AN EVALUATION OF THE SELECTION PROCESS
AND THE RESULTS OF THE SUMMERFIELD SCHOLARSHIP
PROGRAM AT THE UNIVERSITY OF KANSAS

By

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Advisory Committee:

[Redacted Signatures]
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CHAPTER I

INTRODUCTION

The Problem

The purpose of this study was to ascertain, where possible, how effectively the University of Kansas was carrying out its responsibility of administering the Summerfield scholarship program. The University has expended approximately four hundred thousand dollars of the Summerfield scholarship fund and countless hundreds of hours of faculty members' time, in an attempt to carry out the wishes expressed by the grantor of the fund.

This expenditure of both time and money in administering a scholarship program has become an increasingly important function, not only at Kansas University, but at all institutions of higher learning. The problem here, as elsewhere, is that of selecting candidates who can profit most from a scholarship and in the manner desired by the grantor. This is often a pressing problem, as there are usually many excellent candidates of whom only a few can be chosen. In addition a university has the obligation of doing everything within its power to carry out the most explicit desire of the individual who has given generously to make the scholarship possible.

The primary purpose of this study of the Summerfield scholarship program was to evaluate the effectiveness of the
selection processes in terms of selected criteria, and to appraise the administration of the program on the basis of the expressed opinions of the scholars.

The Need for Research

A general review of the literature regarding scholarships led to the development of these concepts regarding evaluation of scholarship programs:

1. The degree of success with which the scholars achieve the objective for which the awards are given should be ascertained.

2. Constant critical evaluation of a scholarship program, including its method of selection of scholars, is necessary if worthwhile results are to be obtained.

3. In a scholarship program in which only a limited number of the applicants can be chosen, and the rest must be eliminated, the processes used in such an elimination must be validated by examining the subsequent success of all the contestants - those selected and those not selected.

That research was needed on the Summerfield scholarship program was indicated by the fact that no objective appraisal or evaluation of the program had been made since its inception over twenty years ago. A desire for such research was expressed by certain members of the administration and faculty of the University who were most directly concerned with proper and efficient functioning of the program.
The Summerfield Scholarships

Their establishment

Solon Erb Summerfield was born and educated in Lawrence, Kansas. He received the degree of Bachelor of Arts from the College of Liberal Arts and Sciences in the University of Kansas in 1899. In 1901 he received the degree of Bachelor of Laws from the School of Law in the University of Kansas.

He practiced law for a brief period prior to his entry into the business of manufacturing silk hosiery. He ultimately became Chairman of the Board of the Gotham Silk Hosiery Company.

Mr. Summerfield was a member of the Board of Trustees of the Kansas University Endowment Association. While in this position, he became aware that many outstanding Kansas high-school boys had need of financial assistance for continuance of their education. He concluded that aiding such outstanding boys was an important investment in the future of society.

After careful investigation and consideration, he decided that the best method of providing aid for such boys was the perpetual support of a series of scholarships at the University of Kansas.

Such a series of scholarships, as provided by Mr. Summerfield, was authorized by the Board of Regents of the University in 1929. Appropriately the Board of Regents ordered that these scholarships should bear the title: "The Summerfield Scholarships."

Mr. Summerfield lived to see his ideas implemented. He died in the fall of 1947, but the scholarship series that
he established will continue in perpetuity. This continuance was provided for by the establishment of the Summerfield Foundation, which administers his estate.

Copies of the official documents and resolutions used to establish the Summerfield scholarships are shown in Appendix A.

Their purposes

It was the intent of the grantor that the scholarships would assist some of the most promising of the young men of Kansas to obtain a college education at the University of Kansas—primarily those who might not otherwise be able to attend college. He further envisioned that possession of the scholarship would be presumptive evidence of the possession of qualities of superior ability, high ideals, excellent character, unquestionable fidelity, and promise of future usefulness.*

Their extent

The scholarships are limited to male graduates of Kansas high schools.

A scholarship is held throughout the four years of college undergraduate work unless the scholar fails to maintain the standards for which it was granted.

Financial need is not a prerequisite for obtaining a scholarship, but it is a factor in determining the amount of

*Complete details concerning the grantor's purposes and motives are given in the "Letter of Dedication," Appendix A-1.
financial aid granted to each scholar.

The fund as set up by the grantor provides an income of at least twenty thousand dollars annually. Ten or more new scholars are chosen each year, depending on the individual needs of the scholars. Thus forty to fifty Summerfield scholars are in attendance at the University at any given time.

Specific Statement of the Problem

In general the purpose of this research was to evaluate how well the University of Kansas had been able to meet the grantor's wishes in implementing his letter of dedication.

More specifically, the objective of this research was stated as a series of questions—questions suggested by Mr. Summerfield's specific wishes, hopes, and requirements. The answers to these questions should give a measure of how effectively the University has met its obligation.

I. Concerning the selection processes:

1. What specific procedures, techniques, and instruments have been used in the selection of scholars?

2. Did the selection processes choose a superior group of college students?
   a. Are they superior in terms of academic records?
   b. Are they superior in terms of student leadership?
3. Were those graduated as scholars more successful than other graduates in later life, in terms of:
   a. further study,
   b. occupational status,
   c. job income,
   d. job satisfaction,
   e. marital and parental responsibilities,
   and
   f. civic and community participation?

II. Concerning the scholars' reactions to the administration of the program and to their educational experiences while under the program:
   1. Was possession of the scholarship a help or a restraint:
      a. financially,
      b. academically, and
      c. socially?
   2. How satisfactory were the educational experiences at Kansas University?

Presentation of Findings

A summary of significant previous studies concerning the evaluation of scholarship programs, the procedures and methods used in this study, the results obtained in this study, and recommendations resulting therefrom are presented in succeeding chapters as follows:
Chapter II A survey of Related Information  

III Sources of Data and Method  

IV The Selection Process and Administration of the Program  

V The Scholars as Students  

VI The Scholars as Graduates  

VII The Scholars' Reactions to the Program and to the University  

VIII Summary, Conclusions, and Recommendations for Further Study  

**Summary**  

This chapter has presented a statement of the problem that was to be studied, reasons for making the study, and some of the historical background concerning the establishment of the Summerfield scholarship program.
CHAPTER II

A SURVEY OF RELATED INFORMATION

Many articles have been written concerning student aid, especially those about scholarships and fellowships. Comparatively few of these have been based on research, and fewer still are concerned with the evaluation of a specific scholarship program.

Purpose of the Survey

Good, Barr, and Scates (1930a) suggest that the survey of related information may accomplish several purposes for the researcher. This survey has been limited to those articles that have been used by this researcher to accomplish these purposes.

For this presentation the literature to be reviewed has been classified as general writings, and reports of research.

The general writings are those that have contributed to the researcher's general understanding of the problems involved in establishing, maintaining, and administering scholarship programs.

*The sources of information are indicated by the number in parentheses, which designates the book or article in the Bibliography to which reference is made. This number may be followed by a colon and a figure which gives the specific page reference.
The reports of research will include only those parts of all published information on research studies in the area, known to the researcher, whose contribution to the present research was to:

Provide ideas, theories, explanations, or hypotheses valuable in formulating the problem; suggest methods of research appropriate to the solution of the problem; and to locate comparative data useful in the interpretation of the results. (19:105)

**General Writings**

The most common type of literature concerning scholarships is that devoted to an enumeration and description of the scholarships available. This is generally in the form of a handbook or guide for use in counseling students who are searching for scholarship aid.

Only two examples representative of this literature will be reviewed. One, the best and most representative of this type of literature, is a bulletin of the United States Office of Education entitled *Scholarships and Fellowships Available at Institutions of Higher Learning* (45). This particular bulletin has what appears to be a most complete resume of scholarships and fellowships available at the various colleges and universities in the United States. It presents an excellent statistical summation in terms of the number of scholarships available and the amount of their funds, but tells little about the individual scholarship. The other example of this type, Feingold's *Scholarships, Fellowships, and Loans* (15), presents information on nearly three hundred agencies which administer
scholarship funds. The information is specific as to requirements, funds available, and directions for making application for the several thousand scholarships administered by the agencies. This type of presentation is most helpful to the individual in need of scholarship aid.

The philosophies which influence the granting of student aid, including scholarships, have been the subject of many articles. Although such material is only very generally pertinent to the purpose of this study, brief mention of two reviews of typical articles in this area are included.

Steckel's (31) review, published in 1938, is concerned primarily with the philosophies behind student aid programs. Smith (30) reviewed the literature on student aid, focusing her attention not only upon philosophies, but also upon the purposes of grants, bases for and procedures of selections, and criteria used to evaluate the selections made. These articles by Steckel and Smith, and many similar ones, provide excellent background information for institutions or individuals contemplating the establishment, expansion, or evaluation of student aid programs.

One of the functions in the selection of scholarship recipients is that of predicting their success as students. This matter of predicting success has been the subject of many research projects. The literature in this area was previously reviewed by the current researcher in connection with another study (9:23-43). Readers interested in further exploration in this area are referred to Garrett's (17)(18).
recent comprehensive compilation and review of these research studies, and to Cain and Michaelis' (7:892) selected bibliography of these writings.

Reports of Research

One of the first published reports of research on scholarship programs was that of Crawford (10)(11) in 1926. The scholarship was "tuition award" for self-supporting students at Yale University. After the first semester, the amount of the award was based on the previous semester's grades. He equated two groups, scholars and non-scholars, on the basis of intelligence test scores and then compared their scholastic records. He found that 75 per cent of the scholarship group exceeded the median mark of the non-scholarship group (10). Considering that the two groups were equated as to intelligence, he concluded that the difference in marks was due to the motivation provided by the scholarship (10).

Moon (27) reported in 1930 on a study made of scholarship holders at the University of Chicago. In this research he studied the holders of two different types of Chicago scholarships for the years 1919 to 1925. Group A consisted of 298 "Honor-Entrance" scholars, whose scholarships were based only on their high school record; group B consisted of seventy "Competitive-Examination" scholars whose scholarships were based on the high-school principals' recommendations and competitive subject matter examination.

The academic records of the groups were evaluated on the
basis of a grade point index (A=6, B=4, C=2, D=0, F=2).
He found that the mean grade point index at the end of the
freshman year of those entering in group A was 3.83, group
B was 4.63, and of all freshmen was 2.64. Five per cent of
group A and 1.4 per cent of group B failed to maintain the
2.0 grade point index which was required to remain in school;
20 per cent of group A and 6 per cent of group B failed to
maintain the 3.0 index required for continuation of the
scholarship. Fifty-nine per cent of group A and 73 per cent
of group B received degrees at Chicago University. Moon did
not report on the statistical significance of these findings,
but from his reported data it was possible to determine
that these differences in percentages were significant at the
five per cent level.

Leadership, judged on appointment as honorary "Marshalls"
at graduation, showed superiority of group B over group A
and both groups over the general student body.

In every instance of comparison, group B (selected by
examination) excelled group A (selected on the basis of high
school record), and both excelled the general student body.

In 1932 Krugman (23) reported on a study made of students
in Washington Square College of New York University. This
was a comparative study of the grade distribution of all
students and of scholarship students from September, 1928,
to June, 1930. The scholarship group consisted of 101 indi-
viduals appointed on the basis of high school grades, college
grades, character, and need. His findings were reported in terms of marks earned over a two to four semester period. He determined the total number of A, B, C, D, and F marks earned by all members of each of the groups and converted these totals to percentages for purpose of comparison.

His findings are shown in the following tabulation:

<table>
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<tr>
<th>Marks</th>
<th>All Students</th>
<th>Scholarship Students</th>
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<tbody>
<tr>
<td>A</td>
<td>10.50%</td>
<td>54.90%</td>
</tr>
<tr>
<td>B</td>
<td>28.25</td>
<td>39.95</td>
</tr>
<tr>
<td>C</td>
<td>39.50</td>
<td>10.02</td>
</tr>
<tr>
<td>D</td>
<td>15.50</td>
<td>0.86</td>
</tr>
<tr>
<td>F</td>
<td>6.25</td>
<td>0.27</td>
</tr>
</tbody>
</table>

He did not report on the statistical significance of these figures. On the basis of these findings he concluded that, "Scholarship students were overwhelmingly superior to the entire student body. The college was warranted in making the awards to these students." (23:42)

Adèle Bilderssee (5) reported in 1932 on a study made in 1930 of the New York State Scholarship students at Hunter College of the City of New York. Her stated purpose was to consider the aims of the New York State Scholarships and to determine if these aims were being met at Hunter College.

She selected three groups of students for the study. A "Student Series," consisting of 507 individuals currently holding a scholarship; a "Graduate Series," comprised of 107 individuals who had entered the college at least four years
before the time of the study; and equal numbers of non-scholarship students entering Hunter College in the same years as the other two series.

She not only investigated the scholarship (academic marks) and citizenship of the scholars; she also analyzed the relationship of the amount of the scholarship to the financial needs of the students, and their reaction to the scholarship.

Since her population was entirely female, there is no way of knowing the significance of her findings to the present study in which the population was entirely male. However, her findings regarding scholastic attainment of the scholarship holders do warrant inclusion and may be summarized as follows:

1. Concerning persistence in college, she found that:
   - 9% of the "Student Series" scholars,
   - 13% of the "Graduate Series" scholars,
   - 33% of the "Student Series" non-scholars, and
   - 58% of the "Graduate Series" non-scholars failed to continue in college.

2. The mean grade point index (based on A=4, B=3, C=2, D=1, and F=0) for the "Student Series" was:
   - 2.85 for the scholarship group, and
   - 2.16 for the non-scholarship group.

   the difference was statistically significant.

Scholarship holders in the colleges of Pennsylvania in 1928 to 1932 were the subject of some research done by Miller (25) and reported in 1935. She used as subjects 460 students
holding either "Athletic," "Miscellaneous," "Senatorial," "Competitive," or "High School Standing" scholarships. In comparing the success of the holders of the various types of scholarships, achievement in college was measured by means of achievement and intelligence tests. No attempt was made to use academic marks as a criterion. Using these limited criteria, she ranked the various types of scholarships as follows:

- Competitive
- High School Standing
- Miscellaneous
- Senatorial
- Athletic

She also concluded that size of scholarship, extracurricular activities, and outside work had no effect on the achievement of scholarship holders.

New York State Scholarship holders at Cornell University from 1913 to 1923 were the subjects of research by Archer (1)(2)(3). He compared the New York Regents' averages of scholars and non-scholars and found that: "These scholars make up a select group." (1:75) In comparing intelligence test-score medians of scholars and non-scholars, he found higher medians for scholars. The college average of the scholarship group (D=65, C=75, B=85, and A=95) was found to be 80.62. He interpreted this finding by stating: "No data were available to use as a basis of comparison for the college averages at Cornell, but it can safely be said that a college average for the scholars of 80.62 would be superior
to a college average for all graduates of Cornell." (l:101)

Of his total group of scholars, 83.30 per cent received degrees. He evaluated this percentage by this statement: "Comparable studies of persistence had disclosed percentages of 42.4 per cent to 68.6 per cent for average college students." (3) The source of these findings was not given, thus the value of the statement is questionable. A total of 40 per cent of the scholars investigated had received advanced degrees.

The largest number of graduated scholars had chosen teaching as a career, followed by engineers, business executives, lawyers, doctors, and scientists, in that order. Only 28 per cent of the scholars had migrated from the state of New York. These findings of Archer's are of limited value as no tests of statistical significance were reported, nor were suitable comparisons made with other groups.

Smith (29) reported in 1937 on a study of student aid in the graduate school of education of Columbia University. Although the population was entirely graduate students, her study is significant in the current research, as it is the only reported study in which consideration is given to the unselected candidates, who applied for assistance but were not selected. The population of her study consisted of three groups:

1. Award: those students receiving awards;

2. Rejected: those students applying for but not receiving awards;
3. Control: those students, eligible for aid, who had neither applied for nor received aid.

Her study sought answers to these questions:

1. What are the characteristics of these groups and what basis of selection operated?
2. Were the selections well-made, as judged by subsequent careers and other criteria?
3. Were those who were rejected and who did not apply as worthy as those who received grants?

A summary of her findings shows that the selections for awards were fairly well made as judged by scholastic attainment in the institution, but in subsequent careers the selection did not indicate the superiority of the Award Group to the degree hoped for or expected; the Rejected Group in these years was, in general, almost equally as worthy as the Award Group when evaluated by their records in the institution (academic marks and "honors") and by their subsequent careers (employment as teachers); and the Control Group was significantly inferior to the Award Group in scholarship and proved to be less outstanding and not as worthy as the Award Group.

Honor-Entrance scholarship holders at the University of Chicago were the subject of research done by Hilts (21) and reported in 1945. Like Moon (27), she compared holders of different types of scholarships. Holders of three types of scholarships were considered:

1. Competitive Examination—entrance based on examination only;
2. One-Year Honor-Entrance—entrance based on high-school academic record, and
3. Two-Year Honor-Entrance—entrance based on high-school leadership record.

The basis used to compare the groups was the grade point index (based on A=3, B=2, and C=0). The Competitive Examination and the One-Year Honor-Entrance scholarships required a grade point index of 1.5 for renewal of the scholarship, while the Two-Year Honor-Entrance scholarship required only 0.0 for renewal. Renewal of the scholarships for the three groups was:

53% for Competitive Examination scholars,
42% for One-Year Honor-Entrance scholars, and
55% for Two-Year Honor-Entrance scholars.

If the latter group of scholars had been required to maintain the same grade point index as the other two groups, only 45 per cent would have had their scholarships renewed. The mean grade point index of the groups was reported as:

1.44 for Competitive Examination scholars,
0.92 for the One-Year Honor-Entrance scholars, and
1.00 for the Two-Year Honor-Entrance scholars.

She stated that these figures showed that the use of competitive examinations in selection of scholars excels the other two methods, and that high school leadership was a better predictor of scholarship than high school academic record alone. Had she applied tests of statistical significance, her conclusions might have been different.

One of the conclusions made by Hilts was: "All scholarships should be made on the basis of competitive examinations,
if this is compatible with the purpose and aim of the scholarship." (21:318)

The Rhodes Scholars were the subject of a survey reported in *The Round Table* in 1944 (41). In keeping with that journal's policy, neither the researcher nor the author was identified. The survey was intended to show the occupational choices of approximately 2200 Rhodes Scholars graduated during the forty years of the scholarship program.

It was reported that the largest single group (about 25 per cent) was in education, "either in universities or in schools." The next largest group was in law (between 400 and 450). "Well over 150" were found to be practicing medicine. Business and banking claimed a "fairly large group" of the scholars.

Four additional studies, although not concerned with scholarship programs, are sufficiently allied to the problems of the current research to warrant inclusion in this survey.

In 1927 Ziegel (38) reported a study of high school honor graduates made at the University of Missouri. For this study he selected two hundred high school honor graduates who matriculated in Missouri University during the years 1900 to 1922, and two hundred non-honor high school graduates, selected at random, matriculating at the same time.

He compared the high school honor graduates with the non-honor graduates in scholastic attainment, mental ability, extra-curricular activities, time in school, number graduating,
major subjects, occupations, and marriage. The grade point index (based on A=4, B=3, C=2, D=1, and F=0) of the honor graduates was 2.679, and for the non-honor graduates it was 2.265.

Graduation from college of the two groups was compared and he found that:

90% of the honor students graduated, while only 75% of the non-honor students persisted until graduation.

In participation in extra-curricular activities the honor graduates excelled the others in all areas except athletics. More of the non-honor graduates than the honor graduates were married at the time of the study. There were no significant differences between the groups in the selection of college majors or in choice of occupations. For both groups the most popular occupational choice was teaching, with engineering second.

A similar study was made by Charles (8) at the University of Nebraska of the entering classes of 1941 to 1943. He studied three hundred university students who had graduated in the top fourth of their high school class.

In terms of entrance test scores, his subjects' mean score was one scale point, on a ten point scale, higher than the average entering freshman. His subjects' grades averaged "in the lower 80's, about three points higher than the university average." Only 33 per cent of his subjects had withdrawn prior to completing college. He stated that the
persistency of his subjects "approach\[es\] twice that of the regular student body."

Concerning university "Honors" he states that his subjects "won honors in much greater proportion than their numerical percentage on entrance."

His figures are probably more significant than they appear in that his top-quarter group was competing against itself in all comparisons. This was due to the fact that his subject group made up about 50 per cent of the total college group—that is, his two groups were not mutually exclusive.

In the spring of 1947 the Guidance Bureau of the University of Kansas conducted a study of the alumni of the University (40). This study provided some comparative data valuable for interpretation of the results of the current study. The applicable parts of the study and a discussion of the findings are reviewed in Chapter III under the heading "Other Questionnaire Data" and will not be included here.

A very comprehensive survey of the United States college graduate was recently made by Time magazine and analyzed by the Columbia University Bureau of Applied Research. The findings of this survey were carefully described by West (35) in a doctoral dissertation, and by Havemann and West (20) in They Went to College. The survey was based on the questionnaire replies of 9,064 graduates of 1,037 colleges, universities, and technical schools.

Although this survey is of all college graduates—not just scholarship holders, it did give some suggestions for
methods of research appropriate to the present study. It provided a wealth of comparative data for use in evaluating the findings of this study. The findings of the Time survey will not be presented in this chapter. Since so many of them were useful in evaluating the results of the current study, they have been presented, for the readers' convenience, in later chapters where such comparisons were appropriate.

Summary

A brief review of several studies and articles concerning scholars and scholarship programs has been made. The nature of the studies, as well as their populations, has been quite varied. In spite of this variance, there are, in general, certain consistencies shown in the findings and conclusions.

With the exception of the Rhodes Scholarships, none of the scholarships offered as large a financial aid as that available to the Summerfield scholars.

None of the selection programs reported in these studies used a selection process as comprehensive as that used in selecting Summerfield scholars.

In those studies in which methods of selecting candidates were compared, the researchers were unanimous in recommending that selection by competitive examination was the best single procedure to use.

Nearly all of the researchers were agreed that scholarship holders were superior, academically, to non-scholarship students.
In all reviewed studies where later occupational data were obtained, more graduated scholars entered teaching than any other profession.

In comparison with the other studies reported, this is the only study of an undergraduate scholarship program to include so many individuals, to cover as extensive a period of time, to study as complex a selection process, and to study those candidates not selected as well as those selected.
CHAPTER III

SOURCES OF DATA AND METHODS

The selection of the population samples to be studied, the sources of data, and the methods used in treatment of the data are described in this chapter.

Selection of the Samples Studied

With minor exceptions the entire sample was selected from the individuals who had been candidates for the scholarship during the years 1929 to 1951. This period of time represents the life of the scholarship from its inception to the date of the study. The sample to be considered in this study was divided into three different groups.

The first group consisted of individuals selected and inducted as scholars by the regular selection process as described in Chapter IV. It was decided that partial sampling of the group would reduce the labor involved without noticeably affecting the accuracy of the study. Consequently, one subgroup of this first group consisted of those who were selected in the odd-numbered years (odd—determined by a toss of a coin) from 1929 to 1947, inclusive; another subgroup consisted of all those selected in 1948 to 1951, inclusive. Total sampling of this latter group of thirty-five current scholars was necessary to provide a subgroup of significant size for subsequent comparisons.
The first group, referred to hereafter as the selected scholars group, was used as a representative sample of all scholars selected by the standard selection process; these were later compared to the second group, which was a representative sample of the unselected candidates. Comparison of the relative successes of these two groups provided a partial measure of the effectiveness of the selection process.

The second group consisted of rejected candidates; that is, those who were candidates for the scholarship but were not selected by the regular selection process. In order to make suitable comparisons with the first group, again only those who were candidates in the odd-numbered years, 1929 to 1947, and all of those who were candidates in the years 1948 to 1951 were included. This group was further limited to those rejected candidates who at some later date attended the University of Kansas as undergraduate students. Thus actually the second group consisted of the rejected candidates from the years being studied who later attended Kansas University. This represents approximately 30 per cent of the total number of rejected candidates for these years. Ideally the study should have included all of the rejected candidates for these years, but no way of locating the other rejected candidates was feasible. Even had they been located, no method of comparing their academic success, wherever they had gone, to that of the scholars at Kansas University was feasible. Therefore, the question of how representative this
group is of the total number of rejected candidates is a limitation of this research that had to be considered in making any conclusions based on the findings from this group (hereafter referred to as the rejected candidates group).

The total composition, as well as composition by year of candidacy, of both groups is shown in Table I.

The third group consisted of all individuals who had graduated as Summerfield scholars from the inception of the program to the date of the study (February, 1952). It was composed of two subgroups: those individuals who were selected by the regular selection program, and who continued as scholars until graduation; and individuals appointed as scholars from the student body of the University to fill vacancies (created by resignations and withdrawals of scholars), who retained their scholarship until graduation. This group is hereafter referred to as the graduated scholars group. Its total composition and composition by years of graduation are given in Table II. This group was used to furnish the data concerning post-college achievements of the scholars and the reactions of scholars to the program and the University.

Sources of Data

The data used in this study were classified as historical, scholastic, and questionnaire.

Historical Data

The historical data concerning the Summerfield scholarship
<table>
<thead>
<tr>
<th>Year of Candidacy</th>
<th>Total Number of Candidates</th>
<th>Selected Scholars Inducted</th>
<th>Rejected Candidates Number at Kansas U.</th>
<th>Percentage at K. U.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>174</td>
<td>10</td>
<td>46</td>
<td>28</td>
</tr>
<tr>
<td>1931</td>
<td>172</td>
<td>11</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>1933</td>
<td>211</td>
<td>10</td>
<td>44</td>
<td>22</td>
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<td>1935</td>
<td>304</td>
<td>14</td>
<td>89</td>
<td>31</td>
</tr>
<tr>
<td>1937</td>
<td>250</td>
<td>12</td>
<td>62</td>
<td>27</td>
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<tr>
<td>1939</td>
<td>265</td>
<td>13</td>
<td>62</td>
<td>25</td>
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<tr>
<td>1941</td>
<td>304</td>
<td>13</td>
<td>90</td>
<td>31</td>
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<tr>
<td>1943</td>
<td>176</td>
<td>16</td>
<td>57</td>
<td>36</td>
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<tr>
<td>1945</td>
<td>149</td>
<td>20</td>
<td>44</td>
<td>34</td>
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<tr>
<td>1947</td>
<td>229</td>
<td>20</td>
<td>79</td>
<td>38</td>
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<tr>
<td>1948</td>
<td>255</td>
<td>9</td>
<td>88</td>
<td>36</td>
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<td>1949</td>
<td>253</td>
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<td>87</td>
<td>36</td>
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<td>34</td>
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<td>1951</td>
<td>245</td>
<td>10</td>
<td>94</td>
<td>40</td>
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<tr>
<td>1929-1951</td>
<td>3232</td>
<td>176</td>
<td>958</td>
<td>32</td>
</tr>
<tr>
<td>Year of Graduation</td>
<td>Number of Scholars Graduated</td>
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<td>1932</td>
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<td>1933</td>
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<td>1951</td>
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<tr>
<td>1932-1951</td>
<td>229</td>
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</tbody>
</table>
program were in the custody of the secretary of the Summerfield Scholarship Committee. They consisted of documents concerning the establishment of the program; names of all candidates, listed by year of candidacy; names of all regularly selected scholars, listed by year of selection; additions to and deletions from the scholarship lists, and reasons therefore; current address (where known) of all graduated and current scholars; and listings and descriptions of selection procedures and instruments used.

Scholastic Data

The scholastic data consisted of information concerning the individuals while they were enrolled in the University. The types of scholastic data obtained were academic records and student leadership records.

The academic data were all obtained from records of the registrar's office; these included the grade (mark) record, graduation record, and date of birth for all individuals in the selected scholars group and the rejected candidates group. The records of the registrar's office also provided the information needed for identification of those unselected candidates who later attended the University.

The selection of a measure of student leadership was complicated by the fact that the individuals being studied were enrolled in many different curricula; therefore, a university-wide criterion was needed. Only three university-wide organizations were available for consideration: The All-Student Council, The K Club, and Sachem, the local chapter of Omicron Delta Kappa, national honor society for senior men.
The All-Student Council was considered, but not used. Although it has a relatively large membership, most of its members are elected as representatives of some organization or group and not by university-wide vote. Election to the All-Student Council appeared to depend more upon campus political affiliation than upon demonstrated student leadership.

The K Club, composed of those who have won athletic letters, was not a suitable measure for this research as recognizing student leadership was not one of its functions.

Membership in Sachem was selected as the criterion for measuring student leadership. Its stated purpose was consistent with the type of criterion desired. Its purpose as explained in the University Catalogue was to choose "...men of high character who have been leaders in student affairs. [Underlining not in the original]" (§1:43) Furthermore it was university-wide in scope. The methods used to elect members were investigated and were found to be such that domination of the organization or of its elections by any one group, such as Summerfield scholars, was practically impossible, as approximately 90 per cent of the membership must approve the election of a new member.

Individuals in this study who were members of Sachem were identified from the organization's records, which were filed in the office of the Dean of Men.

Questionnaire Data

Additional data were collected by means of a three-page (forty-seven item) questionnaire. This questionnaire was sent
to all members of the graduated scholars group, and parts
of it were presented to the current scholars in a personal,
informal interview.

The primary purpose of the questionnaire was to obtain
three types of information: the scholars' reactions to the
scholarship program, their reaction to certain of their edu-
cational experiences in the University, and data concerning
their post-graduate life. The questionnaire was organized into
three sections, each corresponding to the type of information
desired.

The questionnaire was developed to furnish information
which was believed to be necessary to the study, and which
could not be obtained from any other source.

The questionnaire was constructed after careful analysis
of the information needed and was then submitted for criticism
to the faculty and graduate students in a seminar in educa-
tional psychology and guidance at the University of Kansas.
It was then examined by seven graduated scholars who were
members of the University faculty. They offered suggestions
and helpful criticisms based on their reactions as Summerfield
scholars and as teachers of other Summerfield scholars.

In light of these criticisms the questionnaire was re-
vised, and a final version was adopted. A copy of the final
version is shown as Appendix B-1.

Copies of the questionnaire were sent to the graduated
scholars. One postal card follow-up was used. The following
tabulation shows the number of questionnaires sent, the number returned, and the percentage of returns:

- **Number of graduated scholars**: 229
- **Number deceased**: 5
- **Number for whom no address was available**: 8
- **Total number of questionnaires sent**: 216
- **Number of questionnaires returned because of incorrect address**: 4
- **Number of questionnaires presumably received by the addressee**: 212
- **Number of completed questionnaires returned and included in the statistical analysis**: 194
- **Per cent return used in analysis**: 91.5%

The percentage of return was computed on the basis of the total number of questionnaires presumably received by the persons to whom they were sent.

The first two sections of the questionnaire were presented to the currently enrolled scholars during individual interviews. Thirty-one of the thirty-five scholars (89 per cent) completed these sections of the questionnaire. The remaining four current scholars (one from each class) did not respond to the invitations to assist in the research.

**Additional Questionnaire Data**

In the spring of 1949 the Guidance Bureau of the University of Kansas instituted a study of the alumni of the University (40). Included as part of this study was a
questionnaire which was sent to all persons listed on the commencement programs in 1932, 1935, 1938, 1941, 1944, and 1947—a period of time closely paralleling the current study. Fifty-six per cent of the questionnaires were returned. Data requested on this questionnaire for the general alumni group were similar to some of the data requested from the graduated Summerfield scholars. This provided an opportunity to compare the responses of the graduated scholars with those of the alumni group in general.

The findings of the original alumni project were presented with the replies of men and women combined. This made comparison with the current study of little value. However when the replies of only the men to certain of the items were retabulated and re-analyzed, suitable comparisons were made.

Methods Used in the Treatment of the Historical Data

Two general uses were made of the historical data. First, they provided lists of names for identifying the individuals composing the samples studied. Second, they provided the material (presented in narrative form in Chapter IV) which describes the selection processes and the administration of the scholarship program.

Methods Used in the Treatment of the Scholastic Data

Academic Data

The academic data were used to compare the scholarship record of individuals in the selected scholars group and the rejected candidates group. Such a comparison provided one measure of the effectiveness of the selection process; that is, did the process select, from the available candidates, those whose academic record was superior, especially as compared to those not selected?
The grade (mark) records of the individuals were converted to grade point indexes; this represents the ratio of grade points earned to the total number of hours carried. At Kansas University,

Grade points are earned as follows: Each hour of A grade carries three grade points; each hour of B grade, two grade points; each hour of C grade, one grade point per credit hour. The grade of D carries no grade points, and the grade of F, minus one grade point. (p:1:20)

To calculate a grade point index the grade points are multiplied by the number of credits assigned to each course in which a grade was received, and the result is divided by the total number of credits.

In calculating grade point indexes for this study, grades that were recorded in some manner other than the usual A, B, C, D, or F were disregarded. Credits and grades transferred from other institutions were calculated as they were accepted by the University of Kansas. Credits for "military service" were disregarded.

The number of individuals in the selected scholars group and the rejected candidates group who were graduated or were currently in attendance was determined by year of candidacy and for the entire period of the study. The percentage of each group that graduated was calculated and the differences of percentages determined. To determine whether differences between these percentages were significant the reliability of the differences was computed by determining the ratios of the observed differences to the standard error of their differences. The standard errors of the differences were computed by using the formula:
This critical ratio (difference divided by the standard error of the differences) was referred to a normal probability table (13:396) for determination of the probability that the observed differences were greater than zero. The size of the samples used justified the use of a normal probability table.

The standard levels of probability as suggested by Edwards are:

Most experimenters take a probability of .05 as a standard level. This is a convenient reference standard, and a test of significance which yields a probability of .05 to .01 will be regarded as significant and the hypothesis being tested will be rejected. A probability of .01 or smaller will be regarded as very significant...(13:28)

These were accepted as suitable for the present research and were used, where applicable, for all tests of significance.

The number of selected scholars and rejected candidates who graduated (or were currently enrolled), and who maintained minimum Summerfield scholarship standards (an overall grade point index of 2.451, as explained in detail in Chapter IV) was determined; similarly percentages, differences of percentages, and significances of the differences were determined as described above.

A further test was applied to the distributions of the same sample to determine how effectively the selection process had classified the sample into the two groups—rejected candidates and selected scholars. According to Palmer O. Johnson:
This procedure is equivalent to determining whether a set of obtained values differs significantly from those which would result if only chance factors were in operation. (22:91)

The test applied here was the chi-square test as applied to a 2 x 2 contingency table. Table III gives a schematic representation for the cell frequencies in such a table. In application to the current study the letters in Table III have the following meanings:

- \(a\) = the number of selected Summerfield scholars who maintained minimum Summerfield standards.
- \(b\) = the number of selected Summerfield scholars who failed to maintain minimum Summerfield standards.
- \(c\) = the number of rejected candidates who maintained minimum Summerfield standards.
- \(d\) = the number of rejected candidates who did not maintain minimum Summerfield standards.
- \(n_1\) = the total number of selected Summerfield scholars.
- \(n_2\) = the total number of rejected candidates.
- \(N\) = the total number in both groups.

Chi-square was calculated from this formula:

\[
x^2 = \frac{N(bc - ad)^2}{(a \neq b)(c \neq d)(a \neq c)(b \neq d)}
\]  

The terms used in the formula are those given in the schematic representation of Table III. Correction for continuity as suggested by Yates (13:83) was made where cell frequencies were small. The resultant formula in these cases was:
### TABLE III

**SCHEMATIC REPRESENTATION FOR THE CELL FREQUENCIES IN A 2 X 2 TABLE**

(Adapted from Edwards) (13:77)

<table>
<thead>
<tr>
<th></th>
<th>Maintained Standard</th>
<th>Did Not Maintain Standard</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Summerfield scholars</td>
<td>a</td>
<td>b</td>
<td>$a / b = n_1$</td>
</tr>
<tr>
<td>Rejected candidates</td>
<td>c</td>
<td>d</td>
<td>$c / d = n_2$</td>
</tr>
<tr>
<td>Totals</td>
<td>a / c</td>
<td>b / d</td>
<td>$a / b / c / d = N$</td>
</tr>
</tbody>
</table>
\[ x^2 = \frac{N(|bc - ad| - N/2)^2}{(a \neq b)(c \neq d)(a \neq c)(b \neq d)} \]

Hypotheses based on the obtained chi-squares were rejected or not rejected on the previously mentioned standard levels of probability. This was a one-tailed test of significance.

The equivalence or non-equivalence of the academic success records of the two groups (selected scholars and rejected candidates) who maintained minimum Summerfield scholarship standards was determined by comparing the variances of the distributions of grade point indexes, the mean grade point indexes, and the significance of the differences of the mean grade point indexes of the groups. The significance of the obtained differences was determined by using the standard levels of probability previously described. Standard raw-data formulae for determination of variance, mean grade point index, tests of significance, and the F test for variance ratio were used as shown in Johnson (22), Edwards (13) or Garrett (16).

Student Leadership Data

Only one criterion of student leadership was used--membership in Sachem, the local chapter of Omicron Delta Kappa, national senior men's honor society. The number of individuals from the selected scholars group and the rejected candidates group who were elected to membership was determined.

The ratio of the membership of these two groups to the total Sachem membership was calculated and expressed in terms of percentages. Differences between these percentages were
determined and the significance of these differences was calculated and interpreted in the manner previously described for comparing percentages.

Methods Used in the Treatment of the Questionnaire Data

The questionnaire devised for this study was administered to the sample consisting of graduated scholars and current scholars. Their replies to the various items were coded and punched into standard International Business Machines punch-cards. Tabulation was accomplished by using that company's sorting machine.

The questionnaire data of the Kansas University alumni study were treated in a similar manner.

The findings based on the questionnaire data were expressed in two ways depending on the nature of the data. Certain of the findings were expressed as the percentage of the respondents replying to each item or part of an item. In other instances the findings were expressed as measures of central tendencies--means or medians. Standard techniques of determining differences and the significance of these differences were applied (16:210,221).

The findings of these questionnaire data were compared to the findings of other reported studies in this area whenever applicable--especially to those reported by West (35) and Havemann and West (20). Comparisons were also made of these findings and the findings derived from the Kansas University alumni study (40).
Summary

This chapter has presented in detail the method of selection of the population samples studied and the sources of data used. A general description of the methods and statistical tests used in treating the data has been presented.

More specific details concerning methods and statistics, as well as selection and use of criteria, will be given in the succeeding four chapters which present the findings of the study.
CHAPTER IV
THE SELECTION PROCESS AND ADMINISTRATION OF
THE PROGRAM

The purpose of this chapter is to present the procedures used to select Summerfield scholars and to discuss the methods used in administering the scholarship program.

The selection of the scholars and the administration of the program are the responsibility of the Summerfield Scholarship Committee. This committee is composed of faculty members and representatives of the Endowment Association and usually consists of from eight to ten members. It is appointed by the Chancellor of the University and the University Senate.

The Selection Process

The selection process consists of three general phases: the nominating procedures, the preliminary examinations, and the final examinations.

Nomination Procedures

Late in the fall semester each year a letter is sent to all principals of Kansas high schools reminding them that nominations will be in order in the immediate future. With this letter are included announcements (see Appendix C-1) to be placed on the school's bulletin board.

Near the end of the first semester, usually in January, the principals are invited to nominate candidates who most
ably meet the stated requirements of the scholarship. It is suggested to the principals that their nominations be limited to those boys in the upper five per cent of the graduating class, but this is not a requirement. A prepared nomination blank (see Appendix C-2) is furnished to the principals.

Nomination by the high school principal is a prerequisite to candidacy for the scholarship. Therefore, personal bias on the part of a principal could preclude the nomination of a worthy individual, because no student may enter the preliminary examination without first having been nominated by his principal. This is the sole requirement for eligibility to compete in the preliminary examinations. All who are nominated are permitted to compete, because the scholarship committee screens the nominations only to see that all nominations are from Kansas high schools, and that only boys are nominated.

Since the establishment of the scholarship, nominations have averaged approximately 250 per year.

Preliminary Testing

The preliminary tests are usually given early in the spring of each year. From six to eight testing centers are established each year in order to reduce to a minimum the travel required of the candidates. Each nominee is informed of the time and place of his preliminary examination. In the earlier years of the program the testing was conducted by members of the Summerfield Scholarship Committee, but in more recent years the professionally trained examiners of the
University Guidance Bureau have administered these examinations. One full day of testing is required for the preliminary examinations.

The general trend of the preliminary testing program is discussed in a later section of this chapter. A listing of the tests used is shown in Appendix C-3.

Selection of Final Candidates

After the preliminary tests have been scored, the Summerfield Scholarship Committee selects from the list of preliminary candidates a group of finalists, usually about thirty in number.

The primary factors considered in this selection are: the results of the preliminary testing, the candidate's high school record, and the principal's recommendations obtained from the nomination blank. Thus, both objective data and subjective judgments are used in selection.

Final Examination

The selected finalists are asked to come to the University for two days in the final phase of the selection. This usually occurs about one month after the preliminary examinations.

Approximately one-half of this two-day period is spent in further testing, and during the other half the candidate is under observation during formalized interview situations, and informal social situations.

In a later section of this chapter the general trend of the final testing program is discussed. A listing of the tests used is shown in Appendix C-3.
The candidates are usually interviewed, singly or in groups of four or five, by all members of the committee. Beginning in 1951, in addition to the committee interviews, the professionally-trained counselors of the Guidance Bureau have conducted individual interviews with each candidate. These counselors then report their observations and clinical judgments concerning the candidates to the committee.

Selection of Scholars

From this group of approximately thirty finalists the committee selects ten or more scholars to enter the program the following September. This selection is based on all available information concerning the candidates. The data considered during their selection as finalists are reviewed and discussed, as is all of the information obtained during the final examination period.

The difficulty of this final decision is made more apparent by the realization that this entire group represents only the selected candidates of two previously applied selection processes—nomination of the upper percentage in the high school graduating classes, and preliminary Summerfield testing.

The committee considers and discusses each finalist, not once but many times, with the intent of choosing only superior students with integrity and potentialities of leadership.

A group of scholars (usually ten) is selected without regard to relative rank. An additional four or five are ranked in order of their desirability as scholars. After this ranking
is completed, and only then, consideration is given to the financial status of those selected.

The financial need of each of the first group of ten is considered and a determination made of how much aid will be granted to each. If, after this procedure has been completed, there remains unobligated money for that year, the first candidate of the ranked group is selected as a scholar. This process is continued, taking one ranked candidate at a time, until the available funds for the year have been obligated.

Selection for Later Awards

Occasionally an individual selected as a scholar will not enter the University, others resign their scholarship after entering the University, and still others have their scholarship withdrawn by the administering committee for failure to maintain the standards for which they were selected. Thus, vacancies in the scholarship program are created. These vacancies are filled with individuals who are already students at the University. Usually these are individuals who were originally candidates for the scholarship, and were not initially selected, but whose subsequent record indicated that they were deserving of the scholarship. A few of the later awards have gone to individuals who were not initially candidates for the scholarship, but in all cases they were graduates of Kansas high schools.

In this study those individuals who received later awards were grouped, for statistical treatment, by year of original
candidacy, or, for those who were not candidates, by their year of high school graduation—which would have been their year of candidacy.

Table IV presents a historical summation of the number of individuals involved in the various phases of the selection program.

**Survey of the Testing Programs**

As previously explained, tests are used for both the preliminary and final examinations. Since testing plays such an important part in the selection of the scholars, the committee has the responsibility of selecting tests that will best differentiate members of the groups. They have the further responsibility of protecting the integrity of the tests—that is, of making sure that no candidate has advance knowledge of the tests to be used.

In order to meet these requirements, the specific tests, and even the types of tests used, have been changed often during the period that the scholarship has been in existence.

A specific listing of the types and names of tests used each year is shown in Appendix C-3. Although the complete listing of the tests in the text of this report did not seem warranted, a brief analysis of the trends in the testing is important.

Over the years the testing program has gone through four general phases. These changes have not been abrupt, but a
**TABLE IV**

**NUMBER OF INDIVIDUALS IN THE VARIOUS PHASES OF THE SELECTION PROGRAM, BY YEARS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Preliminary Candidates</th>
<th>Nominees</th>
<th>Finalists</th>
<th>Initially Appointed Scholars</th>
<th>Later Appointed Scholars</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>214</td>
<td>174</td>
<td>19</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1930</td>
<td>210</td>
<td>164</td>
<td>30</td>
<td>11</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1931</td>
<td>192</td>
<td>172</td>
<td>21</td>
<td>13</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1932</td>
<td>257</td>
<td>237</td>
<td>27</td>
<td>12</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1933</td>
<td>238</td>
<td>211</td>
<td>26</td>
<td>10</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>1934</td>
<td>244</td>
<td>225</td>
<td>30</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1935</td>
<td>313</td>
<td>301</td>
<td>30</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1936</td>
<td>305</td>
<td>269</td>
<td>32</td>
<td>15</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1937</td>
<td>275</td>
<td>250</td>
<td>32</td>
<td>14</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1938</td>
<td>319</td>
<td>296</td>
<td>35</td>
<td>13</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>1939</td>
<td>282</td>
<td>265</td>
<td>26</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>336</td>
<td>321</td>
<td>32</td>
<td>20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1941</td>
<td>326</td>
<td>304</td>
<td>30</td>
<td>14</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1942</td>
<td>257</td>
<td>226</td>
<td>30</td>
<td>13</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1943</td>
<td>196</td>
<td>176</td>
<td>30</td>
<td>18</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1944</td>
<td>165</td>
<td>148</td>
<td>33</td>
<td>21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>167</td>
<td>149</td>
<td>40</td>
<td>21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1946</td>
<td>194</td>
<td>181</td>
<td>40</td>
<td>22</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>248</td>
<td>229</td>
<td>38</td>
<td>21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1948</td>
<td>280</td>
<td>255</td>
<td>25</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1949</td>
<td>268</td>
<td>253</td>
<td>30</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>258</td>
<td>215</td>
<td>31</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1951</td>
<td>267</td>
<td>215</td>
<td>30</td>
<td>14</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1929-1951</td>
<td>5811</td>
<td>5319</td>
<td>697</td>
<td>343</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>252.6</td>
<td>231.3</td>
<td>30.3</td>
<td>14.9</td>
<td>2.9</td>
<td></td>
</tr>
</tbody>
</table>
gradual transition from one to the other. There are years that are exceptions within the phases, but in general the four phases are quite evident.

During the first phase the preliminary tests included few, if any, commercially-published standardized tests, but consisted principally of locally-constructed subject-matter tests. In contrast to this, the examinations for the finalists consisted primarily of commercially-published standardized tests with few, if any, locally-constructed tests. The few locally-constructed tests used in the finals were essay or discussion type tests concerning matters of logic, ethics, and ideals.

The second phase, which was fairly well established by 1935 or 1936, reversed the relationship between preliminary tests and final tests; that is, the preliminary testing was composed primarily of commercially-published standardized tests, and the final testing of locally-constructed subject-matter tests.

Transition to the third phase was taking place from 1945 to 1947, and 1947 could be considered the beginning of the third phase. During this period locally-constructed tests played little if any part in the selection process. Both preliminary and final testing consisted almost entirely of commercially-published standardized tests.

The fourth phase began in 1949 and was the current practice at the time of this study. This was a continuation of the third phase, except that standard inventories of
personality and interest were added.

One of the problems initially considered in the current research was that of evaluating the selection process by the four phases just described, to see which combination of testing materials resulted in the most effective selection of scholars. If the changing of methods of testing had been the only variable concerned, this might have been possible, but such was not the case.

There were, by mere coincidence, other variables that changed simultaneously, or nearly so, with the phases of the testing program. These variables included: changing economic cycles from beginning depression, to depth of depression, to pre-war recovery, to war-time economy, and to post-war inflation; and parallel changes in the University populations.

The effect of these variables on the population samples used in this study could not be ascertained. It would have been illogical to assume that they had no effect. Therefore, that aspect of the current research was discontinued.

**Administration of the Scholarship Program**

The administration of the Summerfield scholarship program is invested in the Summerfield Scholarship Committee, as set forth in the second paragraph of this chapter. The committee has the responsibility for carrying out the specific wishes of Mr. Summerfield in administering the program. It has the additional obligation of establishing rules and regulations that, in its opinion, will best produce the end result that
was envisioned by the grantor. Many of the procedures, rules, and regulations had to be established on an *a priori* basis and modified as experience proved such revisions were necessary. Thus over the years certain procedures and regulations have become established by the committee in administering the program.

The remainder of this section is devoted to a brief enumeration and description of the more pertinent administrative procedures and regulations that were operative at the time of this study, as they were obtained from the minutes of the proceedings of the Summerfield Scholarship Committee.

### Allotment of Financial Aid

The committee has the responsibility of allotting the available funds so that as many scholars as possible can profit from the scholarship, yet so that every scholar shall be guaranteed a reasonable living income.

For each school year the committee determines as accurately as possible the reasonable cost of fees, books, board, room, laundry, and incidentals for single male students at the University. This figure is the full allowance for the scholars. The amount of money that the scholar can reasonably expect from his family or other sources is subtracted from the above figure to determine the amount of financial aid he may receive from the fund. Additional allowances are made for graduation expenses and enrollment in some excess-cost courses such as music and art. For those scholars whose private means are sufficient for total support, an honorarium of $100 is awarded upon induction into the program. Students who have no private or
other source of income are granted the full allowance. A full allowance at the time of this study was $900 per year for freshmen and sophomores, $925 for juniors, and $950 for seniors.

The amount initially allotted by the committee to a scholar is not permanently fixed and may be altered to meet changing conditions.

Scholars are encouraged not to accept employment while in school, but if a scholar does accept employment while receiving scholarship aid, his aid is reduced by an amount equal to the income from his employment.

Duration of Scholarship

A scholarship awarded to a freshman is to be retained during his four-year college course unless it is withdrawn for failure to manifest the qualities for which it was granted. This is interpreted as four school years (thirty-six months), and attendance at summer school under the scholarship is counted as a proportionate part of a scholarship year. Awards made to upperclassmen are for the period of time necessary to complete their undergraduate course. Normally the award is not available for graduate training, but some exceptions to this rule were made for returning veterans of World War II who had obtained additional undergraduate schooling while in military service.

Leaves of Absence

It is expected that a scholar will remain in school continuously (summers excepted) until he has completed his
undergraduate work. Exceptions to this are made under unusual circumstances such as military service or illness. In these cases the scholar may return after an approved period of absence and re-enter the scholarship program.

Social and Extra-Curricular Activities

In the earlier years of the program membership in social fraternities was discouraged. This restriction was gradually relaxed until, at the time of this study, there were no restrictions regarding membership in social fraternities. There is no record of restrictions concerning participation in athletics or other extra-curricular activities; however, an indirect restriction may have been placed on participation in activities in some instances by the necessity for maintaining the high scholastic record required of the scholars.

Scholastic Record to be Maintained

Though the grantor in his Letter of Dedication did not specifically state that outstanding scholarship was a prerequisite for continuance of the scholarship, his intent is evident. This is further evidenced by the precedent established by the earlier committees, some of whom assisted in the establishment of the scholarship and were well aware of the intent of the grantor.

Outstanding scholarship has usually been interpreted by the committees to mean a grade point index of approximately 2.5, that is, a grade average half way between an A and a B average. Failure to maintain this minimum, without due reason,
results first in warning the scholar by placing him on probation for a stated period of time. If after such action he still fails to maintain the stated minimum, his scholarship is withdrawn.

For the purpose of classifying individuals in this study, a grade point index of 2.451 was used to represent the lower limit of an index of 2.5—the minimum expected of Summerfield scholars.

Conduct Expected

The conduct expected of the scholars was clearly defined by the grantor, and he specifically stated that the scholarship should be withdrawn without hesitation should any scholar fail to comply. Yet he cautioned the committee to have in mind, in carrying out these provisions, the frailties of youth. The conduct of Summerfield scholars has caused little trouble for the committee, since few withdrawals have had to be made for this reason.

Table V gives an accounting of all scholars appointed and their disposition.

Summary

This chapter has presented a historical review of the processes used to select Summerfield scholars and a review of the administration of the scholarship program, including the practices current at the time of this study.
### TABLE V

SCHOLARS APPOINTED AND THEIR DISPOSITION,
BY YEARS OF NOMINATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Scholars Appointed</th>
<th>Resigned Before Entering</th>
<th>Resigned After Entering</th>
<th>Withdrawn by the Committee</th>
<th>Graduated or Current Scholars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>1930</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>1931</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>1932</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>1933</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>1934</td>
<td>23</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>1935</td>
<td>19</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>1936</td>
<td>20</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>1937</td>
<td>17</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>1938</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>1939</td>
<td>19</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>1940</td>
<td>24</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>1941</td>
<td>16</td>
<td>1</td>
<td>5*</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>1942</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>1943</td>
<td>23</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>1944</td>
<td>23</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>1945</td>
<td>23</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>1946</td>
<td>22</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>1947</td>
<td>23</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>1948</td>
<td>12</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1949</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>1950</td>
<td>13</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>1951</td>
<td>14</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>1952-1951</td>
<td>411</td>
<td>30</td>
<td>33</td>
<td>85</td>
<td>263</td>
</tr>
</tbody>
</table>

Average 17.9 1.3 1.4 3.7 11.4

* Includes one deceased scholar.
Although this material is of interest in itself, the primary purpose for including it in this report was to provide background information necessary to the understanding of the findings and conclusions presented in the subsequent chapters.
CHAPTER V

THE SCHOLARS AS STUDENTS

Introduction

The preceding chapter has presented an explanation of how scholars are selected and what standards they must maintain to continue as scholars.

The purpose of this chapter is to show how effectively the selection process has chosen from the available candidates those who were superior in terms of both scholastic achievement and student leadership. This was done by comparing the success of the scholars in their role as students with the success of the rejected candidates (who came to Kansas University) in terms of:

A. Academic records as evidence of
   1. persistency in college,
   2. percentage maintaining minimum Summerfield standards,
   3. number maintaining minimum Summerfield standards, and

B. Student leadership, or percentage recognized as student leaders.

Before comparisons could be made with the rejected candidates group, it was necessary to make some assumption about the representativeness of this group to the total group of unselected candidates. As explained in Chapter III, this group was only a part of the total number of unselected
candidates—a group whose relationship to the total number of unselected candidates was unknown.

The most logical assumption that could be made regarding this rejected candidates group was that it was representative of the total group of unselected candidates. Although this assumption was not proved to be true, and could not be proved with the available data, it was found not to be unreasonable in the light of available data and knowledge—a basis of acceptance suggested by Walker and Lev (34:1273).

Therefore, for purposes of this study it was assumed that the rejected candidates group was a representative sample of all unselected candidates, and evaluations and conclusions were based on this assumption. It was recognized that this assumption may have led to some erroneous conclusions, but this could not have been avoided since further evaluation of the representativeness of the rejected candidates was not feasible.

**Academic Record**

The most universally used measure of scholastic success is that given in the college records in terms of marks or grades. These have often been assailed as false standards and fallible; but true standards or not, accurate or not, they remain in most colleges and universities the only official criterion of scholastic success.

Academic records cancel out idiosyncrasies of individual instructors and are the best estimate of all the contingency
factors which appear to be intangible, and which affect performance.

Concerning this matter Crawford wrote:

Therefore while we shall consider extra-curricular factors and utilize what data of value we can from this source, we shall retain the academic record as the ultimate measure of the individual's success at his job of being a student. (11:3)

On the basis of the academic records, the membership of each of the two groups (selected scholars and rejected candidates) was divided into three categories:

1. Those who withdrew from the University prior to graduation,

2. Those who had graduated or were current students with a grade point index less than the minimum Summerfield standard (2.451), and

3. Those who were graduated or were current students with a grade point index more than the minimum Summerfield standard of 2.451.

Comparisons and evaluations were made on the basis of these categories.

Table VI shows the number and percentage of selected scholars who withdrew prior to graduation, who were either current or graduated students with a grade point index less than 2.451, and who were either current or graduated students with a grade point index of more than 2.451. These data are shown by years and for the total period of the study. Identical information regarding the rejected candidates group is also shown.
### TABLE VI

**ACADEMIC RECORD: SELECTED SCHOLARS GROUP AND REJECTED CANDIDATES GROUP, DISTRIBUTION BY CATEGORIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Group</th>
<th>Withdrawn Prior to Graduation</th>
<th>Current or Graduated</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>Per cent</td>
<td>No.</td>
</tr>
<tr>
<td>1929</td>
<td>SS</td>
<td>2</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>13</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>1931</td>
<td>SS</td>
<td>2</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>4</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>1933</td>
<td>SS</td>
<td>0</td>
<td>00</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>5</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>1935</td>
<td>SS</td>
<td>1</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>18</td>
<td>20</td>
<td>56</td>
</tr>
<tr>
<td>1937</td>
<td>SS</td>
<td>1</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>11</td>
<td>18</td>
<td>43</td>
</tr>
<tr>
<td>1939</td>
<td>SS</td>
<td>2</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>13</td>
<td>21</td>
<td>40</td>
</tr>
<tr>
<td>1941</td>
<td>SS</td>
<td>5</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>34</td>
<td>38</td>
<td>49</td>
</tr>
<tr>
<td>1943</td>
<td>SS</td>
<td>6</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>16</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>1945</td>
<td>SS</td>
<td>5</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>7</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>1947</td>
<td>SS</td>
<td>6</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>21</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>1948</td>
<td>SS</td>
<td>1</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>12</td>
<td>14</td>
<td>62</td>
</tr>
<tr>
<td>1949</td>
<td>SS</td>
<td>1</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>11</td>
<td>13</td>
<td>64</td>
</tr>
<tr>
<td>1950</td>
<td>SS</td>
<td>2</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>4</td>
<td>5</td>
<td>51</td>
</tr>
<tr>
<td>1951</td>
<td>SS</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>0</td>
<td>0</td>
<td>77</td>
</tr>
<tr>
<td>1922-1951</td>
<td>SS</td>
<td>34</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>169</td>
<td>83</td>
<td>636</td>
</tr>
</tbody>
</table>
Persistency in College

Before examining the groups in terms of marks, it was necessary to investigate their persistence in the University. The purpose of the scholarship could be fulfilled only if the scholars persisted in the University until graduation.

It was necessary to determine the percentage of the scholars who continued their course of study until graduation, and how this compared with the persistency in college of the rejected candidates. The percentages shown for the 1948 to 1951 classes represent the percentage who are current students. For these four classes this is not a true picture of persistency, as the cumulative mortality rate in universities increases with each year of attendance (14:1296). Calculations were originally made with these four years separated from the remainder of the years, but it was found that the inclusion of these four years in the total period did not make any consequential change in the findings. Therefore, to avoid repetition of presentation, the total periods were used for comparisons.

It should be noted that these percentages of persistency were obtained in terms of gross mortality. That is, all individuals were considered as mortalities if they had withdrawn from the University of Kansas and had not re-entered at the time of the study—even though they may have transferred to some other university. Net mortality, that is individuals who withdrew from the University of Kansas and had not entered any other university, could not be calculated because of lack of data concerning inter-university transfers.
From the data presented in Table VI it was found that the percentage of selected scholars who graduated ranged from 62 per cent in the 1941 class to 100 per cent of the 1933 class. For the total period of the study 81 per cent had graduated or were current scholars. For the rejected candidates group very similar percentages were found. The same minimum percentage was obtained, but the maximum percentage for graduated rejected candidates was 89 per cent instead of 100 per cent. It was of interest to note that the lower rates of persistency occurred for both groups during the earlier war years and could have been caused by that factor. The overall percentage for the rejected candidates was 82 per cent, a figure that was not significantly different at the 5 per cent level of confidence from the 81 per cent of the selected scholars.

No data were available to determine how these rates of persistency compared to those of the general student body at Kansas University. But McNeely has shown (24:1296) that the gross mortality rate in publicly-controlled institutions is 64.5 per cent, or a persistency of 35.5 per cent, and that the rate of persistency for men is lower than that figure.

Thus it was shown that the persistency of both groups in this study was much greater than that of the average college student.

The persistency of the Summerfield scholars, 81 per cent, was quite similar to that of other scholarship holders or
other select groups as shown in Table VII, which summarizes the findings of studies on persistency in college, as reported in Chapter II.

Maintenance of Minimum Standards

The critical measure of the academic performance of a scholar is the maintenance of the scholastic requirements, the promise of which was the basis for the award. That the Summerfield scholars are expected to maintain an outstanding scholastic record has been established in Chapter IV. Since a scholar loses his scholarship for failure to maintain the established minimum, it must be assumed that the selection committee predicts that those selected will maintain that minimum to a greater degree than those rejected. Therefore, a comparison of the percentage of each group that maintained the minimum will provide a measure of the effectiveness of the selection.

The questions to be answered in this aspect of the research, then, were: What percentage of the selected scholars maintained the minimum standard? What percentage of the rejected candidates maintained this standard? Were these percentages different? And, were a greater number of outstanding students selected than not selected for the scholarship? The data that provided the answers were shown in Table VI.

The percentage of selected scholars who had maintained minimum standards was found to vary from a minimum of 40 per cent in 1947 to a maximum of 90 per cent in 1933. These percentages were of questionable reliability because of the small
### TABLE VII

**PERSISTENCY IN COLLEGE: FINDINGS OF SELECTED STUDIES**

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Reference</th>
<th>Group Studied</th>
<th>Reported Persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current study</td>
<td>----------</td>
<td>Selected scholars group</td>
<td>81.6%</td>
</tr>
<tr>
<td>Current study</td>
<td>----------</td>
<td>Rejected candidates group</td>
<td>82</td>
</tr>
<tr>
<td>Archer</td>
<td>(3)</td>
<td>N.Y. State Scholars, Cornell University</td>
<td>83.3</td>
</tr>
<tr>
<td>Bildersee</td>
<td>(4)</td>
<td>N.Y. State Scholars, Hunter College</td>
<td>82.2</td>
</tr>
<tr>
<td>Charles</td>
<td>(6)</td>
<td>Top-quarter H.S. graduates, Univ. of Neb.</td>
<td>67</td>
</tr>
<tr>
<td>Moon</td>
<td>(21)</td>
<td>Honor-Entrance Scholars, Univ. of Chicago</td>
<td>59</td>
</tr>
<tr>
<td>Moon</td>
<td>(21)</td>
<td>Competitive Examination Scholars, Univ. of Chicago</td>
<td>73</td>
</tr>
<tr>
<td>Ziegel</td>
<td>(29)</td>
<td>High School Honor Graduates, University of Missouri</td>
<td>90</td>
</tr>
</tbody>
</table>
samples used when each year was considered separately. The percentages for the years 1948 to 1951 may have been spurious, as this group was a fluid population—constantly changing, but the inclusion of these years did not significantly change the percentage for the totals.

The total percentage of selected scholars who maintained the minimum standards was found to be 59 per cent. Thus 59 per cent of the selected scholars maintained the scholastic requirement the promise of which was the basis of the award. In the Time magazine survey, West (35:15) reported that 58 per cent of all scholarships were granted on the basis of promise of scholastic performance, and that of all who received such scholarships, only 32 per cent fulfilled the promise which won them their scholarships. Hilm in her study of scholarship holders at the University of Chicago (21:333) reported that 55.5 per cent failed to maintain high enough grades to continue for another year on the scholarship program. It is important to note that her findings were based on the grades made only in the freshman year of college and not on a four-year average, which was used in the current study. Furthermore, the requirements for continuation of the scholarships were not as high as those applied to the Summerfield scholars. From her reported data it was possible to determine that only 18 per cent of the scholars used in her study maintained the minimum grade point index expected of the Summerfield scholars.

In another study at Chicago University Moon (27:445) found that of the scholarship holders selected on the basis
of high school records 79.6 per cent maintained high enough grades in their freshman year to be continued on the scholarship for another year, and of the scholars selected on the basis of high school record and competitive examinations, 94.3 per cent were continued for another year. As in the case of Hilts' study (21), the requirements for continuation were not as high as those for Summerfield scholars. From the data presented it was possible to calculate that only 13 per cent of the first group and 37 per cent of the second group of Chicago scholars maintained a standard equivalent to that expected of Summerfield scholars.

Considering the high standards required of the Summerfield scholars, the percentage maintaining the standard is quite high in comparison to the findings of other studies in this area.

Of the rejected candidates group the percentage that maintained the standard ranged from 8 per cent in 1931 to 31 per cent in 1950. As previously explained these were not particularly reliable figures because of the limited sample size, and because the percentage for 1950 involved a year whose results may have been spurious, since it was a sample of a current population. Again the inclusion of the years 1948 to 1951 did not produce significant changes in the totals. It was found that 16 per cent of the rejected candidates maintained the minimum standard for the total period of the study. This 16 per cent actually represented potentially a
large number of individuals; therefore a comparison in terms of numbers will be made later in this section.

Before comparing the percentage of each group that maintained minimum standards, it was necessary to make one more determination. The determinations made previously had indicated only maintenance of the minimum standards. To make a suitable comparison of the groups it was necessary to know whether or not there was any significant difference in the mean grade point index of each group.

For those who maintained the standard, mean grade point indexes for both groups were calculated and were found as shown in Table VIII, which shows the mean grade point indexes for those of the selected scholars group and those of the rejected candidates group who maintained minimum Summerfield standards. This is shown by years and for the total period. As shown in the table it was found that the mean grade point indexes for the scholars generally exceeded those of the rejected candidates, but these means were not reliable because of the small sampling, and the differences were of no practical significance.

Mean grade point indexes calculated for the totals of the fourteen years in the study were more reliable because the size of the samples were much larger. With these more reliable means it was possible to make a reliable comparison between the means of the two groups. For this the standard test of significance (22.74) was applied. A t ratio of
### TABLE VIII

**ACADEMIC RECORD: MEAN GRADE POINT INDEXES OF THE SELECTED SCHOLARS GROUP AND THE REJECTED CANDIDATES GROUP WHO MAINTAINED MINIMUM SUMMERFIELD STANDARDS, BY YEARS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Selected Scholars</th>
<th>Rejected Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Mean GPI</td>
</tr>
<tr>
<td>1929</td>
<td>6</td>
<td>2.795</td>
</tr>
<tr>
<td>1931</td>
<td>6</td>
<td>2.716</td>
</tr>
<tr>
<td>1933</td>
<td>9</td>
<td>2.736</td>
</tr>
<tr>
<td>1935</td>
<td>8</td>
<td>2.684</td>
</tr>
<tr>
<td>1937</td>
<td>8</td>
<td>2.706</td>
</tr>
<tr>
<td>1939</td>
<td>9</td>
<td>2.689</td>
</tr>
<tr>
<td>1941</td>
<td>7</td>
<td>2.676</td>
</tr>
<tr>
<td>1943</td>
<td>8</td>
<td>2.701</td>
</tr>
<tr>
<td>1945</td>
<td>12</td>
<td>2.682</td>
</tr>
<tr>
<td>1947</td>
<td>8</td>
<td>2.740</td>
</tr>
<tr>
<td>1948*</td>
<td>5</td>
<td>2.854</td>
</tr>
<tr>
<td>1949</td>
<td>6</td>
<td>2.775</td>
</tr>
<tr>
<td>1950</td>
<td>6</td>
<td>2.717</td>
</tr>
<tr>
<td>1951*</td>
<td>6</td>
<td>2.901</td>
</tr>
<tr>
<td>1929-1951</td>
<td>104</td>
<td>2.731</td>
</tr>
</tbody>
</table>

*The difference between the two means for 1948 and the two means for 1951 were significant at the 1 per cent level of confidence. The difference between the two means of the other years was not significant at the 5 per cent level of confidence.*
1.22 was found; the probability of this $t$ ratio was in excess of .20. Therefore, it was necessary to conclude that, although the mean of the selected scholar group exceeded the mean of the rejected candidates group, there was reason to believe that it was a difference that could have occurred by chance and was, consequently, not a significant difference.

Since it was thus shown that there was no significant difference in the mean grade point index of each group, a comparison of the percentage of each group that maintained minimum standards was possible.

The difference between the 59 per cent of selected scholars and the 16 per cent of the rejected candidates who maintained the standards was a highly significant difference, with a probability of less than .001.

Thus from the comparison of percentages of each group that maintained the standard, it was found that the selection process is effective in differentiating between the two groups; only a small percentage of the rejected candidates group maintained the standard, while a much larger percentage of the selected scholars maintained it. Those that had been classified as probably successful (selected scholars) were more successful than those classified as probably not successful (rejected candidates). Before conclusions could be based on these findings, an additional test was applied to find with what frequency so large a disproportion between the two groups who maintained the standards could occur if only
chance factors were operative in their classification into these two groups.

To determine this a chi-square test was applied to test the effectiveness of the classification. The obtained chi-squares are shown in Table IX. In only one year (1950) was the obtained chi-square found to be not significant. A highly significant chi-square was found in all but two of the other years (1947, 1948). The obtained chi-square for the total period of the study was highly significant. Although in Table IX the probability was reported as less than .01, it was actually considerably less than .001; that is, the probability that the difference between the proportions could have arisen by chance is much less than one in one thousand. Therefore, it was concluded that the method of classification was effective.

These findings were only a partial answer to the overall evaluation of the selection process in terms of those who maintained minimum standards. The percentage of outstanding students missed in the selection process was relatively small, but a small percentage of a large population may have significance. That aspect was investigated next.

Of the unselected candidates studied (the rejected candidates group), 153 individuals maintained minimum standards, as did 104 of the selected candidates. Thus considering only the individuals studied, more outstanding students were missed in the selection process than were selected. This was
### TABLE IX

**ACADEMIC RECORD: EFFECTIVENESS OF THE CLASSIFICATION OF SAMPLES INTO TWO GROUPS BASED ON THE MAINTENANCE OF MINIMUM SCHOLARSHIP STANDARDS; A CHI-SQUARE TEST**

<table>
<thead>
<tr>
<th>Year</th>
<th>Selected Scholars</th>
<th>Rejected Candidates</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Above Minimum</td>
<td>Below Minimum</td>
<td>Above Minimum</td>
</tr>
<tr>
<td>1929</td>
<td>6</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>1931</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>1933</td>
<td>9</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>1935</td>
<td>8</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>1937</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>1939</td>
<td>9</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>1941</td>
<td>7</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>1943</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>1945</td>
<td>12</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>1947</td>
<td>8</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>1948</td>
<td>5</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>1949</td>
<td>6</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>1950</td>
<td>6</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>1951</td>
<td>6</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>1929-1951</td>
<td>104</td>
<td>72</td>
<td>153</td>
</tr>
</tbody>
</table>
still not the full measure of the outstanding students missed in the selective process. It had been shown that the rejected candidates group studied represented only 32 per cent of the total unselected candidates. The assumption was accepted that this 32 per cent was representative of the entire unselected candidates group. If this assumption were true, then an estimated 486 potentially outstanding students were missed, while 10\% were selected by the process. This could not be accepted as evidence of failure of the selection process, for the number of scholarships available for the estimated 590 potentially outstanding students was shown to be 176; therefore, had every available scholarship been awarded to a candidate who later maintained minimum standards, 40\% potentially outstanding students would have been missed in the selection process—even had that process functioned perfectly. Although an estimated 486 were missed, a comparison of that figure with the one above (40\% minimum number possible to miss) indicated that the selection process was operating with a relatively high degree of efficiency. In spite of this efficiency 34 selected candidates withdrew and 38 others failed to maintain minimum standards and were dropped from the scholarship program. Thus there appears room for improvement.

This particular analysis emphasizes one of the most difficult problems of the selection committee. Assuming that the rejected candidates group was representative of the total
group of unselected candidates, it could be estimated that for every scholarship available there were three candidates potentially able to maintain minimum standards. Disregarding any assumptions concerning the total rejected candidates group, the limited findings here proved that there were 257 outstanding students for the 176 scholarships, or approximately three outstanding students for every two scholarships available. This would be a very minimum estimate and would occur only if the rejected candidates group represented only the most capable of the unselected candidates, a condition believed not to exist.

Summary

On the basis of academic record the scholars were very outstanding, but so were a large number of the unselected candidates. That many of the scholastically outstanding were missed was shown to be due to the limited number of scholarships available rather than to an ineffective selection process. The selection process was shown to be discriminating fairly effectively and to a degree that could not reasonably be attributed to chance. However, 41 per cent of those selected failed to complete the scholarship program successfully.

Student Leadership

As was explained in Chapter III only one measure of student leadership was used—election to membership in Sachem chapter of Omicron Delta Kappa, national honor society for
senior men. It was necessary to determine what percentage of the selected scholars group and of the rejected candidates group was elected to membership, and what percentage of the total Sachem membership was composed of members of these two groups.

Table X presents the data concerning election to membership in Sachem of individuals comprising the selected scholars group and the rejected candidates group. This table also presents the same data for those individuals in both groups who had maintained minimum Summerfield standards.

The table shows that out of the total of 176 individuals in the selected scholars group, twenty-eight members of the classes of 1949 to 1951 had not progressed far enough in their curricula to be eligible for membership. Similarly, 261 of the 958 individuals comprising the rejected candidates group were ineligible for membership at the time of the study. This left 148 and 697 individuals in the two groups who theoretically could have progressed far enough in their curricula to be eligible for membership.

Of the 148 individuals of the selected scholars group, thirty-seven, or 25 per cent, were elected to Sachem. Similarly, thirty-three, or 5 per cent, of the 697 individuals of the rejected candidates group attained membership. The difference between the percentages of the two groups was highly significant with a probability less than .001.

That part of the membership of Sachem made up of those
TABLE X

STUDENT LEADERSHIP: SELECTION TO MEMBERSHIP IN SACHEM OF THE SELECTED SCHOLARS GROUP AND THE REJECTED CANDIDATES GROUP

<table>
<thead>
<tr>
<th></th>
<th>Total Sample</th>
<th>Individuals in the Samples Who Maintained Minimum Summerfield Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selected</td>
<td>Rejected</td>
</tr>
<tr>
<td>Number in study</td>
<td>176</td>
<td>953</td>
</tr>
<tr>
<td>Ineligible for membership (classes of 1949-1951)</td>
<td>28</td>
<td>261</td>
</tr>
<tr>
<td>Classes of 1929-1948</td>
<td>148</td>
<td>697</td>
</tr>
<tr>
<td>Elected to membership</td>
<td>37</td>
<td>33</td>
</tr>
</tbody>
</table>

Per cent of Classes of 1929-1948 elected to membership | 25% | 5% | 35% | 16%
in the two groups who maintained the minimum Summerfield standard was next analyzed. Of the eighty-six eligible individuals in the selected scholars group who maintained minimum Summerfield standards, thirty, or 35 per cent, were elected to Sachem. Sixteen, or 16 per cent, of the ninety-nine rejected candidates who maintained the standard were elected. This was a highly significant difference with a probability of .003.

The percentage of the total membership of Sachem that was composed of individuals from each group had to be determined by estimate. First it was necessary to estimate the total membership of Sachem for eleven years—the numbers of years of candidacy represented by the individuals in this study. But in order to include all of the years in which it was possible for those candidates to have been elected, nineteen years of membership had to be examined, and, when totaled, included 199 Sachem members. When eleven-nineteenths of that total was calculated, it gave an estimated total of 113 for eleven years. Of this 113, thirty-seven, or 33 per cent, were individuals from the selected scholars group; and thirty-three, or 29 per cent, were individuals from the rejected candidates group. Thus the Sachem membership was found to be divided into three approximately equal groups: selected scholars, rejected candidates, and individuals who had never been candidates for the Summerfield scholarships.

Other studies concerning the leadership of scholarship
holders are not directly comparable to these findings, as the criteria used varied to such a great extent. However, their general findings were all similar to the current findings; that is, scholarship holders are more likely than anyone else to be campus leaders.

Summary

This chapter has presented an analysis of the selected scholars and rejected candidates as students in the University. In evaluating their success as students it has provided a partial evaluation of the selection process.

The findings indicated that, as a group, the selected scholars maintained the scholastic performance for which they were selected to a much greater degree than those not selected for scholarship awards. This group was also shown to have attained recognition as leaders in student affairs far in excess of their relative proportion to the entire student body. However, one would expect recognition as student leaders for more than one out of four of a group whose selection was based, in part, on the promise of qualities of leadership.

It was shown that many of the rejected candidates group, and thus many of the unselected candidates, are potentially as scholastically outstanding as the selected candidates.

In considering the scholastically outstanding individuals (those who maintained minimum Summerfield standards), one of the more interesting findings developed; in comparing the
members of the two groups who maintained minimum standards, no significant difference was found in their mean grade point indexes, but there was a significant difference, in favor of the selected scholars, between the percentages of those found to have been recognized as leaders in student affairs.

In the partial evaluation of the selection process, it was shown that it selects a group the majority of whom maintain the minimum standards expected of them, in contrast to the proportion of the unselected candidates who maintain that standard—a disparity that could not reasonably be attributed to chance. However, 41 per cent of those selected failed to complete the scholarship program successfully.

Although the process missed many individuals who had the potential to maintain the minimum academic standards, those individuals so missed were much less likely to be recognized as leaders in student affairs than those of equal academic ability who were selected as scholars.

Therefore, it was shown that the selection process selected a group of individuals who, as a group, maintained an outstanding academic record, and who were recognized as leaders in student affairs to a greater extent than those not selected.
CHAPTER VI

THE SCHOLARS AS GRADUATES

Introduction

The preceding chapter has presented the scholars as students. It is the purpose of this chapter to present the graduated scholars as citizens. The grantor's expectation was that the scholars would "become more capable and more useful members of society because of these scholarships." (Appendix A-1). The part of the current research reported in this chapter was devoted to describing the graduated scholars as members of society, but no attempt has been made to determine that the scholars' later successes or failures were "because of these scholarships." That is, these findings, as reported and evaluated, are not intended to imply a cause and effect relationship--only to report the current status.

From the current status of the graduated scholars some additional evaluation of the selection process can be made. It can be shown that in terms of specific criteria, those selected did or did not achieve later success greater than that achieved by other college graduates.

To answer questions regarding scholarship, fairly acceptable objective data were available in the form of persistency in college and academic grades. But what measure could be found, or what qualities or functions could be
generally agreed upon as the qualities or functions of a thoroughly capable and useful member of society? This is a philosophical discussion beyond the scope of this report, but recourse will be made to one of the philosophers, the late John Dewey, for an acceptable definition of a capable and useful member of society:

He is to be a worker, engaged in some occupation which will be of use to society, and which will maintain his own independence and self respect. He is to be a member of some particular neighborhood and community, and must contribute to the values of life, add to the decencies and graces of civilization wherever he is. (12:8)

This analysis of Dewey's suggested questions which were answerable by citing facts concerning the graduated Summerfield scholars.

Information concerning the graduated scholars' post-college life was obtained from questionnaire data as explained in Chapter III. The findings reported in the current chapter are based on the replies made to the questionnaire by 194 graduated Summerfield scholars.

Six aspects of the graduates' post-college life were analyzed from the data and compared to similar data from other groups of college graduates. They were:

1. further study,
2. occupational status,
3. job income,
4. job satisfaction,
5. marital and parental responsibilities, and
6. civic and community participation.
These six criteria seemed to provide an acceptable measure of Dewey's definition of a capable and useful member of society.

Further Study

The findings regarding graduate study carried on by the Summerfield scholars showed clearly that the degree earned while receiving scholarship assistance (baccalaureate) was only the beginning for a majority of the scholars. The findings were that:

78, or 40%, had earned only the bachelor's degree;
67, or 35%, had earned a master's degree or the bachelor of law degree, but not a doctoral-level degree; and
49, or 25%, had earned a doctoral-level degree.

These figures were even more noteworthy when it was considered that thirty-five, or approximately one-fifth (18 per cent) of the group, were currently working for the next advanced degree, and that a doctoral-level degree did not represent the final achievement for some of the members of this group; two had a second, earned, doctoral-level degree, and four were engaged in post-doctoral training.

In the related research reviewed in Chapter II only one study reported on advanced degrees for scholarship holders. Archer (3) reported that 40 per cent of the scholarship holders later earned advanced degrees. Of the Summerfield
scholars reported here 60 per cent possessed advanced degrees.

Of all the degrees granted each year by the universities of the United States, as reported for 1946-48, approximately 84 per cent are bachelors' degrees, 14 per cent are master's-level degrees, and 2 per cent are doctoral-level degrees (42:26). These figures do not show the accumulation of degrees by individuals, therefore they are not directly comparable to the findings regarding the advanced degrees of the scholars. However, it could reasonably be concluded from these figures that the Summerfield scholars obtain more than their proportionate share of advanced degrees.

**Occupational Status**

The population sample used in this section of the study consisted of 153 employed graduated scholars. Of the total 194 respondents to the questionnaire, forty-one either were currently students, or had entered military service directly from a student status, and were unable to give significant responses to the section on employment.

Occupational status may have the connotation of ranking or giving relative value to some occupations greater than that given to other occupations. Many scales have been developed for that purpose, especially scales ranking occupations in terms of socio-economic qualities. Two such scales, Edwards' Census Scale (28:111) and Beckman's Scale for Gauging Rank (4), were applied to the data of this study. They were
discarded as inappropriate, because the distributions of the
data upon the scales were extremely skewed.

Therefore, the term "occupational status" was used in
this study to mean types of occupations and occupational areas.
Different methods of grouping occupations were used in order
to make suitable comparisons to findings of other studies.

The first such grouping is shown in Table XI. In this
table the occupations are classified into eight specific areas
and one general area. Eight specific areas were designated,
because they were the only areas in which there were enough
responses to justify separate consideration. The general
area, "all others," represents occupations for which there
were only one to three respondents. The number and percentage
of graduated scholars in each area are shown and compared with
the number and percentages of all male University graduates
(40) in each of the nine areas.

The table shows that more scholars, thirty, or 20 per
cent, entered engineering than any of the other areas. Twenty-
eight, or 18 per cent, were in teaching.* The difference be-
tween these two percentages was not significant and could
have been due to chance. The relative popularity of these
two occupations was significantly greater than that of the
next four (physical sciences--eighteen, or 12 per cent;
medicine and dentistry--seventeen, or 11 per cent; business

---

*Although the general term "teaching" is used here for
purposes of comparison with other groups, it should be noted
that twenty-seven of these twenty-eight scholars were teaching
at the college level.
<table>
<thead>
<tr>
<th>Occupational Fields</th>
<th>Graduated Scholars</th>
<th>All Male K.U. Graduates (140)</th>
<th>Significance of Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Per cent</td>
<td>No.</td>
</tr>
<tr>
<td>Teaching</td>
<td>28</td>
<td>18</td>
<td>262</td>
</tr>
<tr>
<td>Law</td>
<td>15</td>
<td>10</td>
<td>125</td>
</tr>
<tr>
<td>Medicine and dentistry</td>
<td>17</td>
<td>11</td>
<td>272</td>
</tr>
<tr>
<td>Engineering</td>
<td>30</td>
<td>20</td>
<td>271</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>18</td>
<td>12</td>
<td>121</td>
</tr>
<tr>
<td>Business Management</td>
<td>16</td>
<td>10</td>
<td>219</td>
</tr>
<tr>
<td>Accounting</td>
<td>4</td>
<td>3</td>
<td>81</td>
</tr>
<tr>
<td>Other business occupations</td>
<td>9</td>
<td>6</td>
<td>99</td>
</tr>
<tr>
<td>All others</td>
<td>16</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Size of sample</td>
<td>153</td>
<td></td>
<td>1550</td>
</tr>
</tbody>
</table>
management—sixteen, or 10 per cent; and law—fifteen, or 10 per cent). However the differences among these four were not significant and could have been only chance differences. The percentage entering other business occupations, nine, or 6 per cent, was significantly lower than these four areas and significantly higher than that of the accountants, four, or 3 per cent. This ranking disregarded the category of "all others," as it was too indefinite to have practical significance.

In considering the relative popularity of the occupations for all male graduates of the University, teaching and engineering were again the most popular, but medicine and dentistry, too, ranked the same (each of these areas contained 17 per cent of the individuals). Business management ranked next with 14 per cent of the individuals—this was significantly lower than the three first-ranking areas and was significantly higher than law and physical sciences, both 8 per cent, and other business occupations, 7 per cent. Accounting was significantly lower than any other with 5 per cent of the individuals. This ranking again disregarded the "all other" category.

A comparison was also made of the percentages of graduated scholars and the percentages of all male University graduates who entered each of the occupational areas. In this comparison two significant differences were found. The first, which was a highly significant difference, was in the percentages of those who entered medicine and dentistry. Only seventeen, or
ll per cent, of the scholars entered these occupations compared with 272, or 17 per cent, of the other graduates. The other difference was in the last category, "all others," but it was of no practical significance, because it was too general a classification to be meaningful.

Thus it was found that the scholars entered occupations, with the exception of medicine and dentistry, in approximately the same frequency as other male graduates of the University, and medicine and dentistry comprised only 11 per cent and 17 per cent, respectively, of the two groups of graduates. These findings were not different from those reported by Archer (3) and Ziegol (38) which were reviewed in Chapter II.

West (35:85) was able to select a group from the population sample that she studied which she identified as the "mostly A" students. This was a group whose academic record would be similar to that of the graduated scholars used in the current study. She used very broad groupings in analyzing this "mostly A" sample: business, which included engineers; government; technical professions, including occupations in sciences, law, medicine, and dentistry; and liberal professions, including occupations in teaching, writing, arts, and the church. Table XII shows the occupational distribution of the graduated scholars and West's "mostly A" students according to these groupings.

Using these broad groupings, it was found that fifty-nine, or 39 per cent, of the scholars entered business occupations and that this was not significantly different from
### TABLE XII

**OCCUPATIONAL DISTRIBUTION: GRADUATED SUMMERFIELD SCHOLARS AND MALE GRADUATES OF UNITED STATES COLLEGES WHO WERE "MOSTLY A" STUDENTS.**

<table>
<thead>
<tr>
<th>Occupational Fields</th>
<th>Graduated Scholars</th>
<th>&quot;Mostly A&quot;*</th>
<th>Significance of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Per cent</td>
</tr>
<tr>
<td>Business**</td>
<td>59</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>Government</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Technical professions</td>
<td>50</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Liberal professions</td>
<td>39</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>Total sample</td>
<td>153</td>
<td></td>
<td>973</td>
</tr>
</tbody>
</table>

*(35:85)*

**Includes engineers.**
the 37 per cent of "mostly A" students. Significantly fewer of the scholars (five, or 3 per cent) entered government service than did the "mostly A" students (8 per cent), and significantly fewer scholars (thirty-nine, or 25 per cent) entered liberal professions than did the "mostly A" students (38 per cent). However the number who entered technical professions (fifty, or 33 per cent) was significantly higher than the 17 per cent of the "mostly A" students.

These findings on occupational distribution point out that this group of scholars are more typical of other graduates of their own university than of other college graduates having the same academic record. Ziegel (38) also found that his honor group entered occupations in the same ratio as other graduates of the same university. Occupational choice may be more likely a function of the university attended than of the academic records of the graduates. If this is true, it explains why the scholars were typical of other Kansas University graduates. If not true, then it must be concluded that the scholars are typical of only average graduates and not typical of the graduates who maintained outstanding academic records.

A question that had often been raised about the selection of candidates was, "Does the process favor the selection of candidates with certain occupational interests, especially those in the physical sciences?" The findings tended to provide a negative answer to that question--no significant
differences, except fewer scholars in medicine and dentistry, were found between the scholars and the male graduates of the University. If the selection process had favored the selection of candidates of one occupational group over the others, it would be reasonable to expect a greater difference in these findings.

One other item concerning occupational status was considered—the migration of the group. Did these graduates remain in their own home state after receiving the benefits of the scholarship program, or did they go to other states where they could find a greater market for their talents?

From the findings of this study it appeared that the State of Kansas does not hold this group of graduates to the same degree that it holds other male graduates of the University. The employed graduated scholars were distributed as follows:

31, or 20%, employed in Kansas;
19, or 13%, employed in the bordering states of Missouri, Oklahoma, Colorado, and Nebraska; and
103, or 67%, employed elsewhere.

The other male graduates of the University who had graduated from Kansas high schools were distributed as follows:

516, or 43%, employed in Kansas;
223, or 19%, employed in the bordering states; and
453, or 38%, employed elsewhere.

Thus it was shown that 80 per cent of the employed graduated
scholars, and only 57 per cent of an equivalent group of other male graduates of the University had migrated—a highly significant difference. West (35:329) reported that of the "mostly A" students, 49 per cent had migrated to other than their own home state. The most migratory group in her survey was the A students in science and engineering (35:327), of whom 65 per cent were classified as migrants. Even this group was not as migrant as the graduated scholars.

Although this problem of migration has sociological and economic import that would merit further study, it is not a criterion of success or failure, and, therefore, is not considered further in this study.

Job Income

The sample used in this section of the study was composed of 151 of the 153 employed graduated scholars—two did not respond to this item on the questionnaire. As in the previous section many comparisons were made to the male graduates of Kansas University and to the findings of the Time survey (20)(35). In most instances median incomes of the various groups were used as the basis of comparison. It was impossible to determine mean incomes, as the data were reported with the lowest and highest step intervals of indeterminate size—"all under" or "all over" specified amounts. The reliability of the obtained medians was determined by the use of the formula:

\[ S.E. \text{ of } \text{Md}n = \frac{1}{2} \sqrt{\frac{N}{F}} \]  

(16:207)
Examination of the distribution of incomes, indicated that with this group of scholars, as with other groups, income was to a certain extent a function of age. To verify this assumption the population sample representing graduated scholars was divided into two groups—all under thirty years of age, and all those thirty years old and over. The median income of those under thirty years of age was found to be smaller (significant at the 1 per cent level of confidence) than that of the older group. Therefore, whenever possible, comparisons of income were made between groups of similar, or almost similar, ages.

Table XIII presents the distribution of incomes of the graduated scholars and the male graduates of the University by age groups. Annual incomes are designated in step intervals of two thousand dollars, and the number of individuals in the age groups twenty to twenty-nine years, and thirty to forty-three years are shown. Totals for all ages—twenty to forty-three years—are shown for each interval for both samples. Median incomes for both samples for all three age groups are shown.

From the table it can readily be seen that in all comparisons made, the median income of the scholars was greater than that of the other university graduates—$5,118 to $3,918; $8,414 to $5,674; and $7,281 to $4,840. These differences were all highly significant with a probability of less than .001 for each comparison made.
### TABLE XIII

**INCOME DISTRIBUTION: GRADUATED SUMMERFIELD SCHOLARS AND MALE GRADUATES OF THE UNIVERSITY OF KANSAS, BY AGE GROUPS**

<table>
<thead>
<tr>
<th>Annual Income in Dollars</th>
<th>Age Group 20-29 Years</th>
<th>Age Group 30-43 Years</th>
<th>Total 20-43 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scholars</td>
<td>KU Men</td>
<td>Scholars</td>
</tr>
<tr>
<td>Under 3000</td>
<td>3</td>
<td>71</td>
<td>0</td>
</tr>
<tr>
<td>3000 up to 5000</td>
<td>16</td>
<td>233</td>
<td>14</td>
</tr>
<tr>
<td>5000 up to 7000</td>
<td>17</td>
<td>34</td>
<td>21</td>
</tr>
<tr>
<td>7000 up to 9000</td>
<td>3</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>9000 and over</td>
<td>1</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>$5,118</strong></td>
<td><strong>$3,918</strong></td>
<td><strong>$8,414</strong></td>
</tr>
</tbody>
</table>
West (35:56) reported the median incomes of all male graduates of colleges in the United States as:

- Under 30 years of age: $3,537
- 30-39 years of age: $4,618
- 40-49 years of age: $6,152

These age groupings were not exactly comparable to those used in Table XIII, nor was the distribution of West's sample given, but the age groups are sufficiently similar and West's population sufficiently large, to draw a reasonable conclusion that the median income of the Summerfield scholars is significantly larger than the median income of the male graduates of colleges in the United States.

In a previous section of this chapter it was explained that in the Time survey a group called "mostly A" students was separated from the population sample. Fifty per cent of this group was reported as earning $5,000 or more per year (20:159). From the data reported in Table XIII it was calculated that 118, or 78 per cent, of the graduated scholars equalled or exceeded that figure. It was impossible to calculate the statistical significance of this difference because of lack of data for the distribution in this aspect of the Time survey. Considering the fact that it is a large difference and that the Time survey was based on a large sample, it would be reasonable to assume that the difference found is significant to a fairly high degree.

A review of the findings showed that regardless of the basis of comparison, the graduated scholars represented a
more select group in the matter of income than the other groups used for comparison in this study. Thus, the group of individuals who were graduated as scholars have in later life been shown to be quite successful in terms of income. This was not to infer that they were successful because they were scholars, only that those who were scholars were later successful in terms of income from their jobs.

**Job Satisfaction**

Dewey's (12:8) definition of the capable and useful citizen indicated that job satisfaction was an important aspect. It should be noted that job satisfaction was the criterion, not job success. Strong (32:14) makes quite a point of the distinction between job success and job satisfaction; it is job satisfaction that makes for a happy individual, and it is the happy individual who is assumed to be the more efficient member of society.

In this section of the study the replies of the 153 occupationally-established graduated scholars were used.

The first aspect of job satisfaction to be studied was the relationship of the graduated scholar's position to his field of specialization at the University. Of these respondents,

113, or 74%, indicated a close relationship;
29, or 19%, some relationship; and
11, or 7%, no relationship.

This ratio of replies was not different from that of all male
graduates of the University who responded to the same question. In their replies,

1,180, or 74%, indicated a close relationship;

274, or 17%, some relationship; and

131, or 9%, no relationship.

Thus a great majority of the scholars were working in positions for which their college work provided preparation, but in no greater proportion than all male University graduates.

The other aspect of job satisfaction studied was the scholars' own statements about their degree of satisfaction with their present positions. On the questionnaire (item 41, Appendix B-1) the respondents had the choice of two degrees of satisfaction and two degrees of dissatisfaction. But since the criterion being used was job satisfaction, not the degree of satisfaction, the results were analyzed only in terms of satisfaction or dissatisfaction.

The replies of the scholars indicated that 1,422, or 94% per cent, were satisfied with their present job, and only 9, or 6 per cent, dissatisfied, with not one individual indicating that he was thoroughly dissatisfied with his present position.

The male graduates of the University responded to this same question in the same proportions as the scholars. There were 1,497, or 94% per cent, satisfied and 102, or 6 per cent, dissatisfied, with a few individuals (twenty-six) thoroughly dissatisfied.

The scholars were found to be satisfied in their present
employment and, in general, employed in occupations for which their college training had prepared them. These findings were the same as the findings for the other male graduates of the University.

**Marital and Parental Responsibilities**

The responsibility of the individual in matters of marriage and parenthood is a matter that is open to much philosophical debate. But there are few who would not say that it is socially desirable for a group such as the Summerfield scholars to marry and rear families.

**Marriage**

Of the total 194 respondents to the Summerfield questionnaire, 50 individuals were still bachelors, and 144 had been married; of these, 140 were still married. Given in percentages this was:

- 26% bachelors,
- 72% married, and
- 2% divorced.

Comparable figures for all male University of Kansas graduates in approximately the same age range were:

- 212, or 17%, were bachelors;
- 1,046, or 82%, were married; and
- 16, or 1%, were divorced.

These differences between the two groups, except for the divorce rate, were statistically significant, with a probability less than .01. West (35:216) reported that 15 per cent of all male college graduates were bachelors.
Therefore, if marriage is assumed to be a desirable criterion, the scholars were less successful than other graduates to which they were compared.*

Parenthood

The married scholars reported their parental responsibilities as:

- 38, or 26%, no children;
- 176, or 74%, one or more children;
- 82, or 57%, two or more children;
- 38, or 26%, three or more children; and
- 5, or 3%, four or more children.

The figures for the other male graduates of the University were:

- 260, or 25%, no children;
- 79\%, or 75%, one or more children;
- 492, or 47%, two or more children;
- 149, or 14%, three or more children; and
- 30, or 3%, four or more children.

If it is accepted that it is socially desirable that a group such as these scholars numerically perpetuate themselves, 57 per cent of the married scholars were doing this by having two or more children per family. Furthermore, they were maintaining the minimum of two children to a family to a greater extent than the married male graduates of the University—a difference found to have a high statistical significance with

*Whether this was a lower rate of marriage or only a delay in marriage caused by advanced study could not be ascertained from the available data.
a probability of less than .001. But no significant difference was found to exist between the percentage of all graduated scholars who maintained a minimum of two children per family, (eighty-two out of 194, or 42 per cent) and the percentage of all male graduates of the University who maintained that minimum (492 out of 1,296, or 39 per cent).

A summary of these findings showed that fewer of the scholars marry than do the other men who graduate from the University, but those who do marry tend to have larger families than the other male graduates. The two groups were self-perpetuating (two or more children to a family) to approximately the same degree.

**Civic and Community Participation**

The sample used to study the civic and community participation consisted of the respondents to the questionnaire who were occupationally established.

Five different types of community interests or activities were listed on the questionnaire (items 43 to 47, Appendix B-1), and the respondents were asked to indicate their degree of participation in each of these.

**Recreational, Social, and Fraternal Organizations**

One hundred and forty-six of the graduated scholars replied to the item regarding membership in recreational, social, and fraternal organizations. The extent of their participation was found to be:
89, or 61%, were members of at least one; 49, or 33%, were members of two or more; and 25, or 17%, were members of three or more such organizations.

One hundred and eighty memberships in these organizations were maintained by the 146 individuals, or 1.23 memberships per individual.

Religious and Community Welfare Activities

The graduated scholars indicated that they were active in religious and community welfare groups by taking active roles during the preceding year in such activities as: Y.M.C.A., Red Cross, Boy Scouts, church or church schools. Their degree of participation was found to be:

- 103, or 70%, took an active role in at least one activity;
- 53, or 36%, in two or more; and
- 18, or 12%, in three or more.

The total participation of the group in the preceding year was 1.28 activities per individual.

Civic, Political, and Business Organizations

Belonging to civic, political, and business clubs did not appear to be a civic activity that interested the graduated scholars to a large extent as only:

- 57, or 38%, belonged to any such organization;
- 18, or 12%, belonged to two or more; and
- 3, or 2%, belonged to three or more.
The 149 individuals reported a total of only 74 memberships or one membership for every two individuals.

Professional and Scientific Organizations

Interest in professional and scientific organizations was pronounced in the graduated scholars as:
125, or 85%, belonged to at least one;
91, or 62%, belonged to two or more; and
62, or 42%, belonged to three or more such organizations.

The average participation was also higher than in any of the previous areas, with an average of 2.24 memberships per individual.

Political and Public Offices

The political officeholder was almost non-existent in the ranks of the graduated scholars. Only one respondent indicated that he held a politically elective office, and that was a city office in a small town on a part-time basis. Several of the graduates held government or state jobs, but these were merit appointments and presumably not due to political activity, and so are not generally considered as "public offices." Similarly three were members of local school boards which are not usually political, even though they are elective. Thus a very limited number of the graduates held any public office, and none were found to be devoting full time to any elective office.

Activity of the graduated scholars in five general areas
of community service has been analyzed. The greatest interest shown was in professional and scientific organizations and the least was in political and public office.

Ideally it would have been desirable to compare the civic and community activities of these individuals to those of other male graduates of the University, but data for such comparisons were not available.

A limited comparison with West's group was possible (35:187-191). She reported findings in the first four areas discussed above--the area of political and public offices was not reported. The findings were that of the male graduates of colleges in the United States: 50 per cent belonged to at least one, and 22 per cent belonged to at least two recreational, social, or fraternal organizations; 13 per cent took part in at least one, and 2 per cent took part in at least two religious and community welfare activities; 36 per cent belonged to at least one, and 16 per cent belonged to at least two civic, political, or business organizations; and, 70 per cent belonged to at least one, and 39 per cent belonged to at least two professional or scientific organizations. In all four areas the graduated scholars reported a higher degree of participation than that reported in the Time survey for the male college graduates of the United States. The differences were all found to be statistically significant (probability less than .01), with the exception of membership in civic, political, and business organizations, which was not significant.
In general it appeared that the graduated scholars participated to a greater-than-average extent in: social, recreational, and fraternal organizations; community welfare and religious activities; and professional and scientific organizations. They engaged to a lesser degree in civic, political, and business organizations, and were practically non-existent in political and public offices.

Summary

This chapter has presented an analysis of the graduated scholars as members of society. Several aspects of citizenship were analyzed, and comparisons were made with findings of other studies whenever possible.

The evaluation of the selection process, in terms of the success of the graduated scholars, could not be stated as precisely or as emphatically as in the previous chapter, because less objective measures were being used. But it was found that the selection process selected a group of individuals who as graduates compared favorably in many respects with other college graduates, and who in only one of the comparisons (marriage rate) were lower than other college graduates.

The findings indicate varying degrees of successful post-college life for the scholars. They show that the scholars greatly excelled other college graduates in terms of advanced degrees earned, and income received from their jobs. The second factor could well have been a correlate of the first, but this does not alter the importance of the findings.
In other respects they could be said to be generally successful—to a degree equal to, or slightly better than, other University graduates. The graduated scholars worked in positions quite similar to, and in the same ratio as other graduates, but received better pay for their work. They indicated the same degree of satisfaction with their work as other University graduates. The relationship between the type of position held and their college training was quite similar to that of the other University graduates.

The participation of the graduated scholars in civic and community affairs was found to be generally greater than that of the average male college graduate in the United States in: social, recreational, and fraternal organizations; community welfare and religious activities; and especially professional and scientific organizations. They engaged to a lesser degree in civic, political, and business organizations, and were practically non-existent in political and public offices.

It was interesting, but not pertinent to this study, to note that the graduated scholars were more migratory than either the other male graduates of the University or the comparable (high academic record) group from West's study (35).

In one respect, marriage, the graduated scholars might be considered less successful than other male graduates of the University or of United States colleges in general.

Even though fewer graduated scholars marry, those who do, have larger families than the other male graduates of the
University. Consequently, even with the lower marriage rates of the graduated scholar, they are self-perpetuating (two or more children to the family) to the same degree as other male graduates of the University.

The findings reported in this chapter are not meant to imply that the graduated scholars were successful or unsuccessful because they were selected as scholars—only that those selected as scholars were successful to the degree reported.
CHAPTER VII

THE SCHOLARS' REACTION TO THE PROGRAM AND TO THE UNIVERSITY

Introduction

The two preceding chapters have presented evidence of the scholars' activities both as students and as graduates. This chapter presents the opinions of the scholars regarding:

1. their reaction to the scholarship program,
   and
2. their reaction to the University.

The questionnaire was used to elicit the opinions of both the graduated and current scholars. As explained in Chapter III the questionnaire was mailed to the graduated scholars and administered to the current scholars in a personal interview. Many of the scholars made comments in addition to the checked responses. Their answers show thoughtfulness and sincerity—many, in fact, show considerable feeling. Some of these comments are included in this report, because statistical analysis, significant as it may be, cannot portray an individual's feelings nor the quality of his reply.

Reaction to the Scholarship Program

The reactions of scholars to the administration of the scholarship program should provide another measure of how effectively the Summerfield Program is meeting its obligations. Previous chapters have reported how effective the selection
of scholars has been in terms of the scholars' successes as students and graduates. This section of the report is devoted to the scholars' satisfaction with the program rather than to their success judged by outside criteria.

The scholars were asked about the financial value of the scholarship, the effect of the scholarship on academic marks, and the effect that holding or maintaining the scholarship had on social activities.

For tabulating the replies to the questionnaire, the scholars were divided into two groups, the graduated scholars and the current scholars. After the tabulations were completed, it was found that the responses of the two groups were statistically significantly different in only a few instances; therefore, except where these significant differences occurred, the findings were reported on the basis of the total responses of the combined groups.

Financial Aid

It was the grantor's aim that these scholarships would "make possible a college course for a number of worthy boys who might not otherwise have that privilege" (Appendix A-1). The scholars were asked if they would have been able to attend college when they did without the aid of the scholarship.

One hundred and fifty-six, or 70 per cent, believed that they would have been able to go to college without the aid of the scholarship; nineteen, or 8 per cent, had doubts about the matter; and fifty, or 22 per cent, felt that college
would not have been possible. But these percentages do not give the full measure of their responses, particularly of the 156 who said they could have attended without the scholarship aid. Twelve per cent of their "yes" answers were qualified by voluntary comments such as: "I would have had to work an awful lot," "It would have been an unreasonable financial drain on my parents," "I could have attended only part time and worked the rest of the time." And "Yes, but it would have been a small institution in my home community; I would have missed a great deal."

Closely related to the question of whether or not they could have attended college was the question of whether they would have attended the University of Kansas without the incentive of the scholarship, and eighty-five, or 38 per cent, indicated that the scholarship was responsible for their selection of the University of Kansas; twenty-three, or 10 per cent, did not know whether they would have attended the University or not. Thus there has been in attendance a considerable number of outstanding students who, except for the scholarship, would not have attended the University.

In Chapter IV it was explained how financial allotments were made, and how the committee was faced with the problem of making awards so that the scholars would have sufficient income to pursue their studies advantageously, and yet so that the greatest possible number of students would receive assistance. The replies of the scholars indicate that these awards have been made in a satisfactory manner.
Only 190 of the 225 respondents had received financial assistance, and of these only two felt that the amount granted was insufficient. These were both current students, and both qualified their "no" answer. One mentioned that the amount awarded did not cover "extras" such as an occasional movie or date, and since he had absolutely no financial help from home, he never had quite enough money. The other said, "With money that I receive from summer work, I can get by." That the committee was reasonably economical in making their grants was evidenced by many comments such as, "Scholars must be frugal."

Academic Incentive

The grantor in providing these scholarships had hoped that the scholarships would afford encouragement to boys who, while in high school, could look forward to deserving to win the scholarship. The scholars were asked if the possibility of receiving the scholarship provided them with an incentive for higher marks in high school. Fifty, or 22 per cent, thought that it had, and seventy-one, or 32 per cent, said no. But the largest group, 103, or 46 per cent, said that they were not aware of the scholarship in time for it to affect their high school marks. Thus it appeared that if this wish of the grantor is to be fulfilled, more information concerning the scholarship must be made available to the high school students earlier in their high school course.

The scholars were asked a similar question regarding the effect on their marks in college of the desire to retain the
scholarship. Fifty-six, or 29 per cent, of the graduated scholars, and four, or 13 per cent, of the current scholars said that the desire to retain the scholarship had not resulted in higher marks; sixty, or 31 per cent, of the graduated scholars and ten, or 32 per cent, of the current scholars said that it probably had; and seventy-six, or 40 per cent, of the graduated scholars and seventeen, or 55 per cent, of the current scholars said that it had. Three comments on this question give a fair representation of all the comments.

From a 1946 graduate:

I feel that I would have maintained the average necessary for retention of the scholarship, but having the scholarship was a stimulus to do as well as possible.

From a recent pre-medical student:

I feel sure that many things, such as my Fulbright scholarship, wouldn't have been offered me if I hadn't kept my grades up because of the requirement.

And a 1938 graduate adds this thought:

You didn't ask whether we avoided taking difficult courses to keep our grades up, but the answer to that one is pertinent.

The scholastic achievement required for continuance of the scholarship had been placed at a relatively high level. The scholars were asked about this level, and 175, or 80 per cent, indicated that they thought it was "about right"; four, or 2 per cent, thought it was "too low"; twenty, or 9 per cent, said that it was "too high"; and nineteen, or 9 per cent, had never been concerned enough about the requirement to know what
it was. Seven respondents failed to answer this question, but six of them explained that they did not answer, because they questioned the suitability of using such a standard. There were more, twenty-seven, voluntary comments on this item than on any other item of the questionnaire. Twenty-six of these indicated by their comments that in their opinion the establishment of such a standard was questionable. Of this twenty-six, fourteen had checked the questionnaire to indicate that they thought the level required was about right—thus, in effect, indicating dissatisfaction with the establishment of minimum standards, but indicating that if such a standard is necessary, the one now established is about right.

A graduate of the School of Business had this comment, typical of several others:

Standards were not unreasonable, but they tend to force the scholar to follow his strengths and neglect his weaknesses.

A journalist adds:

The problem is the values of present college specialism, not the scholarship. But the scholarship should provide more freedom from grade shackles.

A college instructor said:

In cases I know of, scholars either fell well above or well below the 2.5 requirement; I still question the validity of grades.

From a recent graduate of the School of Business:

I feel that there is too much emphasis on grades as a measure of achievement at K. U. The Summerfield criteria tend to accentuate this emphasis far out of proportion so that grade points begin to equal dollars to those who really need assistance.
Several comments similar to this one from a recent graduate were made:

I do not feel that the grade average itself was unreasonably high, but I do feel that entirely too much emphasis was placed on it by the committee. As far as I could tell, no other criterion was used to measure the relative success of a scholar. This is, I believe, a rather warped and unrealistic approach.

The question of relative difficulty of courses came in for considerable comment.

A physicist said:

My main objection was that no allowance was made for what courses one was taking—"snaps" or a heavy load of science courses.

And a current scholar added:

I feel that I could have made better grades if I had wanted to study all the time, so to that extent, the grades required were too low. I feel that the College (The College of Liberal Arts and Sciences) is probably easier than some other schools, so higher grades should be required in the College.

Several had constructive criticism to add—ideas on how they felt the matter of grade standards should be administered.

A recent graduate implied that a relaxation of the standard during the last two years would be an improvement when he said that:

It seems to me that at least during the last two years a strict emphasis on a 2.5 grade average does not necessarily create a healthy attitude toward scholarship and search for knowledge.

And from a college professor:

It seems to me..., that it is a mistake to tie the continuance of scholarship to grades. It should be taken for granted, until proven otherwise, that a Summerfield Scholar is in college for education, not for a wasted 4 years. As such he will do his best. The tension created by working for grades tended, I think, to lower my grade average.
The scholars were asked what they felt was the academic effect of their being identified to the faculty as Summerfield scholars. One hundred twenty-five, or 67 per cent, of the graduated scholars and sixteen, or 53 per cent, of the current scholars felt that it was to their advantage to be identified as scholars; three, or 2 per cent, of the graduated scholars and none of the current scholars felt that it was to their disadvantage; and fifty-nine, or 31 per cent, of the graduated scholars and fourteen, or 47 per cent, of the current scholars said that it had no effect. Some interesting comments were made in connection with this question.

A former University instructor indicated that it was to his advantage when he was a student and added, "I should say this as both student and instructor."

Another who thought it was to his advantage said:

This was true in certain cases where faculty assumed that I might be interested in material beyond that required, and made this material available to me.

A physicist who also thought that it was to his advantage added this comment:

Faculty expected outstanding work, were likely to suspect their own teaching efforts if it was not evident.

A medical school student thought that there was no effect:

Excepting two cases. One professor knew I was a scholar and gave me an A for C work; another (a former scholar) demanded more of me than others.
And, finally, this comment from a lawyer expresses the opinions of several others:

No effect of which I was aware, academically. Made for cordial personal relations, however.

Social Restraint

The scholars were asked what effect the effort to maintain such a high scholastic standard had on social and extra-curricular participation. One hundred and fifty-seven, or 82 per cent, of the graduated scholars and twenty, or 64 per cent, of the current scholars felt that this effort did not limit their participation in social activities; 163, or 85 per cent, of the graduated scholars and nineteen, or 63 per cent, of the current scholars felt that no limitation was placed on their extra-curricular activities, although some said that maintaining the standard did make participation in such activities difficult.

The scholars were asked how they felt that other students reacted to them as scholars. Sixteen, or 7 per cent, felt that being identified as a scholar was disadvantageous to them in their association with other students; 109, or 51 per cent, said that it was to their advantage; and eighty-nine, or 42 per cent, felt that there was no effect.

One comment from a current scholar summarizes many of the comments:

Some regarded me with unjustified awe, others as a "dirty curve-raiser."
Reaction to the University

In order to obtain the benefits of the scholarship aid, the selected scholars are required to attend the University of Kansas. If the University does not provide a satisfactory educational experience for them, part of the value of the scholarship program is negated. The best way of evaluating their satisfaction with their experiences was felt to be the scholars' own evaluation of various aspects of the University. Therefore, the graduated and current scholars were asked to express their reactions to certain phases of their experiences as students (page 3, Appendix C-1).

The first five items of this section of the questionnaire were general questions concerning the usefulness of the whole college career and matters of general curricular policy.

Table XIV presents an outline of the responses of the scholars to these five items (items 11 through 15). This table shows that all but two, or 1 per cent, of the graduated scholars felt that their college training was of use and value, and that a large majority, 135, or 70 per cent, felt that their total college education had been very useful and valuable.

This table also shows that 148, or 77 per cent, of the graduated scholars and a significantly larger percentage, 93 per cent, or 25 individuals, of the current scholars would probably or definitely choose the same curriculum in which they received their degree or are currently enrolled.

Concerning the question of attending the University of Kansas, the table shows that if they were to start their
### TABLE XIV

**OPINIONS OF GRADUATED SCHOLARS AND CURRENT SCHOLARS ABOUT EDUCATIONAL EXPERIENCES AT THE UNIVERSITY OF KANSAS; PART I, QUESTIONNAIRE ITEMS 11 TO 15, INCLUSIVE**

<table>
<thead>
<tr>
<th>Item and Response</th>
<th>Students Expressing Opinion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduated Scholars</td>
<td>Current Scholars</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>Per cent</td>
</tr>
</tbody>
</table>

#### 11. How valuable and useful do you now consider your total college education to be?  
- **Very useful and valuable**  
  - Graduated: 135, 70%  
  - Current: Not applicable
- **Useful and valuable**  
  - Graduated: 57, 29%  
  - Current: Not applicable
- **Perhaps of some value**  
  - Graduated: 2, 1%  
  - Current: Not applicable

#### 12. Would you choose the same curriculum again?  
- **Probably yes**  
  - Graduated: 102, 53%  
  - Current: 20, 74%*
- **Definitely yes**  
  - Graduated: 46, 24%  
  - Current: 5, 19%
- **Probably no**  
  - Graduated: 34, 18%  
  - Current: 2, 7%*
- **Definitely no**  
  - Graduated: 10, 5%  
  - Current: 0, 0%*

#### 13. Would you come to the University of Kansas again?  
- **Yes**  
  - Graduated: 142, 77%  
  - Current: 22, 78%
- **No**  
  - Graduated: 17, 9%  
  - Current: 1, 4%
- **Yes, only if a scholarship was available**  
  - Graduated: 25, 14%  
  - Current: 5, 18%

#### 14. If you had replaced some of the "required courses"** in your curriculum, would your education have been?  
- **More valuable**  
  - Graduated: 47, 25%  
  - Current: 9, 32%
- **Less valuable**  
  - Graduated: 79, 42%  
  - Current: 7, 25%*
- **Unaffected**  
  - Graduated: 61, 33%  
  - Current: 12, 43%

#### 15. If you had taken more "Advanced-standing examinations" would you have received more benefits?  
- **Definitely yes**  
  - Graduated: 34, 18%  
  - Current: 6, 27%
- **Probably yes**  
  - Graduated: 89, 46%  
  - Current: 13, 59%
- **No**  
  - Graduated: 68, 36%  
  - Current: 3, 14%*

*Represents a percentage that is significantly different (significant at the 5 per cent level) from the other percentage in that row.

**Defined as certain courses required of all students which have little or no direct relationship to their major subjects.
education again, twenty-five, or 14 per cent, of the graduated scholars and five, or 18 per cent, of the current scholars would attend the University only if a scholarship were available; and seventeen, or 9 per cent, and one, or 4 per cent, respectively, said they would not attend the University. This left about three quarters of both groups, 1 1/2, or 77 per cent, and twenty-two, or 78 per cent, respectively, who, if they were planning their education again, would attend the University of Kansas.

Some of the "no" responses to this item were qualified in this manner:

A 1931/2 graduate said:

With "hindsight" at present, I would seek a school whose faculty was more active in research. K.U. faculty of that period was relatively inactive, at least in fields in which I worked,

And a more recent graduate, interested in more specialization said:

No, because I would seek an outstanding school of architecture.

But such answers were balanced by comments such as this one from a college instructor:

After having seen many graduate students from various schools and basing my opinion on their preparation and background, I believe the University of Kansas has an unusually good training program for the undergraduate.

The scholars were asked to express their opinion on the usually controversial question of "required courses,"* Table XIV shows considerable variation of opinions, especially in

*Which were defined on the questionnaire as: "...certain courses required of all students which have little or no direct relationship to their major subjects."
the graduated scholars group. Seventy-nine, or 42 per cent, of the graduated scholars felt that the elimination of the "required courses" would have resulted in a less valuable college curriculum; and forty-seven, or 25 per cent, felt that the omission of such courses would have resulted in a more valuable college course; the others, sixty-one, or 33 per cent, thought that such an elimination would have had no effect on the value of their course. The differences between these three percentages were significant at the 5 per cent level.

The current scholars indicated slightly different feelings on this question; more of them, 43 per cent, or twelve individuals, felt that the omission of such courses would have no effect on their college training, and more, 32 per cent, or 9 individuals, felt that their college training would be more valuable if these courses were omitted. This distribution of responses of the current scholars could have been a chance distribution, as the differences between these three percentages were not significant at the 5 per cent level, and, therefore, the differences must be used with caution.

The scholars were quite liberal with their comments on this item.

A 1947 graduate said:

Good Heavens, some of these courses gave me the only acquaintance with the subjects I shall ever have time for! I would like to insist on even more.

A professor of business administration said:

I'm a confirmed believer in requiring such courses--and seeing that they are good.
Quality of instruction in these courses received considerable comment.

A 1934 graduate commented:

N.B. Important! Faculty in these "required courses" are prone to teach them in routine, uninspired, pedestrian fashion. These courses in particular, require high sense of obligation—almost dedication—from faculty. If they're worth requiring of all, they're worth being taught superlatively, by someone who believes in them. I feel this strongly!

The negative viewpoints were usually aimed at specific courses or departments such as:

I consider the language requirement a distinct and utter waste of time.

The scholars were also asked about increased use of "Advanced-standing examinations." On this matter Table XIV shows that both the graduated scholars, 123, or 64 per cent, and the current scholars, 19, or 86 per cent, were in favor of wider use of the examination; and that the current scholars favored their use to a greater extent than the graduated scholars. These differences in percentages were significant at the 1 per cent level of confidence.

One graduated scholar summed up his feelings on all these five items:

To summarize my thoughts on 11-15: K.U. was a transition period between my boyhood at home and life as a young adult. The scholarship in addition to the funds it provided, also gave me a group of friends (the committee) whose interest provided an underlying factor, security, as I tried my wings in many new ways. What courses I took, indeed, what university I attended, does not seem important, so long as the central purpose of orientation in our culture was achieved. The Summer-field plan could work in many universities, given the funds and people to do a similar job.
A list of eighteen objectives of general education developed by the American Council on Education (39) was modified and used to obtain an additional measure of the scholars' satisfaction with their university training and experience. For each of the eighteen objectives they were asked to indicate an attitude—well pleased, moderately satisfied, or disappointed—toward their training and/or experience while at the University. These were items 16 to 33, inclusive, of the Summerfield questionnaire (Appendix C-1).

These items and the responses of the graduated and current scholars to them are shown in Table XV. This table also includes a comparison of the responses of the two groups. Significance of the differences of the responses of the two groups was estimated by the use of a chi-square test (16:386). Although from this table an analysis of the responses to each item is possible, it is the trend of the replies of the groups that provides a general measure of satisfaction or dissatisfaction. The table shows that more of the graduated scholars were "well pleased" than "disappointed" on all but two of the items: "Guidance and counsel on selection of proper job for me," and "Training for effective use of leisure time." There seems no logical relationship between these two items that would account for their being the only two digressions from the general trend. The current scholars responded quite similarly with only one exception to the general trend—"Training for effective use of leisure time."
### TABLE XV

**OPINIONS OF GRADUATED SCHOLARS AND CURRENT SCHOLARS ABOUT EDUCATIONAL EXPERIENCES AT THE UNIVERSITY OF KANSAS; PART II, QUESTIONNAIRE ITEMS 16 TO 33, INCLUSIVE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Per cent Responding</th>
<th>Chi-square (df=2)</th>
<th>Significance Number Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Information and advice on further education.</td>
<td>GS</td>
<td>27 50 23</td>
<td>4.15</td>
<td>P&gt;.05 171</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>19 73 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Guidance and counsel on selection of proper job for me.</td>
<td>GS</td>
<td>13 50 37</td>
<td>5.94</td>
<td>P&gt;.05 151</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>27 59 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Training in the vocation in which I am now engaged.</td>
<td>GS</td>
<td>51 40 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Development of effective health habits.</td>
<td>GS</td>
<td>17 74 9</td>
<td>1.31</td>
<td>P&gt;.50 126</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>25 63 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Preparation for home and family living.</td>
<td>GS</td>
<td>40 33 27</td>
<td>7.48</td>
<td>P&gt;.05 119</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>21 63 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Training for active participation in civic and community life.</td>
<td>GS</td>
<td>32 52 16</td>
<td>1.74</td>
<td>P&gt;.30 165</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>39 54 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Development of high ideals and a suitable moral code.</td>
<td>GS</td>
<td>38 54 8</td>
<td>.64</td>
<td>P&gt;.70 156</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>34 52 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Improvement in ability to undertake and proceed with new tasks.</td>
<td>GS</td>
<td>47 49 4</td>
<td>2.51</td>
<td>P&gt;.20 175</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>77 23 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Development of ability to meet people easily.</td>
<td>GS</td>
<td>42 14 14</td>
<td>11.38</td>
<td>P&gt;.01 177</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>26 74 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Preparation for further education.</td>
<td>GS</td>
<td>59 39 2</td>
<td>.71</td>
<td>P&gt;.70 181</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>58 40 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Group</td>
<td>Per cent Responding</td>
<td>Chi-square ( (X^2) )</td>
<td>Significance of ( X^2 )</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>---------------------</td>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>26. Training in supervising or directing the activities of others.</td>
<td>GS</td>
<td>26</td>
<td>53</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>36</td>
<td>61</td>
<td>0</td>
</tr>
<tr>
<td>27. Preparation in speaking and writing effectively.</td>
<td>GS</td>
<td>40</td>
<td>49</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>36</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>28. Stimulation of desire to read and appreciate good literature.</td>
<td>GS</td>
<td>33</td>
<td>47</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>33</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>29. Training for effective use of leisure time.</td>
<td>GS</td>
<td>18</td>
<td>58</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>19</td>
<td>54</td>
<td>27</td>
</tr>
<tr>
<td>30. Development of a sound philosophy of life.</td>
<td>GS</td>
<td>28</td>
<td>58</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>37</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td>31. Cultivation of a wholesome appreciation of work.</td>
<td>GS</td>
<td>36</td>
<td>59</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>36</td>
<td>57</td>
<td>7</td>
</tr>
<tr>
<td>32. Development of a broad understanding of social and economic problems.</td>
<td>GS</td>
<td>46</td>
<td>39</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>47</td>
<td>47</td>
<td>6</td>
</tr>
<tr>
<td>33. Stimulation of esthetic appreciation, particularly for good music and art.</td>
<td>GS</td>
<td>34</td>
<td>46</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>CS</td>
<td>31</td>
<td>45</td>
<td>24</td>
</tr>
</tbody>
</table>

*Code: S—Highly satisfactory (well pleased), A—about average (moderately satisfied), U—Unsatisfactory (disappointed).

**Total respondents: GS—194, CS—31. The difference between the number responding and the total number of respondents represents those individuals not responding to certain of the items.

*Pairs of percentages bracketed together made a significant contribution to the significant chi-square as determined by separating the contributions of the individual degrees of freedom (22:95).
In analyzing the responses to individual items, the two groups—graduated scholars and current scholars—showed three significantly different response-distributions, and these were not differences in attitude, only in degree of satisfaction. On item number 20, "Preparation for home and family living," a significantly greater percentage of the current scholars reported themselves as "moderately satisfied." On item 24, "Development of the ability to meet people easily," the graduated scholars indicated less satisfaction than the current scholars, and a similar difference was found on item 26, "Training in supervising or directing the activities of others."

Table XVI presents information similar to that of Table XV except that the replies of the graduated scholars are compared to the replies of other male graduates of the University on these eighteen objectives of general education.

Again the trend of the responses was the important measure of general satisfaction. The table again shows that more of the graduated scholars indicated that they were "disappointed" than "well pleased" on these two items: "Guidance and counsel on selection of proper job for me" and "Training for effective use of leisure time." The other male graduates of the University made the same indication on those two items and on four additional items as well: "Information and advice on further education," "Preparation for home and family living," "Training for active participation in civic and community life," and "Training in supervising or directing the activities of others." Thus in analyzing the general trend of the responses
### TABLE XVI

**OPINIONS OF GRADUATED SCHOLARS AND OTHER MALE GRADUATES ABOUT EDUCATIONAL EXPERIENCES AT THE UNIVERSITY OF KANSAS, QUESTIONNAIRE ITEMS 16 TO 33, INCLUSIVE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Per cent Responding</th>
<th>Chi-square $(X^2)$</th>
<th>Significance of $X^2$</th>
<th>Number Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Information and advice on further education.</td>
<td>GS</td>
<td>27</td>
<td>50</td>
<td>23</td>
<td>7.47</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>22</td>
<td>48</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>17. Guidance and counsel on selection of proper job for me.</td>
<td>GS</td>
<td>13</td>
<td>50</td>
<td>37</td>
<td>7.82</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>18</td>
<td>38</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>18. Training in the vocation in which I am now engaged.</td>
<td>GS</td>
<td>51</td>
<td>40</td>
<td>9</td>
<td>.95</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>47</td>
<td>44</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>19. Development of effective health habits.</td>
<td>GS</td>
<td>17</td>
<td>71</td>
<td>9</td>
<td>13.67</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>27</td>
<td>57</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>20. Preparation for home and family living.</td>
<td>GS</td>
<td>40</td>
<td>33</td>
<td>27</td>
<td>46.44</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>16</td>
<td>51</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>21. Training for active participation in civic and community life.</td>
<td>GS</td>
<td>32</td>
<td>52</td>
<td>16</td>
<td>10.64</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>23</td>
<td>51</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>22. Development of high ideals and a suitable moral code.</td>
<td>GS</td>
<td>38</td>
<td>54</td>
<td>8</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>35</td>
<td>55</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>23. Improvement in ability to undertake and proceed with new tasks.</td>
<td>GS</td>
<td>47</td>
<td>49</td>
<td>4</td>
<td>2.51</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>42</td>
<td>51</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>24. Development of ability to meet people easily.</td>
<td>GS</td>
<td>42</td>
<td>44</td>
<td>14</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>42</td>
<td>44</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>25. Preparation for further education.</td>
<td>GS</td>
<td>52</td>
<td>32</td>
<td>2</td>
<td>9.15</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>48</td>
<td>49</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE XVI, CONT'D

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Per cent Responding</th>
<th>Chi-square (df=2) of X</th>
<th>Number Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>Training in GS supervising or MG directing the activities of others.</td>
<td>26</td>
<td>53</td>
<td>21</td>
</tr>
<tr>
<td>27.</td>
<td>Preparation in GS speaking and MG writing effectively.</td>
<td>40</td>
<td>49</td>
<td>11</td>
</tr>
<tr>
<td>28.</td>
<td>Stimulation of GS desire to read MG and appreciate good literature.</td>
<td>33</td>
<td>47</td>
<td>20</td>
</tr>
<tr>
<td>29.</td>
<td>Training for GS effective use MG of leisure time.</td>
<td>18</td>
<td>58</td>
<td>24</td>
</tr>
<tr>
<td>30.</td>
<td>Development of GS a sound philosophy of life.</td>
<td>28</td>
<td>58</td>
<td>14</td>
</tr>
<tr>
<td>31.</td>
<td>Cultivation of GS a wholesome MG appreciation of work.</td>
<td>36</td>
<td>59</td>
<td>5</td>
</tr>
<tr>
<td>32.</td>
<td>Development of GS a broad understanding of social and economic problems.</td>
<td>46</td>
<td>39</td>
<td>15</td>
</tr>
<tr>
<td>33.</td>
<td>Stimulation of GS aesthetic appreciation, particularly for good music and art.</td>
<td>34</td>
<td>46</td>
<td>20</td>
</tr>
</tbody>
</table>

*Code: S—Highly satisfactory (well pleased), A—About average (moderately satisfied), U—Unsatisfactory (disappointed).  
**Total respondents: GS—1941, MG—1625. The differences between the number responding and the total number of respondents represent those individuals not responding to certain of the items.  
Pairs of percentages bracketed together made a significant contribution to the significant chi-square by separating the contributions of the individual degrees of freedom (22;95).
it appeared that the graduated scholars were indicating a higher degree of satisfaction than the other graduates of the University.

In analyzing the responses to the individual items, the two groups—graduated scholars and the other male University graduates—showed nine significantly different response-distributions: "Information and advice on further education," "Guidance and counsel on selection of proper job for me," "Development of effective health habits," "Preparation for home and family living," "Training for active participation in civic and community life," "Preparation for further education," "Training in supervising or directing the activities of others," "Preparation in speaking and writing effectively," and "Development of a broad understanding of social and economic problems.

In every one of the nine instances the interpretation of the difference was that the graduated scholars were indicating a greater degree of satisfaction than the other University graduates.

Further analysis of these differences did not reveal any logical relationship or discernible pattern of responses. Thus determination of any further implications of these differences was not feasible with the data available. However, in general, the scholars' replies indicated more satisfaction on these eighteen objectives than did those of the other male graduates of the University.

Several of the scholars made comments, regarding their replies to these eighteen objectives, that warrant inclusion.

A design engineer said:
My personal attitude was probably more responsible for the large number of U's than the University. However the engineering curriculum was quite barren.

And another engineer added:

I feel that while engineering subjects were well covered in engineering school, insufficient time was permitted for elective courses which left the engineer sadly lacking in social sciences. A survey program covering sociology, political science, psychology, and general appreciation of fine arts should be included in the engineering curriculum.

A 1950 graduate commented on where he thought the credit was due:

I do not wish to imply that any of these answers are based on the effectiveness of courses of study or academic presentation. Most of the above benefits were obtained in outside activities--fraternities, committees, etc.

Summary

This chapter has presented the scholars' reaction to the scholarship program and to the University--reactions obtained by use of a questionnaire. Wherever possible their reactions have been compared to the reactions of the other male graduates of the University. Subjective comments of the respondents have been quoted, in addition to the presentation of the objective data.

It was found that the scholarship program does make a college education possible for many, but not a majority, of the scholars, who might not otherwise receive such an education, and for others makes such an education much easier and more pleasant to achieve. Not only does it make a college education
available for many students, it also brings outstanding students to the University who would not otherwise have attended.

The distribution of funds was found to have been accomplished economically, but in such a manner that practically all (188 out of 190) who received financial assistance felt that they had been given sufficient financial aid.

It was found that the scholarship provided very negligible incentive for higher grade averages in high school, but considerable incentive to scholars in college who wished to maintain the standard required of them. It was also shown that, although the 2.5 average as the standard of academic achievement was accepted for the level of achievement required, the philosophy of such standards was the subject of much criticism.

Being identified as a scholar was considered advantageous in dealings with the faculty.

Concerning the matter of social restraint, a large majority of the scholars felt that the scholarship program had not restricted their social and extra-curricular activities. Only a very small minority felt that being identified as a scholar was to their disadvantage in dealing with other students.

The graduated scholars felt, almost without exception, that their college education was of use and value, and 77 per cent and 93 per cent of the graduated and current scholars, respectively, felt that they would probably or definitely choose again the same curricula in which they received their degree or are currently enrolled. Both of these items, therefore, indicated a high degree of satisfaction, which was further
emphasized by the fact that three quarters of both groups indicated they would attend Kansas University if they were planning their education again.

Satisfaction with the status quo was again indicated in the scholars' reaction to the question on inclusion of "required courses." Here, however, the degree of satisfaction was not so great, and diversity of opinion was more pronounced than on many of the other items.

Both the graduated scholars and the current scholars expressed themselves as favoring wider use of "advanced-standing" examinations.

The general trend on the responses to the eighteen items concerning the objectives of general education showed that more of both the graduated and current scholars were "well pleased" than "disappointed" with experiences in these items. There were two exceptions to this and some variations of degree, but the trend toward satisfaction was marked.

Thus, it has been shown that the scholars as a group are relatively well-pleased with the administration of the scholarship program and their educational experiences at the University. However, some dissatisfaction was evidenced and many constructive criticisms were offered.
CHAPTER VIII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

FOR FURTHER STUDY

This study was undertaken to ascertain, where possible, how effectively the University of Kansas had carried out its responsibility of administering the Summerfield scholarship program, or, more specifically, to evaluate the selection process in terms of selected criteria and to appraise the administration of the program on the basis of the expressed opinions of the scholars.

This chapter will present a summary of the findings of the study, conclusions based on these findings, and will indicate a few problems that arose during this research, but which are beyond the scope of this study.

Summary of the Findings

The Scholarship Program

From the data of this study the following findings regarding the scholarship program were obtained:

1. A very comprehensive selection procedure has been used throughout the history of the program. It consisted of a nomination process, a preliminary examination, and a final examination. The basic requirement for candidacy was nomination by the high school principal. The preliminary examination has consisted of one full day's written examination, and the
final examination has covered a two-day period devoted to both written examination and personal interview. Such a selection procedure was more comprehensive than any reported in the related studies.

2. For these examination periods extensive use was made of both locally-constructed and commercially-published tests. The locally-constructed tests have been essay, discussion, and short-answer type tests. These have gradually been superceded until, at the time of this study, only commercially-published standardized tests were being used. These consisted not only of aptitude and achievement tests, but also of personality and interest inventories.

3. An interview of the candidate by members of the committee has always been an integral part of the final examination period. Beginning in 1951 additional individual interviewing has been conducted by the professionally-trained counselors of the University Guidance Bureau.

4. The administration of the Summerfield program was invested in the Summerfield Scholarship Committee. Over the years certain procedures and regulations have been established by the committee for administering the program. Details of the more pertinent administrative rules and procedures operative at the time of this study were discussed in Chapter IV.

The Scholars

Data concerning the Summerfield scholars were compared with data from other groups—primarily a rejected candidates
group consisting of individuals who, though candidates for the scholarship, were not selected, but later attended the University; and a group consisting of other male graduates of the University. The findings regarding the scholars were:

1. Eighty-one per cent of those initially selected as scholars either graduated from, or were currently students of the University. This percentage was not significantly different from the 82 per cent of the rejected candidates who persisted; however the persistency of both of these groups was much greater than that of the average college student.

2. The selected scholars, as a group, maintained the scholastic performance for which they were selected to a much greater degree (59 per cent) than did the rejected candidates (16 per cent). However, this means that there are two scholars who failed to maintain the standard for every three who did maintain it.

3. On the basis of the assumption that the rejected candidates group was representative of the total group of unselected candidates, it was estimated that for every scholarship available there were three candidates potentially able to maintain minimum Summerfield academic standards.

4. Twenty-five per cent of the selected scholars and 5 per cent of the rejected candidates were recognized as leaders in student affairs. Thirty-five per cent of the selected scholars who maintained minimum Summerfield standards were recognized as leaders in student affairs as were 16 per cent of
the rejected candidates who maintained the minimum standard. For the selected scholars these were proportions far in excess of their relative proportion to the entire male student population; however, three out of every four of the selected scholars were not recognized as student leaders, even though one of the bases of selection is potential leadership.

5. The graduated scholars greatly excelled other graduates of United States colleges in the number of advanced degrees earned.

6. The two most frequent occupational choices of the scholars were engineering and teaching. The next most popular were the physical sciences, medicine and dentistry, business management, and law in that order. The percentage of scholars entering each of these occupations was approximately the same as that of the other male graduates of the University.

7. More of the graduated scholars, 80 per cent, were employed in states other than Kansas than the other male graduates of the University, 57 per cent, who had also been graduated from Kansas high schools.

8. The graduated scholars excelled in median income other male graduates of the University and the "mostly A" graduates of United States colleges.

9. A large majority of the employed graduated scholars, 93 per cent, were in positions for which their college work had provided preparation. This proportion was similar to that of all other male University graduates, 91 per cent.
10. Both the graduated scholars and the other male graduates of the University were about equally satisfied, 94 per cent, with their current positions.

11. The graduated scholars showed a lower rate of marriage than did the other male graduates, in that 26 per cent of the scholars were bachelors, compared with only 17 per cent of the other graduates.

12. Those of the graduated scholars who did marry tended to have larger families than did the other male graduates of the University. The graduated scholars as a group were self-perpetuating (two or more children to a family) to the same degree as the other male graduates of the University.

13. The graduated scholars showed activity in social, recreational, and fraternal organizations; community welfare and religious activities; and professional and scientific organizations to a greater degree than the male graduates of United States colleges. They engaged to a lesser degree in civic, political, and business organizations and were practically non-existent in political and public offices.

Scholars' Reactions

Data were obtained from which an evaluation could be made of the scholars' reaction to the program and to the University.

1. Many of the scholars felt that without the aid of the scholarship they would still have been able to attend college, but 22 per cent of the scholars said that it would have been impossible without such help.
2. Thirty-eight per cent of the scholars indicated that the scholarship was responsible for their attendance at the University of Kansas.

3. Practically all (188 out of 190) of the scholars who received financial assistance felt that they had been given sufficient, but not generous, financial awards.

4. Only 22 per cent of the scholars thought that the possibility of receiving the scholarship had provided them with an incentive for higher marks in high school. A much larger group (46 per cent) said they were not aware of the scholarship in time for this knowledge to affect their high school marks.

5. Approximately three-fourths of all the scholars felt that the scholarship had been responsible for an effort to obtain higher marks while they were in college.

6. Eighty per cent of the scholars indicated that they felt that the minimum standard for academic achievement was "about right," although many of them questioned the philosophy of establishing any such standard.

7. Two-thirds of the scholars felt that it was to their academic advantage to be known to the faculty as Summerfield scholars.

8. More than three-fourths of the scholars felt that the effort to retain their scholarship did not limit their participation in either social activities or extra-curricular activities.
9. The scholars were almost unanimous (93 per cent) in feeling that being identified to their fellow students as a Summerfield scholar was not a disadvantage; they were about equally divided between feeling that it was an advantage and that it had no effect.

10. The graduated scholars felt, almost without exception, that their college education was of use and value, and a large majority of all scholars felt that if they were planning their education again, they would choose the same curriculum.

11. If they were to plan their educational program again, more than three-fourths of the scholars said they would again attend the University of Kansas.

12. Forty-two per cent of the scholars felt that their college course would have been less valuable had the "required courses" been omitted; 25 per cent felt that the omission of such courses would have resulted in a more valuable college education.

13. Approximately two-thirds of the scholars felt they would have received more benefits from their time spent in college had they been permitted wider use of "advanced-standing" examinations.

14. The scholars were presented with a list of eighteen objectives of general education. Their responses to these objectives, showed general satisfaction with the training and experiences received in the University except in the areas of vocational counseling and training in use of leisure time.
This general satisfaction shown was greater than that evidenced by the replies of the other male graduates of the University.

Conclusions

The specific objectives of this research were initially stated as two series of questions. One series concerned the selection process, and the other concerned the scholars' reaction to the administration of the program and to their educational experiences at the University. The conclusions of this research will be stated as answers to these questions.

Concerning the Selection Process

Did the selection processes choose a superior group of college students in terms of academic records? Yes, it was effective in selecting a group of superior scholars, in that the majority of the group selected did maintain the standard required to a much greater degree than did the group not selected. However, it was ineffective to the extent that far too large a group of the selected scholars (41 per cent) failed to maintain the minimum standard. Because there are so many more potentially capable candidates than there are scholarships available, a reduction of the number of those selected scholars who fail to maintain the standard is imperative if maximum benefits from the scholarship program are to be realized. An attempt should also be made to reduce the number (8 per cent) who relinquish their scholarship voluntarily after having entered the program.
Did the selection process choose a superior group of college students in terms of student leadership? An admittedly limited criterion was all that was available for determining the answer to this question, but on the basis of this limited criterion, one-third of all students recognized as leaders in student affairs were from the group initially selected as scholars. This is a proportion far greater than their relative proportion to the entire male student body. Since selection as a scholar presumes possession of potential leadership, one would expect more than one out of every four of the selected scholars to be recognized as leaders in student affairs. It was shown that there were many unselected candidates who possessed academic ability equal to that of the selected scholars, and who were also recognized as student leaders. It seems reasonable to believe, therefore, that if the selection process could identify and select more of these individuals, the program would more nearly approach the ideal—the well-rounded student and potential leader.

Were those graduated as scholars more successful than other graduates in later life in terms of further study, occupational status, job income, job satisfaction, marital and parental responsibilities, and civic and community participation? The graduated scholars were more successful than other male graduates of the University in regard to further study and job income, and more successful than the average United States male college graduate in participation in civic and community activities. Their satisfaction with their jobs
equalled that of the other male graduates of the University, and they entered occupations in the same relative proportion. Parental responsibilities assumed by the scholars were not significantly different from those of the other male graduates of the University, and their rate of marriage was lower. It would be reasonable to conclude that, in general, they are slightly more successful in later life than other male graduates, but obviously not to the same degree as shown in their academic superiority.

The best overall evaluation that could be made of the selection process was a description of the typical scholar chosen by the process. He was, six times out of ten, able to maintain a 2.45 (or better) grade point index; he had only one chance in four of being recognized as a leader in student affairs; and when he graduated, he was a more useful and successful member of adult society than were other graduates with whom he was compared.

Concerning the Scholars' Reactions

Was possession of the scholarship a help or a restraint financially? Possession of the scholarship for the majority of the scholars was not essential to their attendance at college, but the financial freedom that it offered was an important factor in allowing some of them a greater freedom of choice of schools and curricula, and more advantageous expenditure of effort. For approximately one-fifth of the scholars a college education would have been an impossibility without the financial aid of the scholarship.
Was possession of the scholarship a help or a restraint academically? It must be concluded that for a majority of the scholars the scholarship program acted, in one way or another, as a stimulus to a better academic record in college. However, the program is not offering the incentive for higher marks in high school that was hoped for by the grantor.

Was possession of the scholarship a help or a restraint socially? The data do not show that possession of the scholarship was of any significant help in the scholar's social and extra-curricular activities, but they do show that for a majority of the scholars, possession of the scholarship offers no serious restraint to social and extra-curricular life.

How satisfactory were the educational experiences at the University of Kansas? Satisfaction was indicated in most of the specific responses of the scholars to various aspects of their training and experiences at the University. The most conclusive evidence of overall satisfaction was the fact that the scholars were almost unanimous in the feeling that their college education had been useful and valuable. By far the greatest number of them said that were they planning their education again, they would return to Kansas University and would follow the same curriculum.

These conclusions showing general satisfaction with the scholars' reactions to the scholarship program and to their educational experiences at Kansas University were based on the tabulated replies from the questionnaire. To get a fuller
understanding of the scholars' satisfaction, cognizance should be taken of the feeling expressed in their comments on the questionnaire. Many of the scholars made comments regarding the program and the University. Although in certain specific areas they did have criticisms to make, the general tone of all who commented (with one exception) was one of satisfaction and enthusiasm, best typified by a recent graduate who wrote in bold script across the face of the questionnaire: "For the record: The Summerfield and K. U. can't be beat!"

**Recommendations for Further Study**

Certain questions have arisen out of this study that are pertinent to, but beyond the limitations of, the present study. Answers to these questions would supplement the present study and add to the knowledge necessary for more effective administration and understanding of the Summerfield scholarship program. Further research is recommended to determine, if possible, the answers to these questions:

1. Does personal bias on the part of the high school principal prevent nomination of worthy individuals?

2. Why do approximately two-fifths of the scholars selected for the program either drop out or fail to maintain the academic standard expected of them? Is this the fault of the standard, or are there characteristics common to the majority of these scholars which if properly identified, could be used for improvement of the selection process?
3. Which of the many procedures used in the selection process are sufficiently discriminatory to justify their continued use?

4. Would the educational achievements of the scholars be more in keeping with the intent of the scholarship, with less individual tension, if a minimum academic standard were not required? How frequently does the need for maintenance of such a standard influence the individual's selection of his courses?

5. Why does this group whose occupational selection is so similar to that of the other graduates of the University have a rate of migration out of Kansas so much greater than the other graduates?

6. Is the lower marriage rate of the scholars a matter of delay in marrying, or is it a matter of personality factors?

7. Why are the scholars more satisfied, in general, with their total college experience than are the other male graduates of the University? Is their satisfaction due to qualities inherent within themselves, or is it due to advantages given to them by participation in the scholarship program?
BIBLIOGRAPHY


44. "Forty Years On: The Rhodes Scholars in Retrospect," *The Round Table*, 34:130-139, March, 1944.

APPENDICES
LETTER OF DEDICATION

June 4, 1929.

Mr. Olin Templin, Secretary
Kansas University Endowment Association,
Lawrence, Kansas.

Dear Sir:

I wish to submit to the Board of Trustees of the Endowment Association a proposal for the establishment of a series of scholarships at the University of Kansas to assist a number of the best of the youth of Kansas to secure an education.

For the support of these scholarships, I shall be pleased to provide by bequest an endowment fund intended to yield an annual income of $20,000. During my lifetime I will deposit with the Endowment Association for the support of the scholarships for the academic year 1929-30 the sum of $5,000; for 1930-31 $10,000; for 1931-32 $15,000; and for each succeeding year thereafter $20,000.

This bequest will be administered by the Summerfield Foundation, a vehicle to be created immediately after my death, wherein a certain percentage of the income of my estate will be dedicated to the Endowment Association in perpetuity, and which income, I hope, will be considerably in excess of the amount necessary for this especial activity.

My motives in providing for these scholarships may be stated as follows: (1) I wish to make possible a college course for a number of worthy boys who might not otherwise have that privilege. (2) I should hope that the presence of these students, carefully selected for their superior qualities, and zealously engaged in their studies, might have an inspiring influence upon their fellow students. (3) I should be pleased if the scholarships might be so awarded that the honor they confer would be enjoyed by superior students without regard to their financial condition. Boys who are in no need of monetary assistance deserve the encouragement and incentive the hope of such an honor would bring. (4) It may be found that these scholarships can afford encouragement to the boys in the preparatory schools who could look forward to deserving to win them. That is a possibility pleasing to contemplate. (5) Not the least of the results that might be expected from these scholarships is an increased devotion to high ideals by those who come under their influence. Taken altogether, these detailed motives are embraced in the comprehensive expectation that many students, while living
comfortably and happily, will yet strive manfully and successfully to become more capable and more useful members of society because of these scholarships.

Only boys of superior ability, high ideals, excellent character, unquestionable fidelity, and definite promise of future usefulness, should be considered eligible for appointment. The holding of a scholarship should be presumptive evidence of the possession of these qualities.

The number of these scholarships should be determined by experience, depending upon the financial needs of the scholars. Conditions of living and the ability of scholars to meet their own expenses will vary, and their number should vary accordingly. At the present time I am hoping that perhaps ten scholars may be appointed and that the number will increase until there will be forty when the maximum income from the fund is reached.

I trust that these scholarships may be awarded to entering freshmen and will be retained by them during the period of their four-year college course. However, should any scholar cease to merit the honor by failing to manifest those qualities for which he had been chosen, his scholarship should be withdrawn without hesitation, having in mind always the frailties of youth so that this clause may not be too harshly construed.

Should vacancies occur by death, resignation, withdrawal, or otherwise, it might make possible a corresponding increase in the number of scholars to be appointed the following year. While it would seem desirable that scholars when graduated should have been on appointment for the four years of their course, in exceptional cases deviation from this rule might be fair and prudent.

In awarding these scholarships, I trust that the character of the work of candidates in their preparatory schools will be counted a large factor. It may seem advisable to require some kind of competitive examinations to determine the relative ability of candidates to carry on college studies most profitably. The personal qualifications of candidates should also be given large consideration. These might be obtained from the opinions of their teachers and of responsible citizens in their home communities. I trust that every reasonable means will be faithfully employed in estimating the qualifications of candidates for these scholarships, to the end that they may be awarded only to the most capable and most worthy of the candidates. Unless this is done, they will fail to have the beneficent influence I anticipate for them.

I desire that the income from the fund shall be distributed to those scholars who do not have means sufficient to enable them to carry on their studies most advantageously. Since all
of the scholars are to be selected solely on account of their superior ability and character, they will differ greatly in their financial status. Some of them will doubtless be well able to bear all of their expenses during part or all of the period of their residence at the University; others should have all their expenses met from the fund; still others will need only a part of their expenses to be so defrayed. I realize the difficulty of distributing the money in accordance with the individual needs of the scholars, but I have confidence that it can be done with a reasonable degree of success. Those who are intrusted with this responsibility will, I am sure, give patient and sincere care to the study of the needs of the scholars and will not fail to do substantial justice.

It is my desire that the scholars shall be guaranteed a reasonable living income by having their private resources supplemented when necessary by payments from this fund. I should hope that there would be no distinction recognized between those who receive financial aid and those who do not. There should be no reason for publicity in regard to the distribution of this fund. The Endowment Association will assure itself that the methods of distribution are reasonable and proper.

I do not wish the acceptance of aid to carry with it any legal obligation for its repayment. Nevertheless, such young men as will be appointed to these scholarships will appreciate the privileges accorded them, and when opportunity comes later in life, they will be glad to make sacrifices in order that the boys of future generations may have similar advantages provided for them. Any additional trust that may come to the Endowment Association from former scholars on this account should be used for the benefit of deserving students in such manner as the Trustees then consider wise.

I am aware that with the coming of the years conditions will change so that the wisest of provisions for the assistance of youth today may become inapplicable. I should therefore expect the Trustees of the Endowment Association, while keeping in mind the original purpose of this fund to aid youth to prepare for useful living, to modify the specific terms stated above, if in the judgment of four-fifths of the Trustees conditions no longer make them practicable or prudent.

Any incidental expense incurred in the administration of these scholarships may properly be borne by the fund.

I shall be happy if the Endowment Association will assume the responsibility of this trust and if the University faculty will undertake the task of administering the scholarships the fund provided will maintain. My reward will come from the satisfaction of knowing that I have helped these boys accomplish more in the world than they otherwise could have done.

Very truly yours,

(Signed) Solon E. Summerfield.
APPENDIX A-2

RESOLUTION

Adopted by the Board of Trustees
of the Endowment Association

The generous offer of Mr. Summerfield and the trust proposed were accepted by the Association as announced in the following resolution:

Resolved:

That, by unanimous vote, the Board of Trustees of the Kansas University Endowment Association accepts the very generous gift by Mr. Solon E. Summerfield of certain funds for the establishment of a series of scholarships at the University of Kansas, as outlined in his letter of June 4, 1929;

That this Association is pleased to assume the trust requested by Mr. Summerfield and undertakes to execute its terms with care and fidelity;

That notice be sent to the Board of Regents advising it of the gift of Mr. Summerfield and of the willingness of this Association to execute the trust, and requesting the Board to authorize the establishment of the scholarships in accordance with the wish of Mr. Summerfield, the scholarships to be designated as the "Summerfield Scholarships";

That Mr. Summerfield be informed that it is the confident belief of this Association that by this signal act of intelligent philanthropy he has provided an agency which will afford many worthy boys the opportunity to secure an education and which will at the same time be a powerful stimulant to higher scholarship and finer living by the students of the University as well as by students in the high schools of Kansas; and

That the Secretary be instructed to convey to Mr. Summerfield the foregoing resolutions together with the sincerest gratitude of the Trustees of this Association personally and as a corporate body.
Mr. W. J. Morgan, President,
Board of Regents,
University of Kansas.

Dear Sir:

I am directed by the Board of Trustees of the Kansas University Endowment Association to notify you that this Association has received from Mr. Solon E. Summerfield of New York City, a member of the class of 1899, an offer of sufficient funds to maintain in perpetuity a series of scholarships at the University of Kansas.

The expectations of Mr. Summerfield are expressed in some detail in his letter of June 4, 1929, a copy of which is attached hereto. The special features of the plan proposed by Mr. Summerfield, which should receive formal approval, are the awarding of the scholarships to entering freshmen, selection to be made upon the basis of merit only, the scholarships to be retained thru the four years of the college course, and the distribution of monetary assistance according to individual need with the intention of furnishing each scholar adequate opportunity to carry on his studies unhampered by financial restrictions.

The Endowment Association will be pleased to act as trustee for the funds Mr. Summerfield has offered to provide and to participate in the manner he suggests in the administration of these scholarships. If the Board of Regents approves the establishment of these scholarships and will authorize the participation of the faculty jointly with the Endowment Association in their administration, this Association will take the necessary steps to perform its part in the premises.

Should the Board of Regents authorize the creation of these scholarships the Endowment Association hopes that they may be authoritatively designated as the "Summerfield Scholarships."

The Trustees of this Association are of the opinion that these scholarships will contribute greatly to the advancement of the work of the University and will furnish a healthful stimulus to more earnest scholarship on the part of students of Kansas High Schools.

Faithfully yours,

OLIN TEMPLIN, Secretary
APPENDIX A-4

RESOLUTION

Of the Board of Regents

Ordered, on the recommendation of the Chancellor, that the request of the Kansas University Endowment Association for the establishment of a series of scholarships in accordance with the terms expressed in a letter of Mr. Solon E. Summerfield to the Endowment Association, dated June 4, 1929, be approved.

Ordered, further, upon recommendation of the Chancellor, that this series of Scholarships shall bear the title of "The Summerfield Scholarships."

Ordered, further, on the recommendation of the Chancellor, that the Board of Regents express its deep appreciation and gratitude to Mr. Summerfield for his generosity in providing a fund to be devoted to the support of the Scholarships.
The University of Kansas, in accepting the gift of Mr. Solon Summerfield for the purpose of maintaining the Summerfield Scholarships, also accepted the responsibility of administering and directing the Scholarship Program so that the results expected by Mr. Summerfield might be achieved.

The University is interested in determining, if possible, the extent to which it is obtaining these results. One of the services of the Guidance Bureau of the University is to assist the University in making such a determination.

We believe that there is no better way of evaluating this program and planning for the future than to consider the experience of former Scholars.

This questionnaire endeavors to get at some of the factors involved in such an evaluation. We have tried to construct the form so that you can answer it in a minimum of time. However, we should like to have you supplement the checked items with as many comments as you care to make.

You may feel free to be perfectly frank in your replies as they will be held in strictest confidence. The information that we get from you will be combined with that of all other graduated Scholars, so that findings will appear only in summary form. No member of the Summerfield Committee or of the Endowment Association will have access to your individual replies.

Because of the relatively few graduated Summerfield Scholars and the highly individual characteristics of each Scholar, it is of paramount importance to this evaluation that you reply to this questionnaire.

It is hoped that compilation of data can be completed by April 21, 1952; therefore your prompt response will be appreciated. However, will you please return this questionnaire, even though it can not be accomplished by that date.

An addressed, postage-paid envelope is enclosed for your convenience.

Please accept our sincere thanks and appreciation for your cooperation.

Sincerely yours,

Robert M. Colver
Research Assistant
PLEASE ANSWER THESE QUESTIONS CONCERNING YOUR EXPERIENCES WITH THE SUMMERFIELD SCHOLARSHIP PROGRAM. Check (x) the most appropriate response.

1. Would you have been able to attend college when you did without the aid of the scholarship?

   Probably yes □
   Probably no □
   Can not say □

2. If you had been able to attend college without the aid of the scholarship, would you have attended the University of Kansas?

   Probably yes □
   Probably no □
   Can not say □

3. Was the monetary grant made to you sufficient to provide you with enough income to enable you to pursue your studies advantageously?

   Yes □
   No □
   Received honorarium only □

4. While you were in high school, did the possibility of receiving this scholarship provide you with an incentive for higher grades?

   Yes □
   No □
   Unaware of scholarship in time to affect my grades □

5. The Scholarship Committee required rather high scholastic achievement for the continuance of the scholarship from semester to semester. Was it?

   Too high □
   Too low □
   About right □
   Unknown to you □

6. Did the desire to retain your scholarship result in an effort to obtain higher grades in college?

   Yes □
   No □
   Probably yes □

7. Did the effort required to retain your scholarship limit your participation in social activities (e.g., dates, dances, parties, clubs)?

   Probably yes □
   Probably no □
   Definitely yes □
   Definitely no □
   No, but made participation difficult □

8. Did the effort required to retain your scholarship limit your participation in extra-curricular activities (e.g., music, dramatics, sports, politics)?

   Probably yes □
   Probably no □
   Definitely yes □
   Definitely no □
   No, but made participation difficult □

9. In your contacts with the faculty was the academic effect of being identified as a Summerfield Scholar?

   To your advantage □
   To your disadvantage □
   Of no effect □

10. In your associations with your fellow students did you feel that being identified as a Summerfield Scholar was?

    To your advantage □
    To your disadvantage □
    Of no effect □
PLEASE ANSWER THESE QUESTIONS CONCERNING YOUR EDUCATIONAL EXPERIENCES AT THE UNIVERSITY OF KANSAS. Check (x) the most appropriate response.

11. How valuable and useful do you now consider your total college education to be?

- Very useful and valuable [x]
- Useful and valuable [ ]
- Perhaps of some value [ ]
- Of no particular value or use [ ]
- A distinct waste of time and money [ ]

12. If you were to start your college education over again, would you choose the same curriculum in which you received your degree?

- Probably yes [ ]
- Definitely yes [ ]
- Probably no [ ]
- Definitely no [ ]

13. If you were to have the opportunity to plan your education again, would you come to the University of Kansas?

- Yes [ ]
- No [ ]
- Yes, only if a scholarship were available [ ]

14. There are certain courses required of all students which have little or no direct relationship to their major subjects. If you had replaced some of these in your curriculum, would your college training have been?

- More valuable [ ]
- Less valuable [ ]
- Unaffected [ ]

15. Some universities make provisions for "Advanced-standing" examinations. This permits the student to meet prerequisites and pursue advanced courses without having to spend time on the more elementary courses. If you had done this, do you think you would have received more benefits from the time spent here?

- Definitely yes [ ]
- Probably yes [ ]
- No [ ]

IN WHAT WAYS AND TO WHAT EXTENT DID YOU OBTAIN SATISFACTORY TRAINING AND/OR EXPERIENCE WHILE IN COLLEGE? After each of the statements below, encircle one code letter to indicate your attitude. Omit those statements that you feel are not applicable in your case.

CODE: S—Highly satisfactory (well pleased)
A—About average (moderately satisfied)
U—Unsatisfactory (disappointed)

<table>
<thead>
<tr>
<th>Statement</th>
<th>S</th>
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<tr>
<td>16. Information and advice on further education.</td>
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<tr>
<td>17. Guidance and counsel on selection of proper job for me.</td>
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<td>18. Training in the vocation in which I am now engaged.</td>
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<td>19. Development of effective health habits.</td>
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<td>20. Preparation for home and family living.</td>
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<td>21. Training for active participation in civic and community life.</td>
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<td>22. Development of high ideals and suitable moral code.</td>
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<td>23. Improvement in ability to undertake and proceed with new tasks.</td>
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<td>24. Development of ability to meet people easily.</td>
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<tr>
<td>25. Preparation for further education.</td>
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<td>26. Training in supervising or directing the activities of others.</td>
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<td>27. Preparation in speaking and writing effectively.</td>
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<td>28. Stimulation of desire to read and appreciate good literature.</td>
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<td>29. Training for effective use of leisure time.</td>
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<td>31. Cultivation of a wholesome appreciation of work.</td>
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<tr>
<td>32. Development of a broad understanding of social and economic problems.</td>
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<tr>
<td>33. Stimulation of esthetic appreciation, particularly for good music and art.</td>
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PLEASE ANSWER THESE QUESTIONS CONCERNING YOUR PRESENT STATUS. Check (x) the most appropriate response, or fill in the blanks. (If you are temporarily in military service, answer the starred (*) items as they applied during your most recent civilian experience.)

34. What is your marital status?

35. How many children do you have?

36. Do you own or rent your home?

37. What was the annual gross income on your first job after graduation?

38. What is the annual gross income on your present job?

39. What is the exact title of your present position?

40. What is the relationship of this position to your field of specialization at the University of Kansas?

41. How well pleased are you with your present job?

42. What is your present relationship to the concern in which you work?

43. To how many recreational, social, and fraternal organizations do you belong (e.g., sports, hobby, recreational groups, and lodges)?

44. In how many community welfare and religious groups have you taken an active role within the past year (e.g., Y.M.C.A., Red Cross, Community Chest, Boy Scouts, Church, or Church school)?

45. To how many civic, political and business groups do you belong (e.g., city planning commissions, Republican or Democratic clubs, Chamber of Commerce, Rotary)?

46. Have you held an elective or appointive public office within the past year? If yes, what office? (__________________________________________)

47. To how many professional and scientific organizations do you belong?
Summerfield Scholarships

at the

University of Kansas

SUMMERFIELD SCHOLARSHIPS at the University of Kansas are available to outstanding high school senior boys in Kansas. Again this year approximately ten Kansas high school graduates will be awarded SUMMERFIELD SCHOLARSHIPS on the evidence of superior ability, character, training, and promise of future usefulness to society.

Awards are made on merit only, without regard to the financial resources of the candidate. The amount of money provided by the scholarship is dependent upon the needs of the individual student. SUMMERFIELD SCHOLARSHIPS supplement the available financial resources of the student so as to cover adequately the necessary University fees and living expenses during the student's four-year course of college study. The scholarships are re-awarded annually to those scholars who maintain the high personal and scholastic standards evidenced at the time of their appointment.

In January, Kansas high school principals will be invited to nominate candidates who most ably meet the stated requirements of the scholarship. These students will meet for a preliminary examination to be given on March 10, 1952, the place to be announced later. Those students making the highest scores on this initial test will qualify themselves for the final examination to be given at the University on April 7 and 8, 1952. From this group as many SUMMERFIELD scholars will be chosen as the scholarship fund permits.

Additional information may be obtained by writing the SUMMERFIELD SCHOLARSHIPS COMMITTEE, University of Kansas, Lawrence, Kansas.
The Summerfield Scholarships Committee,
University of Kansas, Lawrence, Kansas:

This school is pleased to recommend this member of its graduating class for appointment to a Summerfield Scholarship and to submit the attached information and estimate of his qualifications as judged by those who know him best.

Name of Nominee, reversed

Street and Number

City

Date of Birth

Parent’s Occupation

--------------------------

The scholastic rank of the nominee is __________ in a total class roll (both boys and girls) of _______________.

While attending high school he has earned __________% of his expenses by working at _____________________________.

He has shown himself especially proficient in _____________________________.

Also in the following outside activities: _____________________________.

State of health ___________________________; Physical defects ___________________________.

Concerning each trait or characteristic named in the scale, compare the subject with his fellows in the high school. One extreme of the line is designed to represent the highest desirable degree of the trait; the other represents a deficiency of the trait. Place an X on that point of the scale where you judge the subject should be rated. The cross may be located anywhere on the horizontal line.

HONESTY
Has highest intellectual integrity; scrupulously honest in school work.

Well above average

Above Average

DEPENDABILITY
Has keen sense of duty; always reliable in execution of trusts.

Well above average

Above Average

INDUSTRY
Shows steadfastness of purpose; works systematically and steadily.

Well above average

Above Average

UNSELFISHNESS
Devoted to the common good; is generous in personal relationships.

Well above average

Above Average

LEADERSHIP
Shows capacity for getting on with and influencing others; has pronounced initiative.

Well above average

Above Average

In the minds of those responsible for this nomination, the most outstanding reasons for the nomination are as follows:
APPENDIX C-3

The following list contains the names of all commercially-published standardized tests used in the selection of Summerfield scholars, and a brief description of the locally-constructed tests used.

The descriptions of the locally-constructed tests include the nature of the test, its length, and subject. Copies of all these tests are on file with the records of the Summerfield Selection Committee.

The titles of the commercially-published tests are listed in capital letters and are as given by Buros (6) or the Cornell University Test List (43). For tests listed in either or both of these references, no bibliographical reference has been given. Since forms of many of the tests are changed frequently, no attempt has been made to include an identification of the different forms of each test used.

1929

**PRELIMINARY**

Essay; five one-hour tests; history, mathematics, science, and foreign language.

**FINAL**

Discussion; seven questions; ethics, ideals, and culture.

A.C.E. PSYCHOLOGICAL EXAMINATION

MILLER MENTAL ABILITY TEST (No bibliographical reference available).

OTIS SELF-ADMINISTERING TEST OF MENTAL ABILITY.

1930

**PRELIMINARY**

Essay; ten questions; ethics, ideals, and culture.

SONES HARRY HIGH SCHOOL ACHIEVEMENT TEST.

**FINAL**

Discussion; any one of ten given items; logic, ethics, and morals.

Discussion; any ten out of eighteen; quotations of famous people.

A.C.E. PSYCHOLOGICAL EXAMINATION.

COLLEGE APTITUDE TESTS (prepared for the association of Minnesota colleges by the University of Minnesota--not commercially distributed.)

1931

**PRELIMINARY**

Essay; five one-hour; mathematics, science, foreign language, and English.

**FINAL**

Discussion; any eight of sixteen; ethics, morals, and culture.

A.C.E. PSYCHOLOGICAL EXAMINATION

COLLEGE APTITUDE TESTS (See 1930).
1932
Same as 1931.

PRELIMINARY
FINAL

1933
Same as 1931.

PRELIMINARY
FINAL
Discussion; six topics; ethics and morals.
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS
CARNEGIE MENTAL ABILITY TEST.

1934
Objective; thirty questions; general knowledge.
HERMANN-NEILSON TEST OF MENTAL ABILITY
VOCABULARY TEST (University of Minnesota Press, 1932.)

PRELIMINARY
FINAL
Discussion; ten items; ethics, morals, and ideals.
CARNEGIE MENTAL ABILITY TEST.

1935
Discussion; one hour; "Opportunities."
CARNEGIE MENTAL ABILITY TEST
A.C.E. PSYCHOLOGICAL EXAMINATION
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS

PRELIMINARY
FINAL
Same as preliminary for 1931.

1936
Discussion; two hours on any one or two of nine given topics; current problems.
DETROIT ADVANCED INTELLIGENCE TEST.

PRELIMINARY
FINAL
Same as preliminary for 1931.

1937
Discussion; two-hours; "Major Problems Confronting The American People."
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS
ARMY ALPHA EXAMINATION, REVISION
BROWN UNIVERSITY PSYCHOLOGICAL EXAMINATION (Educational Test Bureau, Inc. Minneapolis, Minn.)

PRELIMINARY
FINAL
Same as preliminary for 1931, and the addition of, Discussion; eight questions; current problems.

1938
Short answer; six hours; English, mathematics, science, foreign language, and government and history.

PRELIMINARY
Essay; any seven of sixteen given topics; "Re-writing history."

OTIS MENTAL ABILITY TEST, QUICK-SCORING
CARNEGIE MENTAL ABILITY TEST.

1939

Preliminary Discussion; any ten of fifteen given topics; "Beliefs concerning current problems."
INTERPRETATION OF DATA
APPLICATION OF PRINCIPLES
UNIT SCALES OF APTITUDE.

FINAL Discussion; ten items; "Some difficult dilemmas and what to do about them."
Essay; three-hours; English, mathematics, and social studies.

1940

Preliminary Short answer; three-hour; mathematics, social science, and English.
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS
A.C.E. PSYCHOLOGICAL EXAMINATION.

FINAL Short answer; fifty questions; general knowledge.
Discussion; twelve items; current problems.

1941

Preliminary Essay; three-hour; mathematics, natural sciences, and social sciences.
OHIO STATE PSYCHOLOGICAL EXAMINATION.

FINAL Essay; twenty-five questions; general knowledge.
Essay; twenty questions; current problems.

1942

Preliminary Essay; four-hour; mathematics, natural sciences, history, and social sciences.
A.C.E. PSYCHOLOGICAL EXAMINATION

FINAL MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS
CARNEGIE MENTAL ABILITY TEST
EDISON SCHOLARSHIP TEST (Prepared for use in selecting Edison scholars and not generally distributed.)
Essay; two hour; literature.

1943

Preliminary COOPERATIVE GENERAL CULTURE TEST
A.C.E. PSYCHOLOGICAL EXAMINATION

FINAL Write a complete essay on one of fourteen suggested topics.
Write a brief essay (fifteen minutes) on each of three given topics.
CARNEGIE MENTAL ABILITY TEST.
1944  PRELIMINARY
A.C.E. PSYCHOLOGICAL EXAMINATION
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS
COOPERATIVE GENERAL CULTURE TEST

FINAL
A two-hour essay on one of a number of suggested topics. Essay: four-hour; mathematics, English, history, and science.

1945  PRELIMINARY
HENMON-NELSON TEST OF MENTAL ABILITY
COOPERATIVE GENERAL CULTURE TEST
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS.

FINAL
A two-hour essay on one of a number of suggested topics.
COOPERATIVE GENERAL ACHIEVEMENT TEST: SURVEY

1946  PRELIMINARY
A.C.E. PSYCHOLOGICAL EXAMINATION
COOPERATIVE GENERAL CULTURE TEST

FINAL
A two-hour essay on one of a number of suggested topics.
MILLER ANALOGIES TEST
COOPERATIVE GENERAL ACHIEVEMENT TEST: SURVEY

1947  PRELIMINARY
A.C.E. PSYCHOLOGICAL EXAMINATION
COOPERATIVE ENGLISH TEST
COOPERATIVE GENERAL CULTURE TEST

FINAL
An essay evaluating the selection procedure used for selecting Summerfield scholars.
I.E.R. INTELLIGENCE SCALE CAVD.

1948  PRELIMINARY
Same as 1947.

FINAL
MILLER ANALOGIES TEST
COOPERATIVE GENERAL ACHIEVEMENT TEST: PROFICIENCY
Discussion of famous sayings.

1949  PRELIMINARY
A.C.E. PSYCHOLOGICAL EXAMINATION
MINNESOTA READING EXAMINATION FOR COLLEGE STUDENTS

FINAL
An essay entitled "My Life and What I Expect to do with It."
STRONG VOCATIONAL INTEREST BLANK
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY
COOPERATIVE GENERAL ACHIEVEMENT TEST: PROFICIENCY
1950
PRELIMINARY
I.E.R. INTELLIGENCE SCALE CAVID
CARNEGIE MENTAL ABILITY TEST final
MILLER ANALOGIES TEST
STRONG VOCATIONAL INTEREST BLANK
GUILFORD-MARTIN TEMPERAMENT PROFILE.

1951
PRELIMINARY
COOPERATIVE GENERAL CULTURE TEST
CARNEGIE MENTAL ABILITY TEST
STRONG VOCATIONAL INTEREST BLANK final
MILLER ANALOGIES TEST
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY
YALE EDUCATIONAL APTITUDE TESTS.
ABSTRACT

AN EVALUATION OF THE SELECTION PROCESS
AND THE RESULTS OF THE SUMMERFIELD SCHOLARSHIP PROGRAM AT THE UNIVERSITY OF KANSAS

The Problem

This study was undertaken to ascertain, where possible, how effectively the University of Kansas had carried out its responsibility of administering the Summerfield scholarship program, or, more specifically, to evaluate the selection process in terms of selected criteria and to appraise the administration of the program on the basis of the expressed opinions of the scholars.

Methods and Procedures Used

With minor exceptions the entire sample was selected from the individuals who had been candidates for the scholarship during the years 1929 to 1951; it was divided into three groups. The first group (selected scholars group) consisted of individuals selected and inducted as scholars by the regular selection processes in the odd-numbered years from 1929 to 1947, inclusive; and all those selected and inducted in the years 1948 to 1951, inclusive (current scholars).

The second group (rejected candidates group) was used as a representative sample of the unselected candidates and consisted of all unselected candidates in the odd-numbered years from 1929 to 1947, inclusive and all unselected candidates in the years 1948 to 1951, inclusive, who later attended the University of Kansas as undergraduates.
The third group (graduated scholars group) consisted of all individuals who had graduated as Summerfield scholars from the inception of the program to the date of the study. A questionnaire was presented to this group to obtain their reactions to the scholarship program and the University, and to obtain information concerning their post-college careers.

Appropriate parts of this same questionnaire were presented to the current scholars.

The selection process was partially evaluated by comparing the academic records of the selected scholars group to those of the rejected candidates group. The aspects of the academic records used were: persistency in college—that is, the percentage of each group who graduated from the University of Kansas; and the percentage of each group that maintained minimum Summerfield academic standards (a grade point index of 2.451).

Further evaluation of the selection process was made by comparing the percentage of each group (selected scholars group and rejected candidates group) who had been recognized as leaders in student affairs.

The final evaluation of the selection process was made by comparing, wherever possible, the post-college careers of the graduated scholars to those of other male graduates of the University and, in some instances, to graduates of United States colleges in general. The aspects of their post-college careers investigated were: further study, occupational status,
job satisfaction, marital and parental responsibilities, and civic and community participation.

The scholars' reaction to the scholarship program and to the University was obtained by use of the questionnaire presented to all graduated and current scholars. They were asked about the financial value of the scholarship, the effect of the scholarship on academic marks, and the effect that holding or maintaining the scholarship had on social activities.

In order to obtain the benefits of the scholarship aid, the scholars are required to attend the University of Kansas. Since part of the value of the scholarship is negated if the University does not provide a satisfactory educational experience for the scholars, it was important to obtain a measure of the scholars' satisfaction with the University. The graduated and current scholars were asked to express their degree of satisfaction with certain of their educational experiences at the University, such as: curricular offerings and requirements, faculty competence and assistance, preparation for job success, and preparation for social and family life. Whenever possible, their degree of satisfaction was compared to that of other male graduates of the University.

Appropriate standard statistical methods were used to organize and analyze the data. The statistical significance of the findings was determined by the application of standard tests of statistical significance.
Summary of the Findings
The Selection Program

A very comprehensive selection procedure has been used throughout the history of the program. It has consisted of a nomination process, a preliminary examination, and a final examination. For both examination periods extensive use was made of locally-constructed and commercially-published tests, including personality and interest inventories and including, in the final examination period, interviews with the candidates.

The Scholars

Eighty-one per cent of those initially selected as scholars either graduated from, or were currently students in the University, but only 59 per cent had graduated, or were currently students, with a grade point index equal to or greater than the minimum required of Summerfield scholars. For the rejected candidates group the percentages were eighty-two and sixteen, respectively.

On the bases of the assumption that the rejected candidates group was representative of all unselected candidates, it was estimated that for every scholarship available there were three candidates potentially able to maintain the minimum Summerfield academic standards. Thus it was necessary that many worthy candidates remain unselected; however, this number could have been partially reduced by a more efficient selection
process—one that would have reduced the ratio of two who fail for every three who are successful in maintaining the established minimum academic standard until graduation from the University.

Twenty-five per cent of the selected scholars and five per cent of the rejected candidates were recognized as leaders in student affairs. Of all individuals recognized as leaders in student affairs, approximately one-third were individuals in the rejected candidates group, and approximately one-third were individuals in the selected scholars group. For the selected scholars this was a proportion far in excess of their relative proportion to the entire male student population. However, one would expect recognition as student leaders for more than one out of every four of a group whose selection was based, in part, on the promise of qualities of leadership.

The graduated scholars were more successful than other male graduates of the University in regard to further study and job income, and more successful than the average United States male college graduate in participation in civic and community activities. Their satisfaction with their jobs equalled that of the other male graduates of the University, and they entered occupations in the same relative proportion. Parental responsibilities assumed by the scholars were not significantly different from those of the other male graduates of the University, and their rate of marriage was somewhat lower.
The Scholars' Reactions

The responses of the scholars to the questionnaire indicated that:

Possession of the scholarship for the majority of the scholars was not essential to their attendance at college, but the financial freedom that it offered was an important factor in allowing some of them a greater freedom of choice of schools and curricula, and more advantageous expenditure of effort. For approximately one-fifth of the scholars a college education would have been an impossibility without the financial aid of the scholarship.

For a majority of the scholars the scholarship acted, in one way or another, as a stimulus to a better academic record in college. However, there were some who did not agree with the establishment of a minimum academic standard. The program was not offering the incentive for higher marks in high school that was hoped for by the grantor.

Possession of the scholarship was not shown to be of any significant help in the scholar's social and extra-curricular activities, but it was shown that for a majority of the scholars possession of the scholarship offers no serious restraint to social and extra-curricular life.

Satisfaction was indicated with most of the various aspects of their training and experiences at the University. The most conclusive evidence of overall satisfaction was the
fact that the scholars were almost unanimous in the feeling that their college education had been useful and valuable. By far the greatest number of them said that were they planning their education again, they would return to the University of Kansas and would follow the same curriculum.

Many of the scholars added comments regarding the program and the University. Although in certain specific areas they did have criticisms to make, the general tone of all who commented (with one exception) was one of satisfaction and enthusiasm.

The best overall evaluation that could be made of the program was a description of the typical scholar in that program. He was, six times out of ten, able to maintain the minimum academic standards expected of him (a 2.451 grade point index); he had only one chance in four of being recognized as a leader in student affairs; he was more satisfied with his experiences in the University than other graduates; and when he graduated, he was a more useful and successful member of adult society, except in the matter of marriage, than were other graduates with whom he was compared.