of "Hi go" career plans. As at Chicago, 85 per cent of their original "Hi go's" retain such a career. In terms of "Lo go" freshmen, Chicago's record is outstanding. Although the case base is small, 40 per cent of the Chicago freshmen who started with a "Lo go" occupational preference had shifted to Law, Medicine, or an Arts and Science field by graduation. This is higher than any of the comparison groups.

TABLE V.4

FRESHMAN CAREER CHOICE AND FUTURE CAREER FIELD

(Per cent naming a "Hi go" career as their anticipated Future Career)

Institution or Group	Original Career Choice as Freshman		Total per cent Freshmen in "Hi go" Fields
	"Hi go"	"Lo go"	
University of Chicago	82% (171)	40% (50)	77% (221)
"High Quality Private"	85% (53)	20% (61)	46% (114)
"Ultra-Ivy"	71% (35)	7% (27)	55% (62)
"Mid-West Liberal Arts & Sci."	69% (30)	17% (139)	18% (169)
"Big Ten"	70% (83)	12% (193)	30% (276)

In sum, even though Chicago begins with a freshman class characterized by career choices predictive of graduate school, over the four years of college it appears to add still more influence toward these careers.¹ These results are consistent with the findings of Great Aspirations that the more "Hi go" freshmen at a school, the higher the retention of "Hi go" aspirations and the greater the proportion of "Lo go" students who shift into a "Hi go" career. Whether the findings are indicative of peer group influences or campus climates or are an artifact of curriculum or selection, is unknown, but the fact remains that Chicago is a good illustration of the tendency for students to be "pulled" toward the career goals of the majority at their school. At the same time the power of freshman preference must be noted. Even in the "Big Ten" schools whose pull towards "Hi go" careers is minimal, 70 per cent of the original "Hi go" freshmen are still in a "Hi go" field, and are more likely to be in such a field than an originally "Lo go" Chicago freshman.

The analysis has turned up alternative explanations for the high graduate school attendance rates of Chicago graduates. Put in the form of hypotheses, they are:

1. Chicago students have high postgraduate study aspirations, regardless of their career field.
- (or)
2. Among students in similar careers, there is no difference in plans for attendance, and Chicago's high rates stem from its recruitment of freshmen aiming for "Hi go" careers and to a lesser extent from its previously discussed influence on career plans.

¹If one simply compares the per cent of freshmen in "Hi go" fields with the per cent of seniors in them, an opposite, but deceptive answer turns up. (Table V.3). Chicago actually shows a 6.7 per cent drop in the

Table V.5 gives the study plans for Chicago and the comparison schools separately for seniors in "Hi go" and "Lo go" fields. Although the row headed "Total" reminds us that Chicago has a seven per cent advantage over the "High Quality Private" and a 14 per cent advantage over the "Ultra-Ivy" group in postgraduate plans, when career type is controlled this difference disappears. That is, Chicago students do not have a consistently higher per cent expecting further study next year, when compared with "High Quality Private" and "Ultra-Ivy" students in similar careers. Its original advantage was produced by the fact that 72 per cent of the Chicago students are in "Hi go" career fields, as compared with 50 per cent of the "High Quality Private" and 44 per cent of the "Ultra-Ivy" students. When, however, the same comparisons are made for the "Mid-Western Liberal Arts" and the "Big Ten" students, Chicago (along with the "High Quality Private" and "Ultra-Ivy") has higher attendance plans within each career type.

There is nothing in Table V.5 of which Chicago need be ashamed. Indeed, the figures support the claim that Chicago's record in production of graduate students is outstanding. However, the following qualifications must be introduced:

per cent choosing "Hi go" fields, while the "Big Ten" shows a 21 per cent gain. The "reason" is that because Chicago had so many "Hi go" freshmen their small loss rate produced more absolute losses than the high gain rate for the small number of "Lo go" freshmen. As Chicago well knows, when you start at the top, there is no way to go but down, and when you start at the bottom, there is no way to go but up.

1. Although even within career type, Chicago students are more likely to attend graduate and professional school than are graduates of its geographical competitors, Chicago shares this property with most of the leading private institutions of the nation.
2. Although compared with other high quality private institutions, Chicago stands out in terms of its proportion going on for further study next year, most (but not all) of the difference stems from Chicago's recruitment of freshmen already aiming for "Hi go" careers, particularly in the arts and sciences. The demonstrable effect of Chicago experience on career decisions is not enough to produce the differential in post-graduate plans.

TABLE V.5

CAREER TYPE AND PLANS FOR POSTGRADUATE EDUCATION

(Per cent planning to go to graduate or professional school in 1961-62)

Future Career Type	U. of C.	Comparison Group			
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"
"Hi go"	82% (160)	88% (57)	67% (27)	60% (90)	64% (33)
"Lo go"	48% (61)	42% (57)	51% (35)	19% (186)	17% (136)
Total per cent planning to go to graduate or professional school	72%	65%	58%	32%	26%
Total per cent "Hi go"	72%	50%	44%	33%	20%
N	221	114	62	276	169
NA Plans only	0	5	2	12	11
NA Career type	31	19	17	47	30
NA Both	0	2	0	4	1
Total N	252	140	81	339	211

The suggestion of all this is that Chicago's outstanding record as a high producer of graduate and professional students is intimately related to its recruitment. Because the University is currently attempting to re-evaluate its admissions and recruitment, it is important to learn more about the kind of students Chicago attracts. The next and final chapter of this report turns to this topic.

CHAPTER VI

CHARACTERISTICS OF CHICAGO STUDENTS

The Chicago graduate is unique apparently because Chicago attracts students who are oriented towards scientific, scholarly and professional careers. What are the social and personal characteristics of these students which might set them off from students attending some of the other comparison schools?

A. Age, Sex, Marital Status

We can begin to answer this question by specifying the ways in which the typical U. of C. graduate is like graduates from other schools: The sex composition of the University of Chicago does not show a marked difference to that of any of the comparison groups. To be sure, some of the individual schools in these groups are not coeducational, but in terms of the patterns of achievement and aspiration only the characteristics of the groups of schools are relevant here, so we would conclude that the U. of C. graduate was no more or less likely to be male than the typical graduate of any of our comparison groups.

The Chicago graduate was a little less likely to be married than a graduate of one of the "Big Ten" or "Mid-Western Liberal Arts" schools, and slightly more likely to be married than one of the "High Quality Private" or "Ultra-Ivy" graduates, but the difference in either case is not striking. We found 15 per cent of the U. of C. class of '61 were married by the time of graduation. The comparable figures at the other school groups are: "High Quality Private," 10 per cent; "Ultra-Ivy," 6 per cent; "Mid-Western Liberal Arts and Sciences," 22 per cent; "Big Ten," 23 per cent.

Neither was the typical U. of C. graduate much different in age than his classmates elsewhere, being, on the average, somewhat less than a year younger than the graduates at the other school groups.

B. Family Background

The U. of C. graduate was likely to have come from a different type of background than his counterpart in any of the comparison groups. In the first place, his origin was characteristically urban. In fact the chances were three out of five that he came from a city with a population of two million or more (see Table VI-1). Almost three-quarters of the class of '61 came from cities of 500,000 or more. Although none of the graduating classes of the four comparison groups had such a typically urban background, the "High Quality Private" graduates came closest--sixty per cent were from cities in excess of 500,000 population.

Urban residents vary in religion from small towners and rural residents. As one might suspect, the U. of C. class was more likely to have come from a Jewish background, and much less likely to have come from a Protestant background. (The chances that a U. of C. graduate did not come from a Protestant background are better than six out of ten [see Table VI-2].) This stands in direct opposition to the religious backgrounds of the graduates of the other institutions where the equivalent odds ranged from six out of ten to over eight out of ten that a graduate would have come from a Protestant background.

TABLE VI.1

SIZE OF HOMETOWN

(Per cent from Hometown of given size)

Size of Hometown	U. of C.	Comparison Group				National Average*
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
2 million or more	60%	44%	20%	15%	16%	19%
500,000-1,999,999	12	16	23	12	15	14
100,000-499,999 .	9	14	13	18	13	16
10,000-99,999 . .	13	13	27	23	24	31
Less than 10,000 and Farm . . .	7	13	16	30	30	30
Total per cent	100%	100%	99%	98%	98%	102%
N	248	135	79	330	206	3,307
NA, Hometown .	4	5	2	9	5	90
Total N . . .	252	140	81	339	211	3,397

*Representative sub-sample.

TABLE VI.2

ORIGINAL RELIGION AND CURRENT RELIGION
(Per cent with given religious preference)

Religious Preference	Comparison Group												National Average	
	U. of C.		"High Quality Private"		"Ultra-Ivy"		"Mid-West Lib. Arts and Sciences"		"Big Ten"		Original	Current	Original	Current
	Original	Current	Original	Current	Original	Current	Original	Current	Original	Current	Original	Current	Original	Current
Protestant . . .	39%	22%	58%	40%	65%	42%	87%	75%	71%	60%	60%	53%		
Roman Catholic	13	9	12	10	15	16	8	7	19	19	25	25		
Jewish	30	20	23	20	11	9	2	2	5	4	8	7		
Other	4	6	2	5	0	4	2	4	2	4	3	4		
None	13	43	6	25	9	29	1	13	2	13	3	11		
Total per cent	99%	100%	101%	100%	100%	100%	100%	101%	99%	100%	99%	100%		
N	246	246	136	136	80	80	331	329	206	205	3,320	3,305		
NA, Religion .	6	6	4	4	1	1	8	10	5	6	77	92		
Total N	252	252	140	140	81	81	339	339	211	211	3,397	3,397		

More striking, however, is the fact that by the senior year of college the religious preferences of the U. of C. graduates underwent a radical change. In the Spring of 1961 more than 40 per cent of the U. of C. Graduates claimed no religious preference, and barely one-fifth indicated preference for one of the Protestant faiths. By and large, then, the typical U. of C. graduate had a different religious background when he entered college, and a striking pattern of eschewing his original religion by the time he left.

But religion was not the only difference in the background of the U. of C. graduate. Tables VI.3 and VI.4 show an interesting pattern in his socio-economic background. In Table VI.3 we see that his father was likely to be a professional--not quite as likely as it was for the graduate of one of the "Ultra-Ivy" schools, but much more likely than for the "Big Ten" or "Mid-West Liberal Arts" college graduate. In Table VI-4, however, it is evident that despite the predominantly professional background, the income of the U. of C. graduate's family tended to be relatively low. Half of the graduates of the "High Quality Private" and "Ultra-Ivy" schools come from families earning in excess of \$15,000 a year compared to 25 per cent of the graduating class of the University of Chicago. Over a third of the U. of C. graduates came from families where the total annual income was less than \$7,500--by and large a picture of family finances not greatly different from that which typifies the classes of the "Liberal Arts and Sciences" colleges and the "Big Ten" universities. Perhaps we see in these characteristics of Chicago graduates another reason for the greater emphasis placed on financial obstacles as seen in Chapter IV.

TABLE VI.3

FATHER'S OCCUPATION

(Per cent with Father in given occupational category)

Father's Occupation	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Professional	42%) 64	43%) 78	58%) 84	28%) 49	25%) 49	24%) 49
Proprietor-Manager	22)	35)	26)	21)	24)	25)
Sales-Clerical	16	12	9	11	16	12
Skilled worker	11	5	1	15	13	17
Semi-skilled, Unskilled	9	5	4	24	21	22
Total per cent	100%	100%	98%	99%	99%	100%
N	247	136	78	329	207	3,271
NA, Father's Occupation	5	4	3	10	4	126
Total N	252	140	81	339	211	3,397

TABLE VI.4

FAMILY INCOME

(Per cent with Parental Family in given income category)

Annual Family Income	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
\$ 7,500 or less	35%	19%	16%	46%	42%	49%
\$ 7,500-14,999	40	33	36	32	40	34
\$15,000 plus	25	49	49	22	18	17
Total per cent	100%	101%	101%	100%	100%	100%
N	236	122	70	285	177	2,882
"No idea" or NA Income	16	18	11	54	34	515
Total N	252	140	81	339	211	3,397

C. Attitudes and Opinions

The mythology of academia has an especially colorful chapter on the Chicago undergraduate whose bohemian and unconventional genius is the main theme. Our data tend to faintly support the stereotype. For example, Chicago graduates are more likely to consider themselves "Unconventional in opinions and values" than any of the other graduates in our comparison groups--roughly 60 per cent of the U. of C. graduates label themselves unconventional compared to only 30 per cent of the national sample as a whole.¹ Politically, the U. of C. group was somewhat more liberal--this is especially noticeable in comparison to the "Liberal Arts" and "Big Ten" graduates. While these differences are significant, they don't necessarily imply that the other groups are proportionately more conservative since more in these groups tended to rate themselves politically "neither."²

As one might expect from the strong tendency to leave one's original religion, the University of Chicago graduates do tend to think of themselves as extremely "non-religious." Close to half of the class rated themselves either "fairly" or "very" non-religious--a figure comparable to that observed among the "High Quality Private" and "Ultra-Ivy" graduates, but much greater

¹Note, however, that the graduates of "High Quality Private" and "Ultra-Ivy" also exceed the national average in "unconventionality."

²For those interested in taking sides, it is worthwhile to notice that in none of the comparison groups, nor in the sample taken as a whole, do the conservatives come very close to outweighing the liberals--to no one's surprise, the "hotbed" of conservatism in our comparison group would seem to lie in the "Mid-Western Liberal Arts" and "Big Ten" schools.

than the figure characterizing the others. The U. of C. group was much more extreme in its self characterization, however; one-third (twice as many as at the "High Quality Private" and "Ultra-Ivy" schools) said they were "very" non-religious.

By and large, Chicago graduates depart further from the national average than either "High Quality Private" or "Ultra-Ivy" graduates, but they are not much further. But there is one opinion which does provide a remarkable amount of discrimination between the University of Chicago and other institutions. This is the answer to the question, "...Circle the (result or purpose of college) which is most important to you personally and also circle the one which you think is most important to the typical student here." Among the responses is "A basic general education and appreciation of ideas." We can see in Table VI-5 that eight out of ten of the U. of C. graduates checked "A basic education....," quite similar to the frequency observed among the "High Quality Private" and "Ultra-Ivy" graduates, and considerably greater than that displayed by the other two groups. But a more important finding is the fact that eight out of ten U. of C. graduates also thought this was most important to the typical student. Compare this to the other groups: 86 per cent of the "Ultra-Ivy" said "a basic education" was most important to themselves personally, but they thought less than 70 per cent of the others held the same value. The discrepancy is even greater among the other groups--three-quarters of the "Liberal Arts" college group valued a basic education but saw only half of their classmates as holding the same values.

TABLE VI.5

POLITICAL ORIENTATION, CONVENTIONALITY, AND RELIGIOSITY

Institution or Group	Per cent "Liberal"		Per cent Unconventional		Per cent Non-Religious	
University of Chicago . . .	69%	(249)	59%	(246)	49%	(248)
"High Quality Private" . .	54%	(140)	40%	(140)	40%	(139)
"Ultra-Ivy"	55%	(77)	46%	(80)	41%	(80)
"Mid-West Lib. Arts and Sci."	49%	(331)	29%	(330)	11%	(333)
"Big Ten"	46%	(208)	32%	(210)	15%	(210)
National Average	48%	(3,307)	30%	(3,319)	16%	(3,338)

The University of Chicago graduate tends to see himself as basically similar to his classmates. We have already seen that the U. of C. graduates were remarkably homogeneous with respect to their long-run career plans, and this homogeneity might be offered as part of the reason for this rather unique view of one's fellow students. That is, his views of his fellows are quite accurate, which suggests that Chicago students create for themselves a climate of values strong enough to be perceived by almost all.

TABLE VI.6

PURPOSE OF COLLEGE

(Per cent checking "A basic general education and appreciation of ideas" as important to self and important to "typical student here")

Important to....	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
"me personally". . .	82% (250)	83% (138)	86% (81)	74% (327)	57% (209)	67%(3,354)
"typical student here"	81% (247)	57% (137)	68% (80)	46% (321)	34% (207)	38%(3,294)

D. Occupational Values

The occupation a person seeks to enter represents, especially for the talented and well educated college graduates, a choice among a wide range of alternatives, each of which is distinguished in some way from the others either in terms of style of life, monetary and other rewards, or in terms of the job activities themselves. Despite imperfect knowledge about alternatives among college students, a choice nevertheless represents in large part a whole cluster of values, attitudes, needs, and self-concepts which lead to the expression of vocational preferences. The process by which a person comes to prefer a given set of occupations is conceived of in terms of a "birds of a feather" explanation: "The person making a vocational choice in a sense 'searches' for those environments which are congruent with his personal orientations."

In an attempt to capture the predispositions which are expressed in occupational choices, John Holland has constructed a "Vocational Personality Inventory,"³ a shortened version of which was included in our questionnaire (see question 30). The Holland Inventory assumes that there are six basic types of people which can serve as models for the entire range of personality orientations:⁴

Realistic. The model type is masculine, physically strong, unsociable, aggressive; has good motor coordination and skill; lacks verbal and interpersonal skills; prefers concrete to abstract problems; conceives of himself as being aggressive and masculine and having conventional political and economic values...

³Holland, J. L., "A Personality Inventory Employing Occupational Titles," J. Appl. Psychol., 1958, 42, 336-342 and Holland, J. L., Explorations of a Theory of Vocational Choice and Achievement: II A Four Year Prediction Study; National Merit Scholarship Corp., mimeo.

⁴Holland, Exploration...., op. cit., pp. 1-5.

Intellectual. The model type is task-oriented, intraceptive, asocial; prefers to think through rather than act out problems; needs to understand; enjoys ambiguous work tasks; has unconventional values and attitudes...

Social. The model type is sociable, responsible, feminine, humanistic, religious; needs attention; has verbal and interpersonal skills; avoids intellectual problem-solving, physical activity, and highly ordered activities; prefers to solve problems through feelings and interpersonal manipulations of others...

Conventional. The model type prefers structured verbal and numerical activities and subordinate roles; is conforming (extraceptive); avoids ambiguous situations and problems involving interpersonal relationships and physical skills; is effective in well-structured tasks; identifies with power, externals, and status...

Enterprising. The model type has verbal skills for dominating, selling, leading others; conceives of himself as a strong, masculine leader; avoids well-defined language or work situations requiring long periods of intellectual effort; is extraceptive; differs from the Conventional type in that the Enterprising type prefers ambiguous social tasks and has a greater concern with power, status, and leadership; is orally aggressive...

Artistic. The model type is asocial; avoids problems which are highly structured or require gross physical skills; resembles the Intellectual type in being intraceptive and asocial; but differs from that type in his need for individualistic expression, has less ego strength, and is more feminine; suffers more frequently than the other types from emotional disturbances; prefers dealing with environmental problems through self-expression in artistic media...

When we fit the responses of the graduates in our sample to these model types we find very striking differences. Table VI.7 presents these distributions in two manners: first, each respondent was instructed to choose two preferred occupational areas (out of a set of areas each equivalent to one of the above models). The pairs of model types frequently chosen are shown in the top part of Table VI.7. Second, in the bottom part of Table VI.7 the total frequency of responses to each type is presented separately.

The only response patterns shown are those which accounted for at least ten per cent of the responses in any group of graduates.

TABLE VI.7

HOLLAND PERSONALITY SYNDROMES

(Per cent with given Syndrome, ranked on basis of Frequency at U. of C.)

Personality Syndrome*	U. of C.	Comparison Group			
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"
Intellectual - Artistic	29%	12%	16%	6%	8%
Social - Artistic	20	25	19	30	19
Intellectual - Social	14	10	5	19	12
Social - Enterprising	5	12	10	14	14
Conventional - Enterprising	3	10	10	7	9
Conventional - Artistic	0	9	14	0	1
Total per cent	71%	78%	74%	76%	63%
Total "Intellectual" **	60%	35%	38%	31%	34%
Total "Artistic"	58%	47%	50%	41%	33%
Total "Social"	42%	51%	36%	74%	53%
Total "Enterprising"	22%	36%	44%	30%	43%
Total "Realistic"	11%	12%	16%	9%	20%
Total "Conventional"	8%	19%	16%	16%	18%
N	246	137	80	324	208
NA	6	3	1	15	3
Total N	252	140	81	339	211

* Only those personality syndromes are listed which account for ten per cent or more of the students at any school or group.

** The totals are over all possible combinations regardless of whether they individually account for ten per cent or more.

A glance at this table reveals some very striking differences:

Six out of every ten U. of C. graduates indicate either primary or secondary patterns resembling the "Intellectual" model, compared to less than four out of every ten graduates of each of the comparison groups. A similar proportion indicate responses placing them close to the "Artistic" model--in fact roughly 30 per cent fall squarely into the "Intellectual-Artistic" mold. Restricting ourselves to the paired items, three patterns account for the responses of 63 per cent of the U. of C. class of 1961--in order: "Intellectual-Artistic," 29 per cent; "Social-Artistic," 20 per cent; "Intellectual-Social," 14 per cent. Only among the graduates of the "Mid-West Liberal Arts" colleges is a comparable degree of homogeneity produced, but around quite a different set of values.

Thus the dominant patterns among the University of Chicago graduates are more likely to include the "Intellectual" model than any of the comparison groups and to exhibit a significantly greater degree of homogeneity than the graduates of any other comparison groups except the "Mid-West. Liberal Arts" colleges.

Assuming that "students with different dominant personal orientations... have significantly different attributes, including scholastic aptitude,... college majors career choices, preferred roles and achievements,"⁵ we would expect to find a pattern of career choices characteristic of the institutions quite similar to that which we have in fact found (e.g., a predominance of U. of C. graduates aiming for the arts and sciences).

⁵Ibid., p. 10.

The responses to another question relating to occupational preferences supports this portrait. Table VI.8 shows the percentages of the graduates indicating they would find very interesting each of three occupations: Research Chemist, College Professor, and Business Executive. Since these occupations are analogous to some of the archetypes above, we would expect to find the University of Chicago graduates indicating a greater attraction to the role of Research Chemist and College Professor and less attraction to the Business Executive role. In fact, this is shown in this table.

TABLE VI.8

OCCUPATIONAL IMAGES

(Per cent checking "This sort of work would be very interesting")

Occupation	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Research Chemist	65%	51%	49%	39%	46%	42%
College Professor	88%	76%	75%	68%	66%	65%
Business Executive	33%	46%	53%	41%	53%	49%
N	242	136	77	322	197	3,222
NA	10	4	4	17	14	175
Total N . .	252	140	81	339	211	3,397

We would also expect to find different patterns of occupational values characteristic of the University of Chicago graduates, and in Table VI.9 we find that there are, indeed, different job characteristics which they regarded as very important in the choice of an occupation. They were less likely to value making a lot of money, exercising leadership, being helpful to others or useful to society and working with people rather than things. They were also, as one might expect, more likely to value the opportunity to be original and creative, and the chance to be "living and working in the world of ideas."

TABLE VI.9

OCCUPATIONAL VALUES

(Per cent saying given characteristic would be very important in picking a job or career)

Occupational Characteristic	U. of C.	Comparison Group				National Average
		"High Quality Private"	"Ultra-Ivy"	"Mid-West Lib. Arts and Sciences"	"Big Ten"	
Making a lot of money	20%	29%	32%	18%	25%	24%
Opportunities to be helpful to others or useful to society	56%	62%	58%	72%	64%	65%
A chance to exercise leadership	29%	45%	44%	40%	43%	41%
Opportunity to work with people rather than things	38%	56%	41%	62%	53%	38%
Opportunity to be original and creative	71%	68%	74%	48%	56%	71%
Living and working in the world of ideas.	58%	47%	57%	43%	41%	39%
N	248	140	81	336	210	3,387
NA	4	0	0	3	1	10
Total N	252	140	81	339	211	3,397

The portrait that emerges of the Chicago graduate is that of a person with relatively high social origins, but at a middling rather than a top level, especially in comparison with graduates of the "High Quality Private" and "Ultra-Ivy" schools. He is from the metropolis, quite likely to be Jewish in origin, but in any event non-religious by the time of graduation.

The Chicago graduate is an intellectual who values the world of ideas and the ability to be original and creative. Quite naturally, he is unconventional and liberal in his views. More than the graduates from any of the other schools, he is strongly oriented towards scientific, scholarly and intellectual pursuits.

APPENDIX

THE QUESTIONNAIRE

NATIONAL OPINION RESEARCH CENTER

UNIVERSITY OF CHICAGO
5720 WOODLAWN AVENUE • CHICAGO 37 • ILLINOIS

April, 1961

Dear Student:

National Opinion Research Center, a non-profit research organization affiliated with the University of Chicago, has been asked by three Federal agencies, the U.S. Office of Education, The National Science Foundation, and the National Institutes of Health, to survey the career plans of seniors in American colleges and universities.

You are one of 40,000 students in 135 schools who have been chosen by scientific probability sampling methods to participate in this study.

The research is designed to yield important information on the relationships between college experiences and career plans.

The questionnaire requires 30 minutes or so to fill out. Please answer the questions as frankly and accurately as you can. Your answers will be absolutely confidential, and no individual student's answers will be revealed in the reports, which will be based on statistical tabulations.

Almost all of the questions can be answered by drawing a circle around one or more numbers or letters in the right hand margins of the questionnaire. Thus:

I am now-- (Circle one.)

- A student in high school 1
- A student in college **2**
- A student in graduate or professional school X

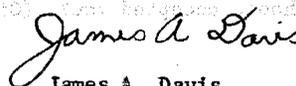
NOTE: After each question there are instructions in parentheses. Please follow these instructions closely as they are very important for data processing.

- A. If it says "(Circle one.)," draw a circle around only the one number or letter which best describes your answer, even though one or more other alternatives might be relevant.
- B. If it says "(Circle one in each column.," or "(Circle one in each row.," please look to see that you have circled one and only one number or letter in each of the appropriate rows or columns.
- C. If it says "(Circle as many as apply.," circle as many or as few numbers or letters in the columns or rows as you think are relevant.

If you are interested in the results of this study, please write a letter or card requesting a copy of the results to National Opinion Research Center, 5720 South Woodlawn, Chicago 37, Illinois, after October, 1961.

Thank you very much for your help.

Sincerely,



James A. Davis
Study Director

I. Plans For This Coming Fall

1. What will you be doing this Fall?

Circle the number which describes what you will be doing this Fall.
 If you expect to be doing two things simultaneously, circle both. If
 you are considering two alternative plans, circle only the more probable.

- Working full time at a type of job which I expect to be my long run career field 2 (9)
- Non-career military service 3 1
- Working full time at a civilian job which will probably not be my long run career field 4
- Housewife 5
- Graduate study in an arts and science field (physical science, biological science, social science, humanities) 6
- Graduate study in a professional field (law, medicine, engineering, education, agriculture, social work, etc.) 7
- Other (Circle and specify: not sure) 8

2. How definite are the plans you circled in question 1? (Circle one.)

- Quite definite X (10)
- Fairly definite, but subject to change. 0 y
- Quite indefinite 1

3. If you are considering a set of alternative plans, different from the ones you circled in question 1, indicate them by circling the appropriate numbers below, using the categories from question 1.

If you have no alternative plans in mind, circle the number nine below.

- 2 3 4 5 6 7 8 9 (11)

4. At the time you entered college, what were your plans for study beyond the bachelor's degree? (Circle one.)

- I planned to go into a line of work which requires graduate or professional training X (12)
- I planned to go on for graduate or professional training, but I didn't have a specific field in mind 0 y
- I planned to stop at the bachelor's degree 1
- I didn't have any definite plans 2

5. Have you applied for admission to any graduate or professional school for the coming year? (Circle one.)

- *No, and I do not expect to go to school next year 4 (13)
- **No, but I do expect to go to school next year 5 9
- ***Yes, I applied to one school 6 IF 4, SKIP TO
- ***Yes, I applied to 2 or 3 schools 7 COL.
- ***Yes, I applied to 4 or more schools 8 23

*IF "NO, AND DO NOT EXPECT TO GO TO SCHOOL NEXT YEAR": SKIP TO QUESTION 7.

**IF "NO, BUT I DO EXPECT TO GO TO SCHOOL NEXT YEAR": SKIP TO QUESTION 6.

***IF "YES": PLEASE ANSWER a, b, AND c.

a. How many schools accepted you? (Circle one.)

- None 0 (14)
- One 1 4
- More than one 2

b. How many schools rejected your application? (Circle one.)

None 5 (15)
One 6 9
More than one 7

c. Have you any applications pending? (Circle one.)

Yes 0 (16)
No 1 y

6. Did you apply (or were you nominated) for financial support (scholarship, fellowship, assistantship, etc.) for this Fall? (Circle one.)

*No 7 (17)
**Yes 8 9

*IF "NO": Did you not apply because-- (Circle any which apply.)

I had no intention of going to school at the time applications were due 0 (18)
I wouldn't need any support of this type 1 y
The amount I could get would have been too little 2
The duties attached would have been unsatisfactory 3
I didn't think I could get any 4
It didn't occur to me to apply 5
Other (Circle and specify: _____) 6

**IF "YES": PLEASE ANSWER a, b, c, AND d.

a. To where did you apply or was your nomination sent? (Circle one or more.)

The school I will (probably) attend 0 (19)
Other schools or schools 1 y
Other source (government, private foundation, etc.) 2

b. Which ones offered you aid? (Circle one or more.)

The school I will (probably) attend 4 (20)
Other school or schools 5 9
Other source (government, private foundation, etc.) 6
No offers 7

c. Which of the following do you expect to receive next year? (Circle one or more.)

Scholarship for part tuition 1 (21)
Scholarship for full tuition 2 9
Fellowship for tuition plus an amount under \$1,000 3
Fellowship for tuition plus \$1,000 or more 4
Teaching assistantship 5
Research assistantship 6
No financial support of this type 7
Don't know yet 8

d. From which of the following source or sources do you expect to receive financial aid (scholarship, fellowship, assistantship, etc.)? (Circle one or more.)

No financial aid of this type expected 1 (22)
School I will attend 2 0
Private foundation, philanthropic organization, etc. 3
U.S. Federal government:
National Defense Act 4
National Science Foundation 5
Public Health Service - National Institutes of Health 6
Other 7
State or local government (U.S.) 8
Other (Circle and specify: _____) 9

ARE YOU SURE OR FAIRLY SURE THAT YOU WILL BE ATTENDING GRADUATE OR PROFESSIONAL SCHOOL NEXT YEAR? (ACADEMIC YEAR 1961-1962)?

(81) IF YES: PUT A CHECK IN THIS BOX AND SKIP TO QUESTION 13

IF YES, SKIP TO COLUMN 32

(81) IF NO: ANSWER QUESTIONS 7 THROUGH 12.

7. If there were no obstacles in terms of finances, grade records, getting admitted, etc., would you like to go on for graduate or professional study in the future? (Circle one.)

Yes	2	(23)
Maybe	3	5
No	4	

8. Do you expect to go on for graduate or professional school sometime in the future? (Circle one.)

No	5	(24)
Probably not	6	9
*Probably yes	7	
*Yes	8	

*IF "PROBABLY YES" OR "YES": PLEASE ANSWER a AND b.

a. Do you expect that your future employer will send you or pay for your future studies? (Do not count savings from your pay or anticipated veteran's benefits.) (Circle one.)

Yes	0	(25)
No	1	y

b. When will you start your graduate or professional studies? Make your single best prediction. (Circle one.)

Academic Year		
'62-'63	0	(26)
'63-'64	1	y
'64-'65	2	
'65-'66 or after	3	
No specific date in mind	4	

9. Do you have a definite job (including military service) lined up after graduation? (Circle one.)

Yes	6	(27)
No, but I intend to be working	7	9
No, I do not intend to be working	8	

10. Since you've been in college, have you at any time considered going on for graduate study or considered an occupation which would require professional training beyond a bachelor's degree? (Circle one.)

I never thought of it	2	(28)
I thought about it, but I never considered it seriously	3	1
I considered it seriously, but decided against it	4	
I do plan to go on, but not next year	5	

11. To what extent did immediate financial obstacles (not doubts about the long run economic value of further study) affect your decision regarding graduate or professional school next year? (Circle one.)

Financial obstacles had nothing to do with it	6	(29)
*Financial obstacles played some part in my decision	7	9
*Financial obstacles are the major reason I am not going on for further study next year	8	

* Please answer question at top of next page.

*Listed below are some selected types of financial assistance. Circle any type which in itself (not in combination with the others) would have made it possible for you to go on to graduate or professional school next year.

- Tuition Scholarship 0 (30)
- Fellowship for tuition plus \$1,000 cash 1 9
- Loan for tuition which would not have to be paid back until I was out of school 2
- Loan for tuition plus living expenses which would not have to be paid back until I was out of school. 3
- 10-20 hours a week job as a teaching or research assistant 4
- Financial help from my parents 5
- Payment of all my current debts for undergraduate education 6
- None of these 7

12. Which of the following best explains why you do not anticipate going to graduate or professional school next year? (Circle any which apply.)
- No desire to do so Y (31)
 - Can get a desirable job without further schooling 0 SP
 - Financial obstacles 1
 - Low grades in college 2
 - Family responsibilities 3
 - I would rather get married 4
 - I want to get practical experience first 5
 - I don't think I have the ability 6
 - I lack the necessary undergraduate course prerequisites 7
 - I'm tired of being a student 8
 - Military service 9
 - I will be in a company training program which provides the equivalent X

SKIP TO QUESTION 18, "FIELDS AND CAREERS"

SKIP TO COLUMN 38

IF YOU ARE SURE OR FAIRLY SURE THAT YOU WILL BE ATTENDING GRADUATE OR PROFESSIONAL SCHOOL NEXT YEAR, ANSWER QUESTIONS 13-17.

13. Have you decided upon the specific school you will attend? (Circle one.)
- Yes 7 (32)
 - No 8 9

14. Write below the name of the school that you will most probably attend next Fall.

(Name of School)	(City)	(State or Country)
a. Is the above school the one you are now attending? (Circle one.)		
Yes 4 <u>(33)</u>		
No 5		

15. If you were absolutely free to choose (ignoring finances, admissions, etc.) would you prefer to-- (Circle one.)
- Go to the same school I expect to attend next year 0 (34)
 - Attend a different school 1

- *IF "ATTEND A DIFFERENT SCHOOL":** Did any of the following prevent you from attending the school you would really prefer? (Circle any which apply.)
- 0 Wasn't offered any financial support (scholarship, fellowship, assistantship) 2 (35)
 - 1 Was offered support, but it was too little 3
 - 2 Was refused admission or didn't apply because I thought I would be refused 4
 - 3 Financial obstacles other than scholarship, assistantship, etc. 5
 - 4 Limited to schools in a particular community 6
 - 5 Other (Circle and specify: _____) 7

16. If you were absolutely free to choose (ignoring finances, admissions, etc.) would you prefer to-- (Circle one.)
- 0 Study in the same field I will be in 0 (36)
 - 1 Study in a different field 1

- *IF "STUDY IN A DIFFERENT FIELD":** Did any of the following prevent you from studying in the field which you really prefer? (Circle any which apply.)
- 0 Wasn't offered any financial support (scholarship, fellowship, assistantship) 2 (37)
 - 1 Was offered support, but it was too little 3
 - 2 Was refused admission or didn't apply because I thought I would be refused 4
 - 3 Financial obstacles other than scholarship, assistantship, etc. 5
 - 4 Limited to schools in a particular community 6
 - 5 Other (Circle and specify: _____) 7

17. In terms of your finances during the next academic year when you are in graduate or professional school, from which of the following sources do you expect to receive \$200 or more? (Circle any which apply.)
- 0 Full time job 1 (38)
 - 1 Part time job other than teaching or research assistantship 2
 - 2 Withdrawals from savings 3
 - 3 National Defense Education Act Loan 4
 - 4 Other loan 5
 - 5 Parents or relatives 6
 - 6 Income from spouse's employment 7
 - 7 Other (Circle and specify: _____) 8

IMPORTANT

The following list of fields is to be used in answering Questions 18 through 24. Read the instructions for these questions found on page 8 before using the list.

(Business or Administration)	(Name of School)
Business and Administration	Engineering
92 Accounting	10 Aeronautical
90 Advertising, Public Relations	11 Civil (including Agricultural, Architectural, Civil, Sanitary)
9X Military Service, Military Science	12 Chemical (including Ceramic)
97 Secretarial Science (or employed as a secretary)	13 Electrical
72 Industrial or Personnel Psychology	14 Engineering Science, Engineering Physics, Engineering Mechanics
91 All other business and commercial fields (Business Administration, Marketing, Insurance, Finance, Industrial Relations, etc.)	15 Industrial
93 Public Administration (or employed as government administrator if not covered by other fields)	16 Mechanical (including Naval Architecture and Marine, Welding, Textile)
	17 Metallurgical
	18 Mining (including Mining, Geological, Geophysical, Petroleum)
	1X Engineering, General and other specialties

<u>Physical Science</u> (NOTE: Secondary School Science Teaching is classified under Education)	37 Microbiology (including Bacteriology, Mycology, Parasitology, Virology, etc.)
01 Astronomy, Astrophysics	38 Pathology
02 Chemistry (excluding Biochemistry which is 32)	39 Pharmacology
03 Physics (excluding Biophysics which is 34)	40 Physiology
04 Geography	41 Zoology
05 Geology, Geophysics	3X Other Biological Science Fields
06 Oceanography	<u>Agricultural and Related Fields</u>
07 Metallurgy	45 Agricultural Sciences (including Animal Husbandry, Agronomy, Farm Management, Horticulture, Soil Science, Soil Conservation, etc.)
08 Meteorology (Atmospheric sciences)	46 Forestry, Fish and Wild Life Management
0X Physical Science, General and other specialties	27 Veterinary Medicine
09 <u>Mathematics and Statistics</u> (NOTE: Secondary School Mathematics Teaching is classified under Education)	47 Farming (Code as occupation only, not as field of study)
<u>Education</u> (NOTE: Junior College, College and University Teaching should be coded by Field of Specialization, not as Education)	<u>Psychology</u> (NOTE: Code Psychiatry as Medicine 21)
50 <u>Elementary</u> (including Kindergarten and Nursery School)	70 Clinical Psychology
<u>Secondary--Academic Subject Fields</u>	66 Counseling and Guidance
51 English	67 Educational Psychology
52 Modern Foreign Languages	71 Social Psychology
53 Latin, Greek	72 Industrial and Personnel Psychology
54 History, Social Studies	73 Experimental and General Psychology
55 Natural Science (General, Physics, Chemistry, Biology, etc.)	74 Other Psychological Fields
56 Mathematics	<u>Social Sciences</u>
<u>Specialized Teaching Fields</u>	75 Anthropology, Archeology
57 Physical Education, Health, Recreation	76 Economics
58 Music Education	04 Geography
59 Art Education	83 History
60 Education of Exceptional Children (Including Speech Correction)	77 Area and Regional Studies
61 Agricultural Education	78 Political Science, Government, International Relations
62 Home Economics Education	93 Public Administration
63 Business Education	79 Sociology
64 Trade and Industrial Education (Vocational)	96 Social Work, Group Work
65 Industrial Arts Education (Non-Vocational)	7X Social Science, General and Other
66 Counseling and Guidance	<u>Humanities</u>
67 Educational Psychology	80 Fine and Applied Arts (Art, Music, Speech, Drama, etc.)
68 Administration and Supervision	81 English, Creative Writing
6X Education, General and other specialties	82 Classical Languages and Literatures
<u>Health Professions</u>	83 History
20 Dentistry or Pre-Dentistry	84 Modern Foreign Languages and Literatures
21 Medicine or Pre-Medicine	85 Philosophy
22 Nursing	8X Humanities, General and Other Fields
23 Optometry	<u>Other Fields and Occupations</u>
24 Pharmacy	86 Architecture, City Planning
25 Physical Therapy	94 Foreign Service (Code as occupation only, not field of study)
26 Occupational Therapy	98 Home Economics (Code either as a field of study or as an occupation if you mean working as a home economist for pay)
27 Veterinary Medicine or Pre-Veterinary	99 Housewife (Code as occupation only, not as field of study)
28 Medical Technology or Dental Hygiene	87 Journalism, Radio-Television, Communications
2X Other Health Fields	95 Law, Pre-Law
<u>Biological Sciences</u>	88 Library Science, Archival Science
30 Anatomy	96 Social Work, Group Work
31 Biology	89 Theology, Religion (Employment as a Clergyman or religious worker)
32 Biochemistry	X0 <u>Field of Study or Job Which has no Near Equivalent in This List</u> (If you use this code, please describe your field in a word or two under the questions where it applies.)
33 Botany and Related Plant Sciences (Plant Pathology, Plant Physiology, etc.)	X1 <u>Do not expect to be either employed full time or to be a Housewife</u> (Code only for questions about careers, not for field of study.)
34 Biophysics	
35 Entomology	
36 Genetics	

II. Fields and Careers

On pages 6 and 7 of this questionnaire is a list of fields of study and employment. Each one can be used to describe a field of study or a type of job. Thus, for example, in questions about fields of study, "Psychology" means college courses in psychology; in questions about careers, "Psychology" means the occupation of psychologist.

IMPORTANT NOTE:

When you have chosen the field or occupation from the list which is your answer to one of the questions below, please write the two numbers or letters of that field in the double box at the end of that question. For example, if "Clinical Psychology" is now your major field, write its code number (70) in the boxes at the end of question 18 thus:

7	0
---	---

18. Present major field?

If you have a joint major, give the one with the most course credits.

(39-40)	X	X
---------	---	---

19. Previous major field?

If you have not shifted majors, write "yy" in the boxes.

If you have several previous majors, give the first one in which officially registered.

(41-42)	X	X
---------	---	---

20. Future graduate or professional major?

If you do not plan to ever go to graduate or professional school, write "yy" in the boxes.

If you plan study in several fields, give the main one.

(43-44)	X	X
---------	---	---

21. Anticipated career field?

Please give what you expect to be your long-run career and ignore any school, stop-gap job, or temporary military service which might precede it.

If you are a woman, use "Housewife (99)" only if you do not expect to work full time until your children are grown.

In addition to writing the code in the boxes, please describe your anticipated career in a few words here:

(45-46)	X	X
---------	---	---

22. Possible alternative career field?

If none, write "yy" in the boxes.

If your alternative has the same code number as the one to question 21, write "yy" in the boxes.

If more than one alternative, give the most likely only.

(47-48)	X	X
---------	---	---

23. Career preference when you started college?

Give your single strongest preference even if it was vague or if there were several alternatives.

If absolutely no preference, write "yy" in the boxes.

(49-50)	X	X
---------	---	---

24. Any alternative career field seriously considered during college which is not mentioned in questions 21, 22, or 23?

If none, write "yy" in the boxes.

(51-52)	X	X
---------	---	---

NOTE: THE NEXT THREE QUESTIONS REFER TO YOUR ANSWER TO QUESTION 21 (ANTICIPATED CAREER FIELD). IF YOU CODED "99" OR "X1" AS YOUR ANSWER TO QUESTION 21, PLEASE SKIP TO QUESTION 28. OTHERWISE, ANSWER ALL THREE QUESTIONS.

30. Listed below are six groups of occupations. The occupations within each group are similar to each other in many ways.

In Column A, circle the two types you would like best.

In Column B, circle the two types you would like least.

Consider the jobs as a group, not particular ones, and rate them only in terms of whether you would like that type of work regardless of whether such jobs are realistic career possibilities. Disregard considerations of salary, social standing, future advancement, etc.

Occupations	A. Two Best Liked Groups	B. Two Least Liked Groups
Construction inspector, electrician, engineer, radio operator, tool designer, weather observer	X	X
Physicist, anthropologist, astronomer, biologist, botanist, chemist	0	0
Social worker, clinical psychologist, employment interviewer, high school teacher, physical education teacher, public relations manager	1	1
Bank teller, financial analyst, IBM equipment operator, office manager, statistician, tax expert	2	2
Business executive, buyer, hotel manager, radio program director, real estate salesman, sales engineer	3	3
Actor, commercial artist, musician, newspaper reporter, stage director, writer	4	4

(58) (59)
y y

31. Please circle all the statements which describe your feelings about these specific occupations. (Circle as many or as few as apply in each column.)

	(60) SP	(61) SP	(62) SP	(63) SP	(64) SP	(65) SP
	Research Physicist or Chemist	College Professor	High School Teacher	Physician	Engineer	Business Executive
This sort of work would be very interesting	y	y	y	y	y	y
I don't have the ability to do this kind of work	X	X	X	X	X	X
I probably couldn't make as much money at this type of work as I'd like to make	0	0	0	0	0	0
One would have to devote too much time and energy to this work. I want to be able to spend more time with my family and friends	1	1	1	1	1	1
One would have to invest more time and money in preparing for this occupation than I feel I could afford	2	2	2	2	2	2
I know as a personal friend, or family friend, one or more people in this field	3	3	3	3	3	3
My parents would disapprove of my going into this field	4	4	4	4	4	4
My personality isn't suitable for work in this field	5	5	5	5	5	5
People with my religious, racial, or family background don't have much chance of success in this field	6	6	6	6	6	6
Wouldn't be challenging enough for me	7	7	7	7	7	7
I wouldn't like the life I'd have to lead outside the job	8	8	8	8	8	8
This is my father's occupation	9	9	9	9	9	9

32. Please rate the following in terms of their effect on your career plans or decisions during college. (Circle one in each row.)

	Very Important	Fairly Important	Unimportant	Never Received Any	
a. Vocational or similar psychological tests	5	6	7	8	(66) 9
b. Discussions with my academic advisor	0	1	2	3	(67) 4
c. Discussions with faculty members other than my advisor	5	6	7	8	(68) 9
d. Advice from parents	0	1	2	3	(69) 4
e. Interviews with a professional psychological or vocational counselor	5	6	7	8	(70) 9

33. a. What is your opinion about the recently established Peace Corps? (Circle one.)

An excellent program about which I am enthusiastic	2	(71)
A good idea of which I am very much in favor	3	9
A good idea but I am not enthusiastic	4	
Probably a good idea but I am not enthusiastic	5	
Probably not a good idea but I am not sure	6	
Definitely not a good idea	7	
Don't know enough about it to have an opinion	8	

b. What are you personally likely to do about the Peace Corps? (Circle one.)

Definitely not volunteer	0	(72)
Am thinking about volunteering but have not made up my mind yet	1	y
Have thought about volunteering but probably would not	2	
Am probably going to volunteer	3	
Have already volunteered	4	
I am not sure what I will do	5	

c. Have you filled out the Peace Corps Questionnaire? (Circle one.)

Yes	6	(73)
No, but I intend to do so	7	9
Definitely No	8	

d. Here are some reasons young people have given for their personal reactions to the Peace Corps. Designate reasons both for volunteering and for not volunteering if both kinds seem pertinent to you. (Circle any which apply in your own case.)

(1) Reasons for volunteering:

To make a personal contribution to world peace	3	(74)
The attraction of working closely with others	4	9
The opportunity to learn about foreign cultures and languages	5	
It would give me a chance to decide what kind of career I really want	6	
To help the poorer nations of the world improve their economic conditions	7	
It would further my career	8	

(2) Reasons for not volunteering:

Family and personal obligations	1	(75)
Not eligible on physical grounds	2	9
Opposed to the general idea of a Peace Corps	3	
It would interrupt my career	4	
Too long a period of service	5	
Low pay, undesirable working conditions, etc.	6	
I don't have skills which would be useful to the Peace Corps	7	
My personality isn't suitable for that type of service	8	

III. College Experience

34. Did you do all of your college work at this school? (Circle one.)
- | | | | |
|---|---|---|-----|
| (38) Yes | X | | (9) |
| (39) No, transferred after freshman year | 0 | y | |
| (40) No, transferred after sophomore year | 1 | | |
| (41) No, transferred after junior year | 2 | | |
| (42) No, started here, attended a year or more elsewhere, and then returned | 3 | | |
-
35. Were you regularly employed during this academic year? (Circle any which apply.)
- | | | | |
|--|---|--|------|
| No | 4 | | (10) |
| Yes-- | | | |
| (43) Full time job which is relevant to my anticipated career field | 5 | | |
| Full time job which has nothing to do with my anticipated career field | 6 | | |
| Part time job which is relevant to my anticipated career field | 7 | | |
| Part time job which has nothing to do with my anticipated career field | 8 | | |
-
36. In which of the following have you been an active participant at this school? (Circle any which apply.)
- | | | | |
|---|---|---|------|
| Editorial staff of campus publication | 0 | | (11) |
| Musical or dramatic group | 1 | y | |
| (44) Business staff of campus publication or other campus group | 2 | | |
| Campus group concerned with national or world issues | 3 | | |
| Inter-collegiate (varsity) athletics | 4 | | |
| Fraternity, Sorority (or equivalent) | 5 | | |
| Special interest group (e.g., Psychology Club, Outing Club) | 6 | | |
| Student government | 7 | | |
| Other (Circle and specify: _____) | 8 | | |
| (45) None | 9 | | |
-
37. Please call to mind the students of your own sex who are your closest friends here. Where did you meet them? (Circle any which apply)
- | | | | |
|---|---|---|------|
| Knew them before I came here | X | | (12) |
| Dormitory or rooming house | 0 | y | |
| My Fraternity or Sorority (or equivalent) | 1 | | |
| Campus activities | 2 | | |
| (46) Classes in my major field | 3 | | |
| Classes in other fields | 4 | | |
| Other (Circle and specify: _____) | 5 | | |
| No close friends here | 6 | | |
-
38. Of your close friends here, how many are going on next year for graduate or professional studies? (Circle one.)
- | | | | |
|---------------------------------|---|---|------|
| All or almost all | X | | (13) |
| More than half | 0 | y | |
| Less than half | 1 | | |
| (47) Few or none | 2 | | |
| No close friends here | 3 | | |
-
39. Which of the following best describes where you lived this year? (Circle any which apply.)
- | | | | |
|--|---|---|------|
| Fraternity, Sorority (or equivalent) | 5 | | (14) |
| Dormitory or other campus housing | 6 | 9 | |
| Off-Campus room, apartment, house | 7 | | |
| With my parents | 8 | | |

40. Listed below are some college courses which you might have taken. Please circle the number of any statements which describe your reactions. (Circle any which apply in each row. If none apply, leave the row blank.)

	(15)	(16)	(17)	(18)	(19)
	Course or Area				
	Physics, Chemistry	Mathematics	Biology, Zoology, Botany	Social Sciences	English
I took one or more courses in this field or area during college	X	X	X	X	X
I <u>didn't</u> take any courses in this field or area during college	0	0	0	0	0
I found this course content very interesting	1	1	1	1	1
I found this course content very dull	2	2	2	2	2
I have a flair for course work in this area	3	3	3	3	3
I found this area rough going academically	4	4	4	4	4
Teachers in this area encouraged me to go on in the field	5	5	5	5	5
I admire many of the teachers in this area as persons not just as professors.	6	6	6	6	6
By and large, the teachers in this area are <u>not</u> the kind of person I'd like to be	7	7	7	7	7
One or more of my close friends is majoring in this	8	8	8	8	8

41. Listed below are some purposes or results of college. Circle the one which is most important to you personally, and also circle the one which you think is most important to the typical student here. (Circle one in each column.)

	Most Important to me Personally	Most Important to the Typical Student here	
A basic general education and appreciation of ideas	0	5	(20) (21) 4 9
Having a good time while getting a degree	1	6	
Career training	2	7	
Developing the ability to get along with different kinds of people	3	8	

42. Have you had any experience in original research (participating in collecting and analyzing raw data or conducting an experiment, not writing papers based on published sources or doing experiments from a laboratory manual) during your college studies? (Circle any which apply.)

- No, I have never participated in original research 2 (22)
9
- Yes, I have--
 - a. Participated in research as part of a course 3
 - b. Been employed by a faculty member as a research assistant 4
 - c. Had an off-campus job (summer or during school year) working in research 5
 - d. Participated in a summer research training program sponsored by the government or private foundation 6
 - e. Conducted a research project on my own (e.g. senior thesis) 7
 - f. Other (Circle and specify: _____) 8

43. What is your current academic status? (Circle one.)
- Registered Spring term and studying for a bachelor's degree to be awarded at Spring commencement (May, June, July, but before Summer session commencement) 0 (23)
- Registered Spring term and studying for a bachelor's degree to be awarded at Summer session commencement 1

Other (Circle and briefly specify your academic status: _____) . 2

44. When you graduate, how much personal indebtedness will you have for your education? (Count only money you owe for tuition or living costs during school, not payments on car, appliances, clothes, etc.) (Circle one.)
- None 5 (24)
- Some, but less than \$500 6
- \$500 - \$999 7
- \$1,000 or more 8

45. What is your overall (cumulative) grade point average for undergraduate work at your present college?
- IMPORTANT:** If your school uses letter grades (A,B,C, etc.) please circle the code number which is closest to your letter grade average.
- Warning:** The number which you circle probably does not correspond to the number equivalent at your school, e.g. at most schools "straight A" equals 4.0 here it equals "0".
- If your school does not use letter grades, there should be special instructions accompanying your questionnaire. If, through clerical error, the instructions are missing, write your average in the margin.
- (Circle one.)
- | Letter Grade | Code Number |
|--------------|-------------|
| A | 0 (25) |
| A- | 1 |
| B+ | 2 |
| B | 3 |
| B- | 4 |
| C+ | 5 |
| C | 6 |
| C- | 7 |
| D+ | 8 |
| D or lower | 9 |

Listed below are a number of awards and honors. Which of these have you received during college or which are you fairly sure you will receive by the time you graduate? (Circle any which apply.)

- | | Most Important to the Typical Student here | Most Important Personally |
|--|--|---------------------------|
| Dean's List | 2 | 0 |
| Phi Beta Kappa | | |
| Other honor society based on academic achievement | | |
| Graduation with honors (cum) (Magna) (Summa) | | |
| National Merit Scholarship holder, Finalist, or Semi-Finalist | | |
| Other scholarship awarded on basis of academic ability | | |
| Participation in "honors program" at this school | | |
| Prize or award for scholarship or research work (e.g. "Smith prize for best biology experiment") | | |
| Prize or award for literary, musical or artistic work | | |
| Took one or more graduate level courses as an undergraduate | | |
| Other award or honor | | |
| No special honors | | |
- Other (Circle and specify: _____) . 1

47. As best you know, how do you stand among the other people graduating in the same major field at your school? (Circle one.)

(27)	X	Top ten per cent	4	(27)
			9	
		Top quarter, but not top ten per cent	5	
		Second quarter	6	
		Third quarter	7	
		Lowest quarter	8	

48. What is your emotional feeling about your college or university? (Circle one.)

(28)	X	I have a very strong attachment to it	8	(28)
			9	
		I like it, but my feelings are not strong	0	
		Mixed feelings	1	
		I don't like it much, but my feelings are not strong	2	
		I thoroughly dislike it	3	

IV. Personal Characteristics

49. Your age at your last birthday? (Circle one.)

		19 or younger	0	(29)
			1	9
		21	2	
		22	3	
		23-24	4	
		25-29	5	
		30 or older	6	

50. Sex. (Circle one.)

(30)	X	Male	7	(30)
			9	
		Female	8	

51. Marital Status. (Circle one.)

(31)	X	Single, don't expect to be married before Fall, 1961	4	(31)
			9	
		*Single, expect to be married before Fall, 1961	5	
		*Married, one or more children or expecting a child	6	
		*Married, no children	7	
		Widowed, Divorced, Separated	8	

*IF "MARRIED" OR "EXPECTING TO BE MARRIED BEFORE FALL, 1961": What will your spouse or future spouse most likely be doing next year? (Circle any which apply.)

(32)	X	Working full time	3	(32)
			9	
		Working part time	4	
		Housewife, Mother	5	
		Going to School	6	
		Military Service	7	
			8	

57. a. Which of the following categories best describes the usual occupation of the head of the household in your parental family? (Circle one.)

- Professional 1 (41)
- Proprietor or Manager 2 y
- Sales (Other than Sales Manager or Administrator) 3
- Clerical 4
- Skilled worker 5
- Semi-Skilled worker 6
- Service worker 7
- Unskilled worker 8
- Farmer or farm worker 9

b. If the head of the household is a woman, also circle here 0

c. If the head of the household is retired, also circle here X

Please circle the one which best describes you. Consider only those which are most appropriate to you as a person. (Most people choose five or six, but you may choose

58. Which of the following is the appropriate income category for your parental family? Consider annual income from all sources before taxes. (Circle one.)

- Less than \$5,000 per year 2 (42)
- \$5,000 - \$7,499 3 9
- \$7,500 - \$9,999 4
- \$10,000 - \$14,999 5
- \$15,000 - \$19,999 6
- \$20,000 and over 7
- I have no idea 8

59. Which of the following best describes the community which you think of as your home town during high school days? (Circle one.)

- Farm or open country X (43)
- Suburb in a metropolitan area of--
 - more than 2 million population 0
 - 500,000 to 2 million 1
 - 100,000 to 499,999 2
 - less than 100,000 3
- Central city in a metropolitan area or city of--
 - more than 2 million population 4
 - 500,000 to 2 million 5
 - 100,000 to 499,999 6
 - 50,000 to 99,999 7
 - 10,000 to 49,999 8
 - less than 10,000 9

60. Which of the following best describes the distance between your home town (when you were in high school) and your current college? (Circle one.)

- In the same city or within commuting distance X (44)
- Within four hours automobile drive or less 0 y
- More than four hours drive, but in the same state 1
- More than four hours drive, but in a different state 2

61. Please rate yourself on the following dimensions as you really think you are: (Circle one in each row.)

	Very	Fairly	Neither	Fairly	Very	
a. Unfavorable toward modern art	y	X	0	1	2	Favorable toward modern art (45) 3
b. Politically liberal	4	5	6	7	8	Politically conservative (46) 9
c. Conventional in opinions and values	y	X	0	1	2	Unconventional in opinions and values (47) 3
d. Religious	4	5	6	7	8	Non-religious (48) 9

62. Listed below are some adjectives, some of which are "favorable," some of which are "unfavorable," some of which are neither.

Please circle the ones which best describe you. Consider only those which are most characteristic of you as a person. (Most people choose five or six, but you may choose more or fewer if you want to.)

	(49) SP	(50) SP	(51) SP
Ambitious	X		
Athletic	0		
Calm	1		
Cautious	2		
Cooperative	3		
Cultured	4		
Dominant	5		
Easy Going	6		
Energetic	7		
Forceful	8		
Fun Loving	9		
Good Looking		X	
Happy		0	
Hard Driving		1	
High Strung		2	
Idealistic		3	
Impetuous		4	
Intellectual		5	
Lazy		6	
Low Brow		7	
Methodical		8	
Middle Brow		9	
Moody			X
Obliging			0
Outgoing			1
Poised			2
Quiet			3
Rebellious			4
Reserved			5
Shy			6
Sophisticated			7
Talkative			8
Witty			9

0 more than 2 million population
 1 500,000 to 2 million
 2 100,000 to 499,999
 3 less than 100,000
 4 more than 2 million population
 5 500,000 to 2 million
 6 100,000 to 499,999
 7 50,000 to 99,999
 8 10,000 to 49,999
 9 less than 10,000

63. Which of the following best describes the distance between your home town (when you were in high school) and your current college? (Circle one.)
 0 In the same city or within commuting distance
 1 Within four hours automobile drive or less
 2 More than four hours drive, but in the same state
 3 More than four hours drive, but in a different state

63. Your replies to this questionnaire are completely confidential, and absolutely no information of any kind about specific persons will be released to your school or anyone else. Your sealed questionnaire will be read only by the research staff in Chicago. However, in order to assess the statistical representativeness of the students in the sample, and because we hope to follow up some of the students in the sample next year to determine the outcome of their plans, we must ask you the following:

PLEASE PRINT

A. Your Name

Last Name	First Name	Middle Name
-----------	------------	-------------

B. Your most likely address one year from now

Name of residence hall, department, company, etc., if any		
Street Address		
City or Town	Zone	State or Country

C. Name and address of someone who will know where you are or could forward a letter to you if you were not at the address you listed above

Last Name	First Name	Middle Name
Street Address		
City or Town	Zone	State or Country

D. Name and address of the high school or preparatory school from which you entered college

Name of high school or preparatory school		
City or Town	Zone	State or Country

IMPORTANT

You have now completed the questionnaire. Please seal it (to maintain confidentiality) and return it to the field representative at your school, according to the instructions he has provided.

WARNING: After you have sealed your questionnaire, your name will be inside. Make sure that you write your name and your return address on the outside back page, so that the field representative will know that you have returned your questionnaire.

TO SEAL: There is a gummed flap at the top of this page. Fold the questionnaire in half, and seal the folded questionnaire.

Thank you very much.

03. Your replies to this questionnaire are completely confidential, and absolutely no information of any kind about specific persons will be released to your school or anyone else. Your sealed questionnaire will be read only by the research staff in Chicago. However, in order to assess the statistical representativeness of the students in the sample, and because we hope to follow up some of the students in the sample next year to determine the accuracy of their plans, we must ask you the following:

PLEASE PRINT

A. Your Name

First Name	Middle Name	Last Name
------------	-------------	-----------

Your home phone number and year from now

Name of residence (apt., apartment, company, etc., if any)		
Street Address		
City or Town	State	Zip Code
State or Country		

If you were not at the address you listed above, please send address of someone who will know where you are or could forward a letter to you

First Name	Middle Name	Last Name
------------	-------------	-----------

FOLD ALONG THIS LINE

FROM

Street Address		
City or Town	State	Zip Code
State or Country		

If you are not at the address of the high school or preparatory school from which you entered college

Name of high school or preparatory school		
City or Town	State	Zip Code
State or Country		

TO

<p>IMPORTANT</p> <p>You have now completed the questionnaire. Please seal it to maintain confidentiality and return it to the field representative at your school, according to the instructions he has provided.</p> <p>WARNING: After you have sealed your questionnaire, your name will be inside. Make sure that you write your name and your return address on the outside back page so that the field representative will know that you have returned your questionnaire.</p> <p>TO SEAL: There is a gummed flap at the top of this page. Fold it over, tuck it in, and seal the folded questionnaire.</p> <p>Thank you very much!</p>

FIRST CLASS MAIL

PASTE GUMMED FLAP HERE