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# THE UNIVERSITY OF OKLAHOMA 

GRADUATE COLLEGE

PERSONAL, SOCIAL AND ACADEMIC CHARACTERISTICS OF SOUTHERN EDUCATION FOUNDATION FELLOWS IN PARTICIPATING COLLEGES AND UNIVERSITIES

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

BY
ALBERTINE BRANNUM HAYES
Norman, Oklahoma
1964

PERSONAL, SOCIAL AND ACADEMIC CHARACTERISTICS
OF SOUTHERN EDUCATION FOUNDATION FELLOWS IN PARTICIPATING COLLEGES AND UNIVERSITIES


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# PERSONAL, SOCIAL AND ACADEMIC CHARACTERISTICS <br> OF SOUTHERN EDUCATION FOUNDATION FELLOWS IN 

PARTICIPATING COLLEGES AND UNIVERSITIES

## CHAPTER I

## INTRODUCTION

In 1937, as a consolidation of the John F. Slater Fund and the Negro Rural School Fund (Anna T. Jeanes Foundation), the Southern Education Foundation was established for the purpose of financially aiding outstanding Negro educators in furthering their education. The Slater Fund received residual funds of the Peabody Education Fund in 1914, and in 1938, the Virginia Randolph Fund monies were added. This latter Foundation has contributed substantial amounts in grant monies to Negro students at the post-master's level. Preference in the awarding of grants was given initially to principals and supervisors, although a teacher at any level would be given consideration.

The primary objective of the Southern Education Foundation Fellowship program has been to extend the leadership of Negroes, through additional educational opportunities in
colleges and universities, in Southern States predominantly. It was assumed that institutions in close proximity to many of the areas from which these students come would not only provide the quality of experiences necessary to bring about improved leadership, but, at the same time, could work in an educational climate conducive to mutual understanding.

Fellows of the Southern Education Foundation Program, although recommended by the State Agents responsible for Education for Negroes in their respective states, must be unconditionally admitted to the institutions in which they plan to matriculate before the full year grants are made. This requirement has been in effect since June, 1961. Although applicants have been accepted primarily in the fields of education, sociology, social psychology and social anthropology, students may be considered in other fields at the discretion of representatives of cooperating university centers.

Since 1959, the Southern Education Foundation has selected qualified Negro students, primarily administrators and potential college teachers, to pursue work toward the doctoral degree in the field of education. Individuals selected for fellowships come from Southern States and have varied educational backgrounds. A majority of these students remain in the respective institutions to which they have been admitted to complete the degree requirements and to have degrees conferred. There is no document available indicating degree of success in pursuing work toward the doctoral degree
or of factors evident which relate to the success of these students. In view of this situation, it appeared the next important step would be a comprehensive survey of records of Fellows in an attempt to identify factors that seemingly contributed to their success.

## Statement of the Problem

The problem of this study was an attempt to identify personal, socio-economic and academic characteristics of Southern Education Foundation (SEF) Fellows which may be contributory toward successful advancement. It was necessary to categorize the Fellows in groups related to doctoral study for the purpose of identifying characteristics. Characteristics were isolated for the three categories of SEF Fellows: those who have earned doctorate degrees, those who were pursuing doctoral programs at the time of the study, and those who have failed to complete the program, respectively. This study suggested certain sub-problems which were:

1. The development or selection of instruments to be used in securing data about the characteristics selected for study.
2. The identification of specific characteristics from the data to be secured.
a. Personal--These characteristics were identified as:
(1) age
(2) sex
(3) marital status
(4) affiliation with professional organizations
(5) positions held prior to fellowship
(6) positions held after fellowship
b. Socio-economic--These characteristics were identified as:
(1) income
(2) parents' occupations
(3) affiliation with non-professional organizations
c. Academic--These characteristics were identified as:
(1) Graduate Record Examination scores
(2) undergraduate grade point average
(3) post-master's grade point average
d. Values--These were identified from the Allport,

Vernon, Lindzey, Study of Values, as:
(1) theoretical
(2) social
(3) aesthetic
(4) religious
(5) political
(6) economic
e. Interests--These were identified as:
(1) vocational
(2) interest maturity
(3) masculinity-feminity of interests
(4) occupational level

It was not intended that this study would cover all characteristics of SEF Fellows, recognizing that other characteristics of personality, temperament and aspirations may influence graduate school success. It was decided to eliminate these variables from this study since temperament and aspiration are difficult to evaluate quantitatively.

## Importance of the Study

A problem is presented when a limited number of grants are available to a large potential group. In the Southern Education Foundation Program, a limited number of grants are available in each of the cooperating university centers. It may be assumed there would be many more applicants than available grants. As such, selection appears to loom as one problem in the awarding of grants to applicants. When the number of applicants exceeds the number of available grants, the applications of some individuals must be rejected. The desires of both the Southern Education Foundation and the cooperating university centers are to make grants and to admit students who are successful in attaining the goals and in fulfilling the primary purposes of the
overall project of the Foundation. It was projected that isolated characteristics of SEF Fellows would provide background information important to the selection of potential SEF Fellows.

This study was to identify characteristics of Southern Education Foundation Fellows. The primary purpose of this investigation was to determine if observable differences existed in performance on tests of graduate ability (Graduate Record Examination--(Verbal--Quantitative) as well as undergraduate grade point averages among SEF Fellows in the three categories previously defined. An attempt was made to ascertain if patterns of differences in graduate grade point average exist among the three groups of SEF Fellows, and, if personal, socio-economic and academic characteristics were unique to each of these groups, respectively.

## Definition of Terms

One of the difficulties inherent in conveying ideas by written communication is that of semantics. Each individual brings his own experiential background to focus on written symbols. Therefore, varied meanings are attached to the same printed material. In order to minimize multifarious interpretations of the material in this study, the following working definitions of terms were used:

Southern Education Foundation: A philanthrophic foundation which has as a major project the making of grants
for post-master's work, primarily in the field of education.
Values: Referred to predominant value patterns in six categories (social, theoretical, economic, aesthetic, political, religious) derived from the Allport-Vernon-Lindzey Study of Values.

Undergraduate Grade Point Average: Referred to the mean grades made by the students in their total undergraduate programs.

Graduate Record Examination Scores: Referred to scores (Verbal and Quantitative) from the Graduate Record Examination which is administered as one factor in admission to some of the cooperating university centers.

Graduate School Success: Referred to the mean grade point average, having earned a doctorate degree, or current enrollment in the program.

Graduate Grade Point Average: Referred to the mean grade point average made by students in the period of study following completion of work toward the master's degree.

Undergraduate Area of Specialization: Referred to major areas of subject specialization at the undergraduate level.

Southern Education Foundation Fellows: Referred to students receiving or who have received grants from the Foundation and who fall in one of the following three categories:

1. Students who have completed requirements for doctoral degrees and upon whom the degrees have
been conferred.
2. Students presently enrolled in the doctoral program and successfully meeting inherent requirements.
3. Students who failed to complete the necessary requirements.

On The Job Success: Referred to evidence of promotion or change in status position of individuals as related to prefellowship positions held.

Income: Referred to evidence of:

1. Income from position in which individual is employed.
2. Income from other sources.

Immediate Criterion: Referred to pre-fellowship status of the participant.

Intermediate Criterion: Referred to classification with respect to current, successful participation in a program of doctoral study.

Ultimate Criterion: Referred to adjustment of an individual to a post-fellowship position in which he is gainfully employed.

## Sources of Data

This study was based upon data collected from institutions and the participating students who were awarded the Southern Education Foundation Fellowship during the years

1958-59 through 1962-63. Records from colleges in which these participants completed undergraduate work, and the cooperating centers in which they pursued post-master's programs were used. Questionnaires, the Allport, Vernon, and Lindzey Study of Values, and the Sims SCI Rating Scale were used in securing personal data; academic records of SEF Fellows and GRE scores were used in securing academic data. The Strong Vocational Interest Blank was administered to determine interest characteristics of SEF Fellows.

## The Sample

TABLE 1
CATEGORIES OF MALE AND FEMALE SEF FELLOWS

| Male | Female | Categories | $\%$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| 27 | 9 | Doctoral degrees conferred | 47.57 | 36 |
| 21 | 7 | Full-time students and com- <br> pleting study | 34.44 | 28 |
| 6 | 9 | Failed to complete doctoral <br> study | 18.99 | 15 |
| 54 | 25 |  | 100.00 | 79 |

Of the eighty-six men and women who were granted fellowships during the five year period from 1958 to 1963, twenty-six were female and sixty were male. From this group, the writer was unable to contact five, one female and four males, either through last known addresses or schools attended by these individuals; two of the male group contacted
indicated they did not wish to participate and one, after three written and two verbal requests did not return tests or questionnaire. Thus, the findings in this study are based upon $92 \%$ of the total population. The seventy-nine participating subjects were divided into three categories--(1) those who earned doctoral degrees, (2) those who were currently engaged in the SEF Program at the time of this study, and (3) those who had failed to complete the study in participating college and universities as shown in Table 1.

## Limitations

This study was limited to SEF fellows participating in the program during the period from 1958-63 at the institutions indicated as follows:

University of Arkansas
University of Florida
University of Kentucky
University of North Carolina
University of Oklahoma
University of Tennessee
University of Texas
George Peabody College for Teachers
North Carolina College

## Procedure

This study utilized the normative-survey method of
research as described by Good. 1
The literature and terminology of descriptivesurvey investigations include survey, normative, status, and trend. Descriptive studies may include present facts or current conditions concerning the nature of a group of persons, a number of objects, or a class of events, and may involve the procedures of induction, analysis, classification, enumeration or measurement. . . . ${ }^{2}$

The initial step in securing data for this study was a letter to Dr. J. Curtis Dixon, Executive Secretary of the Southern Education Foundation, explaining the nature of this investigation and enlisting his aid in securing the cooperation and participation of the Cooperating University Centers. (See Appendix A). When this initial phase of the study was completed, letters were sent to the Coordinators of the Cooperating University Centers seeking academic records of the three groups of SEF Fellows listed in the sample. (See Appendix B). The information sought included:

1. GRE Scores (Verbal and Quantitative), where available.
2. Grades earned in the Cooperating University Centers.
3. Classification of students as indicated in the sample.

At the same time, letters were sent to the participants in the SEF Program enlisting their cooperation in this

[^0]investigation. (See Appendix C). When replies had been reviewed, a second letter was sent to each person asking him: (1) to complete a questionnaire (See Appendix D) constructed to get biographical information on each individual, (2) to self-administer the Allport-Vernon-Lindzey, Study of Values, the Strong Vocational Interest Blank and the Sims SCI Scale. Follow-up letters were sent to persons included in the sample to encourage early return of materials. (See Appendix E).

When the undergraduate institutions from which individuals included in the sample were identified, letters were sent to those institutions asking for the grades earned by those individuals (See Appendix E). Undergraduate and graduate grade point averages were determined using a four point scale.

| A | 4 |
| :--- | :--- |
| B | 3 |
| C | 2 |
| D | 1 |

Completed questionnaires were the bases for personal and socio-economic data. The responses were categorized according to age groups, sex, marital status, income, positions held before and after fellowship, affiliations with professional organizations, affiliations with non-professional organizations, and parental occupations. Tabulations were made in keeping with the categories above and summarized in
percentages.
GRE Scores, undergraduate grade point averages and graduate grade point averages of SEF Fellows were categorized with respect to age, sex, undergraduate majors and graduate majors. Comparisons were made in terms of averages and per cents to see if patterns exist for the three groups included in the study. The three tests taken by the three categories of SEF fellows in the study yielded the following data. The Study of Values provided data on which the relative prominence of each of six value areas--social, theoretical, economic, aesthetic, political, and religious--was evident for each individual. These value patterns were identified in terms of high and low scores established for male and females by the authors of the Study of Values. In the study of Values, a score on one of the values is considered definitely high or low if it falls outside the limits below. They are as indicated below:

|  | F | M |  | F | M |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Theoretical | $31-41$ | $39-49$ | Social | $37-47$ | $32-42$ |
| Economic | $33-43$ | $37-48$ | Political | $34-42$ | $38-47$ |
| Aesthetic | $37-48$ | $29-41$ | Religious | $37-50$ | $32-44$ |

The Strong Vocational Interest Blank yielded scores for occupational interest group patterns and non-occupational scores. The occupational group patterns of interest for men were Group I, Artist, Group II, Engineer, Group IV, Mathematics-Science. Teacher, Group V, Y.M.C.A. Director,

Group III, Senior C.P.A., Group IX, Sales Managers and Group X, Advertising Man; for women, Group I, Artist, Group II, English Teacher, Group III, Social Worker, Group IV, Social Science Teacher, Group VII, Business Education Teacher, VIII, Elementary Teacher, Group IX, Home Economics Teacher, Group X, Physical Education Teacher (H.S.) and Group XII,

Mathematics-Science Teacher. The non-occupational scores were interest maturity, occupational level for men and masculinityfemininity for women. These results were categorized in terms of ratings for occupational interest patterns. The Sims SCI Scale was used as an index to social class status of subjects in this study.

The criterion variable used to determine ultimate success was the position in which the individual was gainfully employed at the time of the study. Thorndike ${ }^{3}$ distinguishes between immediate, intermediate and ultimate criteria. The intermediate criterion was the classification of the Fellow with respect to current, successful participation in a program of doctoral study. The immediate criterion was--prefellowship status of the participant, and the ultimate criterion was on-the-job success as indicated by advancement in position during the post-fellowship period.
$3_{\text {Donald E. Super, Appraising Vocational Fitness (New }}$ York: Harper and Brothers, 1949), p. 34.

## Organization of the Study

The first chapter of the study includes an introduction and an origin of the problem, statement of the problem, importance of the study, limitations, definition of terms, sources and treatment of data, and organization. Chapter II includes a discussion of related literature. Chapter III is devoted to a description of instruments. Presentation and discussion of data are included in Chapter IV, and the summary and conclusions in Chapter V.

## CHAPTER II

## SURVEY OF RELATED LITERATURE

In reviewing literature about indicators of success of graduate students, it becomes apparent that research on this problem is relatively recent. It was during the last two decades that research has been undertaken to determine designs for predicting graduate school success. Few studies have assumed the role of determining what factors apparently contribute most to success of graduate students who have completed a specific program, who are successfully working toward completion of a program, or characteristics of students who are unsuccessful, and factors contributing to inability to succeed.

In a study by Stuit and Peterson, ${ }^{4}$ an effort was made to determine the efficiency of specific indices in determining the effectiveness of certain predictive indices of scholastic success in the State University of Iowa Graduate College. In describing the population of this study, the writer

[^1]states:

> All cases of students taking the Graduate Record Examination (hereafter referred to as GRE) in 1940 and 1941 for which data on both the undergraduate record and GRE test scores were complete were included in the study. None of the students had more than 15 hours of graduate work and the large majority had completed no graduate work whatever at the time they took the GRE tests. For the "General Study" 411 cases were available, comprising 59 per cent of all graduate students beginning work (excluding summer terms) in the university in the year 1940-41. . . .

The criterion of scholastic success utilized in this study was the graduate grade point average. This graduate grade point average was computed using a 4 point scale for all graduate work completed at the time the study was undertaken. In the majority of cases, this meant a graduate grade point average based on two or three semesters of work. This latter statement points out a weakness in comprehensiveness of graduate work included in the study. Stuit and Peterson concluded:
. . . the undergraduate grade point average and GRE Advanced Examination constitute effective predictive indices of success in the graduate college as a whole. The combination of undergraduate grade point average and GRE Advanced Examination constitutes the best prediction "team" of two variables. The GRE Verbal Test, corresponding rather closely to scholastic aptitude tests of ten used on the undergraduate level, also does a fairly effective job of predicting scholastic success in the graduate college. 6

The findings concerning the relationship
$5_{\text {Ibid. }}$, p. 267.
$\sigma_{\text {Ibid. }}$, p. 279.
between various personal history data items and graduate success confirm those generally found on the undergraduate level. The best students, on the average, are those who are the youngest, who have made no change in field or interest, who came directly from undergraduate college to graduate ${ }^{\text {college }}$ and who graduated from a Type II College. 7 Some of the good students were in the older groups, delayed their entrance to graduate college, changed their field of interest and did not graduate from a Type II College. For this reason, care should be exercised in applying the findings of this part to practical problems of admission and guidance of students. Each case should be decided on its own particular merits. 8

We ber, Brink and Gilliland's' study reported exacting the value of several different factors for predicting success in graduate school. Undergraduate scholarship marks in the field selected for graduate specialization and the level of undergraduate work taken in the field selected for graduate specialization were factors determined as contributing to success in graduate school.

The Scholastic and ACE Scores of three-hundred nineteen graduates of the College of Liberal Arts, Northwestern University, who had completed nine hours of graduate work were used as a basis for the study. These subjects were enrolled in the Humanities, Physical Sciences and Social

[^2]Sciences. The criterion of success was again the grade point average obtained in graduate work. The undergraduate grade point average was the best predictor of graduate grades in this study, although undergraduate major average had no superiority over overall undergraduate grade point average. . . . Moreover, the scores on the psychological examination (ACE) were not related too closely to marks received in the major as they were to the average as a whole. . . .

In this study, Jenson described the chief problems:
(1) To investigate the differences in group performance on tests of graduate aptitude and undergraduate quality point average to determine whether or not separate prediction formulae were necessary for differences in groups of graduate students; (2) to ascertain the extent to which the groups differed in graduate quality point average; (3) to determine which predictors singularly and in various combinations, gave maximum accuracy in forecasting first year graduate scholarship; (4) to determine and compare the predictive power of the commonly used undergraduate quality point average with that of tests for accuracy in forecasting grade-earning power of each group of first year graduates; and (5) to develop a set of devices whereby the results of the study could be applied to actual problems of graduate student selection which are faced daily by educational administrators. 1

Jenson used subjects from Education, English, Chemistry and Psychology for departmental samples. Each sample included approximately fifty first year graduate students with complete undergraduate records and test scores. The
${ }^{10}$ Ralph E. Jenson, Predicting Scholastic Achievement of First Year Graduate Students, "The University of Pittsburgh Bulletin, XLVI (June, 1950), pp. 305-13.
${ }^{11}$ Ibid.
graduate work of these students was taken in one field of study listed above at the University of Pittsburgh. Undergraduate quality points, scores from the Miller Analogies Test, the Iowa Mathematical Aptitude Test, and the Cooperative Reading Comprehension Test, Higher Form C2 were used as predictive variables.

Because of varied patterns of ability and performance within departments, Jenson's conclusions indicated the need for a better approach to departmental studies. He further suggested that empirical tests should be given to ascertain differences in group performances on the predictive and criterion variables. He found the graduate quality point average could be predicted reasonably well and that the Pittsburgh Examination predicted graduate grade point average as well or better than the longer tests of the Graduate Record Examination.

Travers and Wallace ${ }^{12}$ designed a study to assess the potentialities of the graduate student based upon the criterion of success in graduate school. All data were collected in the Horace H. Rackham School of Graduate Studies of the University of Michigan. The major reasons given for interest in assessing student potentialities were the need for improving selection procedures and to be able to determine how far

[^3]a student should continue graduate work.
The Academic Aptitude Test, Graduate Level was administered to 1,111 graduate students during the academic year, 1948-49. About one-half of these students were in their first year of graduate work. Foreign students whose undergraduate degrees had been earned in non-English speaking countries were eliminated, and 484 cases were included in the study. Because of small numbers of subjects, biological science, library science and miscellaneous groups were also eliminated from the study.
. . . It was demonstrated that if success is measured by grades then it is possible only in certain fields to make predictions of success. In the present case, engineering lacked homogeneity from one semester to the next. However, it does not imply that graduate schools should from time to time check on the stability of average grades since they are the basis for awarding degrees. If grades are unstable from one semester to the next then any degree awarded on the basis of them is purely arbitrary. 13

The predictive value of a test designed to give a verbal-ability and a numerical ability score was studied. It was found, however, that the test did not give test predictions when this type of partitioning was used. The evidence indicated that it would be better to partition the test into a vocabulary and a reasoning section and to weigh these parts differentially for making prediction in various fields. This finding is of importance in view of the fact that two of the major testing organizations have announced plans for providing a verbal ability and numerical ability test for, the same level of difficulty as the present test. 14
$13_{\text {Ibid }} .$, p. 379.
${ }^{14_{\text {Ibid }}}$.

Hartock ${ }^{15}$ in an investigation of factors related to the success of pre-medical students reported:

Scholarship and intelligence seem to be the most reliable criteria of success of pre-medical curriculum and in gaining admission to medical school. Low high school and pre-medical scholastic averages typically predict similar records in medical schools; high averages likewise predict high records. Persons with other than "clear" academic records have little chance of admission. No subject of this investigation who had been dropped from the university for poor scholarship has yet gained admission to medical school, and only 3 per cent of those dropped from the pre-medical curriculum for poor scholarship have gained admission. 16

Shelton and Fishback ${ }^{17}$ reported on a survey conducted at Southern Illinois University in the fall of 1951. The authors purported to show what appears to be a new trend in admitting applicants to graduate study. Data supporting this new trend were revealed in a survey of the literature and the graduate programs of admission in fifty-one selected colleges and universities. The results of the study may be summarized thus:

1. There is a decided lack of information on prognosis of success in graduate study in education. The American Council on Education, as well as other agencies in the field, makes

[^4]clear that "few, if any, final and complete answers have been found to problems in prognosis of success in graduate study, " but the answers which have been found should be helpful to counselors and others in the field.
2. More than eighty-five per cent of the institutions represented in the study accept the standard baccalaureate degree as sufficient evidence of successful completion of undergraduate study and satisfactory preparation for admission to graduate study in education. More than eightyfive per cent of the institutions represented may admit to graduate study in education applicants who--
(a) possess the standard baccalaureate degree,
(b) have at least a "C" average in undergraduate work,
(c) have an acceptable distribution of undergraduate courses,
(d) fulfill character requirements, and
(e) fulfill health requirements.

Because of the wide variation in academic standards, not only in high schools and undergraduate schools but also in graduate schools, and because of the inaccuracy of tests and other instruments of prognosis of success in graduate study, it is difficult to follow any other admission practice.
3. More than ninety per cent of the colleges and university centers survey make a clear distinction at both the master's and doctor's level between admission to graduate study and admission to candidacy for a graduate degree. More than ninety-five per cent of them make a clear distinction between admission to graduate study and admission to candidacy for the doctor's degree. While more than eighty-five per cent of the colleges and universities accept the standard baccalaureate degree as sufficient evidence of satisfactory preparation for admission to graduate study in education, more than ninety per cent refuse to accept it as sufficient evidence of satisfactory preparation for admission to candidacy for a graduate degree. In order to be admitted to candidacy for a graduate degree at both the master's and doctor's levels, more than eighty-five per cent of the institutions set up requirements in addition to those set up for admission to candidacy for the doctor's degree to be granted.
4. A majority of the colleges and universities responding require actual demonstration on
the part of the applicant of ability to do the quality of graduate work desired before admission to candidacy for a graduate degree is approved. Use of this criterion does not imply that tests and other prognostic instruments of success in graduate study cannot be helpful for admission purposes when used correctly and with caution. However, if an applicant can do this quality of graduate work desired, then there can be little question about his participation in graduate study, so long as graduate degrees are conferred primarily on the basis of marks received in graduate courses. ${ }^{1}$

Practically all of the writers in the area of prognosis of success in graduate study recommend the use of combinations of factors to predict scholastic success. All recognize the limitation involved in the use of a single criterion upon which to base the prognosis; of success in undergraduate or graduate work. 19
: Variations were found among fifty-one selected colleges and universities in admission to graduate study and/or admission to candidacy for a graduate degree. Requirements which sometimes must be met before an applicant is admitted to candidacy for a graduate degree are described below:
(1) admissioñ to graduate study,
(2) the presentation of an acceptable pattern of previous study (sometime including the possession of a minor or major in the field of specialization),
(3) the passing of examinations,
(4) the demonstration of proficiency in
(a) the use of English and (b) writing, and
(5) the actual demonstration of ability to do the quality of work desired. 20

18
Ibid., pp. 365-67.
${ }^{19}$ Ibid., p. 372.
${ }^{20}$ Ibid., p. 375.

The importance of data to support predictions approximating success in graduate school is all the more significant in view of the universality of education at the elementary and secondary school levels. Some state colleges and universities follow almost the same pattern in admission policies.

In discussing the desirability of selection procedures in a graduate school of education, Mary V. Seagoe said:

Even when the prediction of success has no suggestion of selective admission, it has guidance value for wise selection and timing as well as for choice of major. But in education graduate work, a case may be made for a high degree of selection as well. (1) The training being of fered is of a professional rather than a general nature. Though the democratic acceptance may dictate higher education or even graduate work of some kind for all, it does not imply an open door to all comers regardless of proficiency in a specific field. (2) Graduate students, particularly doctoral candidates, are the key personnel of ten years hence in positions of leadership in colleges and in public schools. To fail to select is to sacrifice the future of American education. . . . 21

In September, 1941, the Regents of the University of California provided for the granting of the Doctor of Education Degree on the Los Angeles campus. Prior to that time, graduate work in education had been limited to the granting for the Master of Education Degree. Utilization of the National Teachers' Examination followed work of small departmental Committees on Examinations which supervised the

[^5]preparation of objective-type examinations in philosophy of education, history of education, educational psychology and administration for advancement to doctoral candidacy. The faculty of the School of Education became interested in the National Teachers' Examination and took advantage of the opportunity to collect data on doctoral candidates from the inception of the program. Results indicate a trend toward selectivity at the point of admission with less emphasis on a qualifying examination at the end of formal course work. Capps and DeCosta ${ }^{22}$ undertook a study at South Carolina State College to test the reliability of the Graduate Record Examination, the National Teachers' Examination and undergraduate grade-point average to graduate school success.

The conviction underlying this purpose was that scores on these examinations should be tested rigorously before they are employed as one of the bases for admission to the School of Graduate Study. 23

The results of their study revealed that the best predictor of graduate school success in education was the Advanced Education Test of the Graduate Record Examination. The correlation between graduate school success and the other predictor variables of the study ranged from 0.29 to 0.49 .

[^6]Durnall's ${ }^{24}$ study to test the hypothesis that the Miller Analogies Test was effective in predicting success of graduate students enrolled in education at Oregon State College involved 153 students who had completed at least 30 hours of graduate work in education. The MAT was administered to all students who applied for admission to the Graduate School with majors in education.

The raw scores on the MAT ranged from 15 to 87 with a mean of 49.79 and a standard deviation of 13.07. The MAT scores were correlated with obtained grade point averages in education and a coefficient of .21 was obtained. It was possible to raise the coefficient by correlating raw scores on the MAT with the rank order of grade point averages. This resulted in a correlation of .50 .25

The mean MAT score of nine persons who had received the ED. D. Degree was 56.44 while the mean MAT score of 75 students who obtained the ED. M. or M. S. Degree was 48.56. This difference was significant at the five per cent level of confidence. ${ }^{26}$

Durnall continued:
It would seem that, while there is some relationship between MAT scores and grade point average in graduate work in education, the degree of relationship is not particularly high. There is evidence to indicate that a very high score on the MAT may not be as indicative of scholastic success in education courses as a score closer to the mean. 27
${ }^{24}$ Edward J. Durnall, Jr., "Predicting Success for Graduate Students in Education," School and Society (October, 1954), LXXXX, p. 107.
${ }^{25}$ Ibid., p. 107 .
${ }^{26}$ Ibid.
${ }^{27}$ Ibid.

Hountras ${ }^{28}$ employed the Miller Analogies Test to differentiate between probationary and non-probationary foreign graduate students at the University of Michigan. The 101 students in the sample came from Africa, British Empire, Europe, Far East, Latin America and the Near East. Means were given for probationary and non-probationary students by geographic areas and by academic areas.

Hountras stated:
. . . It may be concluded that the two groups of foreign students in our sample, probationary and non-probationary, differed significantly in their performance on the MAT. A further breakdown of foreign students according to native country and field of concentration also proved helpful in revolving additional significant differences between probationary and non-probationary students. 29

Rupiper ${ }^{30}$ in "An Analysis of the Graduate Record
Examination for Doctoral Majors in Education" at the University of Oklahoma presented evidence of the following results:

1. The GRE-quantitative and GRE-Advanced Education mean scores of students in education at the University of Oklahoma were significantly higher than the national mean scores for the first-year graduate students.
2. There is a significantly high positive relationship between the GRE Test scores and the GRE-Advanced Education scores.
${ }^{28}$ Peter T. Hountras, "The Use of the Miller Analogies Test in Predicting Graduate Student Achievement, " College and University (Fall, 1956), pp. 63-70.
${ }^{29}$ Ibid., p. 69.
${ }^{30} 0$ mer J. Rupiper, "An Analysis of the Graduate Record of Examination for Doctoral Majors in Education," Peabody Journal of Education (March, 1959), XXVI, pp. 279-85.
3. Successful graduate students yielded a significantly higher mean score than nonsuccessful graduate students on GRE-Verbal and GRE-Advanced Education.
4. Only chance or no relationship resulted when the GRE and DQE Variables were correlated with master's degrees obtained at this university and with thesis written as part of the requirement for the Master's. 31

Chase 32 compared the undergraduate record of Hunter College graduates who later earned doctorate degrees with a random sample of records of graduates enrolled at the time of the former group. This comparison was an effort to determine the quality of students who received the doctorate degree with those in the random sample and to see if there were significant differences as related to the disciplines in which the doctorate degrees were earned.

The undergraduate records of 294 students from one college who subsequently earned the doctorate degree were significantly better than those of a comparable random sample from the same classes, both for the first term and for the cumulative average of all their college work. 33

There is no significant difference between the college averages of the different fields as defined by the Office of Scientific Personnel, except for Education, in which the average was considerably below that of the other group with a highly significant difference. The distribution of the undergraduate bimodal curve with

31 Ibid., p. 284.
${ }^{32}$ Edith B. Chase, "A Study of Undergraduate Records of Graduates From Hunter Colleges Who Later Earned Doctorate Degrees," Journal of Experimental Education, XXVI (September, 1960), p. 49.

$$
33_{\text {Ibid. }} \text {, p. } 60
$$

two modes, one of the larger group the same as that of the random sample and a second made for a smaller group the same as that of the other factor. 34

Michael, Jones, and Gibbons 35 sought to ascertain the extent of the relationship between scores on the quantitative and verbal sections of the Graduate Record Examination (GRE-Q and GRE-V) and standing in each of the three parts of the Background Examination of the Graduate Survey Examination as well as between scores on the Natural Science, Social Science and Humanities Parts of the Area Tests of the GRE and the level of performance on each of the same three criterion measures of achievement. It was thought that if the predictive validities or the subjects of GRE were sufficiently high, it could possibly be substituted for the Background Examination in selection of graduate students. 36

For a sample of 41 graduate students at the University of Southern California who took the GRE prior to completion of the Background Examination, predictive validity coefficients as well as intercorrelations among the various tests. . . . (only scores on the first attempt at the BE were considered, although students are given a second chance if they fail the first time). . . . The restriction of range in the instance of GRE-Q and GRE-NS was substantial, since in terms of the national norms the mean and standard duration of scaled scores are approximately 500 and 100, respectively. Thus, the predictive validities (none of which was significant at the .05 level) would seem to represent minimal estimates. When 100 was taken as an estimate of the standard deviation of an uncurtailed group of examinees statistically significant validities of $.55, .42, .32$, and, .31 were obtained for GRE-Q, GRE-V, GRE-H and GRE-NS, respectively, relative to the criterion of scores in the subtest in physical
${ }^{34}$ Ibid., p. 61.
35 Ibid.
36 Ibid., pp. 859-61.
chemistry and a coefficient of .33 was realized between scores on the GRE-NS and standing in the subtest in inorganic and analytical chemistry. 37

It was concluded:
. . . It is apparent that the GRE should not be used in place of the Background Examination of the Chemistry Department. Although no data were available, the advanced test of the GRE series in the subtest (sic) matter field of chemistry would seem to be a more nearly appropriate choice in view of the fact that in previously cited study the Graduate Survey Examination (the items of which relate greater emphasis upon specific aspects of achievement in the physical sciences and mathematics) was more predictive of success in the BE than were scores on those portions of the GRE investigated. 38

In a study to determine the validity of a battery of tests (GRE-Verbal, Quantitative and Area Tests) to predict the performance of doctoral candidates on a comprehensive series of examinations which partially determine admittance to the doctoral program in the School of Education, University of Southern California, Law 39 included 46 students in the sample. These Doctoral Candidates in the School of Education at the University of Southern California had records of five scores from the GRE. The total $\mathrm{N}=46$, of which 24 failed and 22 passed. Means, differences between means, and significant differences between the pass and fail groups were

> 37 Ibid. , p. 861.
> $38_{\text {Ibid. }}$.
${ }^{39}$ Alexander Law, "The Prediction of Ratings of Students In A Doctoral Training Program," Educational and Psychological Measurement, XX (Winter, 1960), p. 847.
completed on verbal quantitative scores of the GRE and on area tests in Natural Sciences, Social Sciences and Humanities and scores on criterion measures: scores on Administration, Curriculum, Educational Psychology and Guidance and History and Philosophy. Law used the regression equation for the best estimate of total comprehension scores: $C=.1633 \mathrm{~V}+.1070 \mathrm{Q}-.0482 \mathrm{NS}+.0581 \mathrm{HU}+.1849 \mathrm{SS}-10-65$.

## Summary

A summary of the results of studies reviewed in this chapter give some ideas of the situation related to predicting graduate school success:

1. The undergraduate grade point average, the major grade point average and GRE Advanced Examination constitute effective predictive indices in the graduate college as a whole.
2. Undergraduate grade point average, intelligence test scores, average undergraduate grades in the field selected for graduate study are factors which contribute to success in graduate school.
3. The controversy as to the effectiveness with which predictions of graduate school success may be made utilizing the Graduate Record Examination.
4. Evidence indicates that the division of the test into a vocabulary and reasoning section and to
weight these parts differentially for making prediction in various fields would give a better prediction of success.
5. Scholarship and intelligence appear to be the best predictors of success.
6. The Graduate Record Examination and Miller Analogies Test are often used as part of qualifying examinations for admission to candidacy for an advanced degree.
7. There is a distinction between the admission to graduate work and candidacy for a degree.
8. Genuine concern has been expressed by many writers about selection of graduate students.

## DESCRIPTION OF INSTRUMENTS

In an attempt to determine discriminatory factors it became apparent that varied instruments were necessary. Subjects selected for inclusion possessed enough communality of experiences to justify distinct categorization of them as unique groups. Common to all subjects was the experience of having, at some time, been awarded a Southern Education Foundation Fellowship for study on the post-master's level.

Many universities use performance on the Graduate Record Examination as an indication of the individual's ability to achieve academically on the doctoral level. One result of this fact was some of the subjects in this study shared another common experience; that of having at various times taken the Graduate Record Examination (verbal and quantitative). In as much as these test results were available, using the results from this instrument in isolating factors which may contribute to academic achievement was deemed desirable.

The Graduate Record Examination consists of two parts; Part I is a series of eight tests--one in general verbal
vacility and one in each of seven subject matter fields. Part II is an advanced test in a field selected by the student.

Since no data were available on vocational interest patterns of SEF Fellows, it was necessary to select an instrument appropriate to the level of educational attainment of this group. Among instruments to determine vocational interest patterns, the Strong Vocational Interest Blank was designed to differentiate between occupational groups. It was selected because it had been developed for use and standardized upon college students and adults who were employed in the professions and in business. The subjects in this study more nearly approximated the college students and adults upon whom the instrument was standardized. Forms were available for both men and women. The test could be self administered.

The Study of Values was standardized on a college population of 8,369 students primarily from liberal arts colleges and pursuing a program of liberal arts study. The mean reliability coefficient using a "z" transformation was 0.90 where the split-half method was employed. The final item analysis utilizing 780 subjects showed a positive correlation significant at the 0.01 level for each item with a total score for its value. The mean repeat reliability coefficient using the "z" transformation was 0.89 for the one month study and 0.88 for the two month interval.

The third instrument was selected to provide bases for an index to social class status. The Sims SCI Occupational Rating Scale can be self-administered and requires little of the mature individual's time. It consists of forty-two occupations, representative of different levels of socioeconcmic status. It was designed for use with high school and college students, and adults. The subject taking the test indicates whether individuals following vocations in the test belong to the same class he belongs or in a higher or lower class.
. . On the surface, the scale appears to be concerned only with ratings which people give the occupations. Actually, through experimentation, the social prestige of the forty-two occupations used in the Scale has been already determined-ie., people who label themselves as belonging to the upper class have been found to accept those who follow other occupations as belonging to their own class; people who identify themselves as middle class accept those who follow other occupations; and those who claim to belong to the same working classes accept still others. Furthermore, the occupations have been so selected that they represent approximately equal steps along a scale of prestige from the lowest (a garbage collector) or the $\frac{40}{40}$ highest (a United States Ambassador). . . . 40

The score on the SCI Scale is an expression of the median position which the subject assigns himself along the occupational continuum. When there are no D's the corrected score may be found readily by use of Table I, Scores Corrected for D Responses. To use this table, it is necessary to obtain first the ( $L+\frac{S}{2}$ ) score and to count the D's. Omitted items or items with two or more letters

[^7]encircled should be treated as D's.
The corrected score is found by locating the ( $L+\frac{S}{2}$ ) score in the left-hand column and the $D$ in the upper horizontal column and reading from the body of the table the score corresponding to these two. 41 :

Scores on the Scale may range from 0 to 42. The higher the score the higher the position the subject assigns himself in the social structure. The actual range of the scores which has been collected to date is from 3 to 37

The Table 2 makes it possible to translate scores into social class levels. For example, scores of 1 to 6 indicate identification with a social class, called the lower working class, to which in the opinion of the judges, people who follow occupations such as garbage collector, farm hand, cook for a family, and cotton-mill worker generally belong. Scores of 7 to 12 indicate identification with the working class. - . The remaining scores are interpreted in a similar manner. ${ }^{4}$

As the Scale was developed, a list of 100 occupations was prepared on the basis of two criteria--1. Occupations were chosen so as to be reasonably representative of all of the socio-economic levels, ranging from unskilled and casual labor through skilled labor, white collar, and semiprofessional workers to professional men and managers and owners of big businesses; and 2. Oecupations were chosen which were considered to be so widely known that most people would know something about them. Six-hundred forty-six male and female judges, including high school students, college
${ }^{41}$ Ibid., p. 3.
$42_{\text {Ibid. }}, \mathrm{p}: 3$.
43 Ibid., p. 4.
students and adults from many professional people, were asked to rank the professions anonymously and to indicate whether they belonged to the upper, middle or working class.

An item analysis and elimination based upon these judgements was then made as follows:

1. The percentage of D's (doubtfuls) for each occupation was determined. After inspection of these results it was decided arbitrarily, to discard all occupations which more then ten per cent of the judges checked as doubtful.
2. The validity of the remaining occupations was determined by making chi-square tests of the significance of the differences in the percentage of persons from increasing social classes--upper, middle, working--who placed the occupations below them, and in the percentage from decreasing classes--upper, middle, working--who placed the occupations above them. No occupation was retained which was significant to less than the five per cent level of confidence; actually all but seven of those finally used were significant to a one per cent level or better. 44

Each of the remaining items was given a score value which was the difference between the per cent of the total group of judges who placed the occupation above them, with the sign of the greater per cent. These scores, which ranged from a theoretical 100 to -100 , had an actual range of 90 to -89. This score is essentially an expression of the relative social prestige of the occupation. 45

The consistency of results of studies cited in the manual supports the contention that the Scale does measure class identification.

The full utilization of one's potentials, the goaldirectedness of an individual, the enthusiasm and

[^8]perserverance with which each task is approached and difficulties, if any, analyzed and surmounted are reflections of the individual's value system. It can be assumed that in academic achievement as in other things, success or failure is dependent, to a great extent, upon the particular set of values an individual sees as important in his life. It was necessary to select an instrument which would provide bases for value patterns of subjects in this study. Careful reading of test publishers' descriptions of instruments purporting to measure personal values, through study of critiques of these instruments and examination of copies of instruments procured for study revealed few such instruments available among those found and in the literature; the Allport-VernonLindzey, Study of Values emerged as one of the most suitable instruments available for isolating individual values. For these reasons and other specific information to follow, the Allport-Vernon-Lindzey, Study of Values was chosen to identify value patterns of subjects in this study.

The Study of Values has as its objective to measure the relative importance of six basic interests or motives in personality: the theoretical, economic, aesthetic, social, political, and religious. The classification is based upon Eduard Spranger's Types of Men which elucidated the point of view that the personalities of men are best known through a study of their values or evaluative attitudes. The test was designed primarily for use with college students or adults

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with equivalent educational background. It is selfadministered.

Perhaps the most direct and convincing evidence for the validity of the scale comes from examining the scores of groups whose characteristics are known. Thus, common experience leads us to expect that women will on the average be more religious, social, and aesthetic than men. We likewise expect students of engineering by and large to stand relatively high in theoretical and economic values. . . . 45

Tables of special norms for various groups correspond with the expectation cited above.

It is recognized that norms for instruments used in this study have not been established for Negro subjects. In as much as these instruments have been used in numerous studies and many institutions, excepting Sims SCI Occupational Rating Scale, they were deemed most desirable from instruments suitable for use in this study.

The combination of test scores and personal data from the questionnaire constructed by the writer provides bases discriminating the personal characteristics that may be related to achievement of SEF Fellows. The Graduate Record Examination gives insights in verbal reasoning, reading comprehension and arithmetic and algebraic reasoning; value patterns result from the Study of Values; vocational interests are derived as a result of the Strong Vocational Interest Blanks; the Sims Index to Social Class gives a measure of

[^9]class identification, and the questionnaire elicits personal data not available from other sources. These instruments contribute individually and as a group to the composite picture desired in enumerating characteristics of SEF Fellows included in this study.

The questionnaire constructed by the writer was designed to elicit certain vita, educational employment and organizational affiliations and economic information about subjects not available through other instruments and/or descriptive resources available. It was to supplement other information in efforts to get a composite picture of subjects included in this study. Only information pertinent to the study was included in the questionnaire. The test scores and information from the questionnaires will form bases for presentation and discussion of the chapter to follow.

## CHAPTER IV

## PRESENTATION AND DISCUSSION OF DATA

This investigation is the result of efforts to determine some of the characteristics which contribute to successful Southern Education Foundation Fellows. Many individuals are concerned about the inequalities and differentiation in undergraduate study and grades; there are generalizations to be made in view of the fact that the only requirement for admission to many graduate schools is that of holding a bachelor's degree from a four year accredited college. Equal concern has been expressed in the awarding of fellowships to potential graduate students.

The presentation of the following data describe three arbitrarily selected categories of SEF Fellows. The categories include (1) former students who successfully completed doctoral programs and upon whom doctoral degrees have been conferred, (2) students who are devoting full time to study or are completing dissertations as one requirement for the doctoral degree, and (3) those students who have not been successful in completing doctoral programs.

## SEF Fellows Who Successfully

 Completed Doctoral StudyThere were thirty-six SEF Fellows in the category of former students who successfully completed doctoral programs and upon whom doctoral degrees were conferred. Twenty-seven of these Fellows were male and nine female. The ages ranged from thirty to fifty-nine years. The largest group of twelve Fellows fell in the forty to forty-four year interval. The same ratio in this age interval was true for both males and females. The age distribution reflects an almost equal pattern above and below the forty-four year level. Thirty-two of these Fellows are married; one male was separated from his spouse, one female was single, one female widowed and one divorced. The average profile in this category of successful SEF Fellows would be a married individual between the ages of 30-49. This is probably true because of age due to the initiation of the SEF Program in 1957 and the original plan of making fellowship grants to principals and supervisors who were mature individuals at that time. (See Table 2).

The number of dependents is revealed in a variation from no dependents to four. Three Fellows had no dependents, five had one dependent each, five had two dependents each, eight had three dependents each, thirteen had four dependents each, and two Fellows were responsible for seven and eight dependents, respectively. The three Fellows with no dependents were female. It is apparent that the average Fellow in
this category had responsibilities related to the welfare of family as well as self.

TABLE 2
AGE DISTRIBUTION, MARITAL STATUS AND NUMBER OF DEPENDENTS OF SEF FELLOWS WHO SUCCESSFUULY COMPLETED DOCTORAL STUDY

| Age | Frequency |  | Marital Status | Frequency |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Dependents } \end{gathered}$ | Frequency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| 20-24 |  |  | Single |  | 1 | 0 |  | 3 |
| 25-29 |  |  | Married | 26 | 6 | 1 | 2 | 3 |
| 30-34 | 5 | 1 | Separated | 1 |  | 2 | 4 | 1 |
| 35-39 | 4 | 1 | Widowed |  | 1 | 3 | 7 | 1 |
| 40-44 | 9 | 3 | Divorced |  | 1 | 4 | 12 | 1 |
| 45-49 | 4 | 2 |  |  |  | 5 |  |  |
| 50-54 | 2 | 1 |  |  |  | 6 |  |  |
| 55-59 | 1 |  |  |  |  | 7 | 1 |  |
| No age given | $?$ | 1 |  |  |  | 8 | 1 |  |
|  | 27 | 9 |  | 27 | 9 |  | 27 | 9 |

The mothers of thirty Fellows who have successfully completed doctoral study are living and six deceased. (See Table 3, a.) The level of educational attainment of these mothers varies from five who graduated from college to eleven who completed eighth grade or below. Among the other mothers of these successful SEF Fellows, two attended college, eight graduated from high school and ten attended high school.

## TABLE 3

PARENTS OF SEF FELLOWS WHO HAVE SUCCESSFULLY COMPLETED DOCTORAL STUDY
a. Mothers

|  | Frequency |  | Educational Attainment | Frequency |  | Occupations | Frequency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| Living | 22 | 8 | College Graduate | 2 | - 3 | Bookkeeper | 1 |  |
| Deceased | 5 | 1 | Attended College | 1 | 1 | Domestic Worker | 4 |  |
|  |  |  | High <br> School <br> Graduate | 6 | 2 | Dressmaker |  |  |
|  |  |  | Attended High School | 8 | 2 | Housewife | 19 | 4 |
|  |  |  | 8th Grade or Below | 10 | 1 | Interior Decorator |  |  |
|  |  |  |  |  |  | Laundress |  |  |
|  |  |  |  |  |  | Merchant |  |  |
|  |  |  |  |  |  | Nurse | 1 |  |
|  |  |  |  |  |  | Supervisor of Schools |  | 1 |
|  |  |  |  |  |  | Teacher | 2 | 4 |
| Total | 27 | 9 |  | 27 | 9 |  | 27 | 9 |

The work of these mothers falls in six areas, namely, bookkeeper, domestic worker, housewife, nurse, supervisor of schools and teacher. Twenty-three of these mothers were
housewives, four domestic workers and six teachers. The large number of mothers who were housewives is significant in that it probably denotes mothers who had more time to devote to working with and inspiring their children. There is the possibility of a relationship between the number of mothers who were housewives and the fact that twenty of the mothers of these successful SEF Fellows attended high school and four completed high school and college work.

In the group of fathers of SEF Fellows, twenty-one were living and fifteen deceased. The education of these fathers revealed equal numbers of eleven who had reached eighth grade or below and who had attended high school. Seven were graduated from high school, five attended college and two graduated from college. (See Table 3, b.) They were gainfully employed as a building contractor, carpenter, civil service employee, designer, farmer, high school principal, janitor, laborer, merchant, minister, postman, teacher and waiter. Eight worked as farmers and seven were ministers.

The male group of successful SEF Fellows included eighteen or $66.67 \%$ who graduated from state supported colleges or universities, and nine or $33.33 \%$ who graduated from private four year colleges or universities. The educational preparation of this group shows extensive variation particularly at the undergraduate level. At the latter level, fourteen different major fields of study were indicated, including Vocational Agriculture, Biology, Science, Business

TABLE 3--Continued
b. Fathers

|  | Frequency |  | Educational Attainment | Frequency |  | Occupations | Fre-quency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| Living | 16 | 5 | College Graduate | 1 | 1 | Building <br> Contractor <br> Carpenter | 2 | 1 |
| Deceased | 11 | 4 | Attended College | 3 | 2 | Civil <br> Service <br> Employee <br> Designer | 1 | 1 |
|  | - |  | High School Graduate | 5 | 2 | Farmer | 7 | 1 |
|  |  |  | Attended High School | 8 | 3 | High School Principal | 1 |  |
|  |  |  | 8th Grade or Below | 10 | 1 | Janitor | 2 |  |
|  |  |  |  |  |  | Laborer | 5 |  |
|  |  |  |  |  |  | Merchant | 4 |  |
|  |  |  |  |  |  | Minister | 2 | 5 |
|  |  |  |  |  |  | Postman | 2 |  |
|  |  |  |  |  |  | Teacher |  | 1 |
|  |  |  |  |  |  | Waiter | 1 |  |
| Total | 27 | 9 |  | 27 | 9 |  | 27 | 9 |

Administration, Commercial Industries, Education, Social Studies, Elementary Education, Mathematics, History, English,

Sociology, Chemistry and Music Education. Majors, at the post Master's level, are concentrated in fewer areas. General Education, Secondary Education, Educational Administration, Administration of Higher Education, Guidance and Social Foundations were fields in which doctoral degrees were conferred. Educational Administration was the area of specialization for ten fellows or $37.04 \%$ of this group. Secondary Education was chosen by seven or $25.93 \%$ of the group, four. each or $14.81 \%$ each majored in General Education and Administration of Higher Education. Guidance and Social Foundations of Education were areas majored in by only one fellow or $7.41 \%$ of the subjects in each of the latter two categories.

There appears to be a pattern of post-master's majors and minors in numerous areas of education with the greatest concentration in Educational Administration and Secondary Education. This may be the result of the general rule of accepting applicants in the fields of Education, Social Psychology and Social Anthropology by the Foundation. One may conjecture that since the majority of these Fellows were graduated from state supported four year colleges and universities, where great emphasis was placed upon teacher training, they lack backgrounds sufficient for study in some areas which would lead to doctoral study or the conferring of other degrees.

Based upon the four point system, the male successful SEF Fellow had an undergraduate grade point range of 1.22 and
mean grade point of 2.41 or $\mathrm{C}+$; the range for post-master's grades was 0.79 , with a mean grade point at this level of 3.58. Little, if any, relationship is reflected between undergraduate mean grade point and post-master's mean grade point.

GRE scores (verbal and quantitative) were not available for all Fellows. Some schools did not require this examination as a requirement for admission to the doctoral program at the time these students entered the Centers. GRE scores were reported for thirteen of this group of successful Fellows with a mean score (verbal) of 390.10 and a mean score (quantitative) of 330.02 .

Six of the females or $66.66 \%$ comprising this group of successful Fellows graduated from state supported four year colleges, and three or $33.33 \%$ graduated from private four year colleges. (See Table 4, b.) Their undergraduate work was concentrated in six major areas; three subjects or 33.33\% majored in English, two or 22.22\% majored in Physical Education and one subject each majored in Business Education. Elementary Education, Music and Sociology representing $11.11+\%$ in each field. Majors at the post-master's level were spread over seven areas. Educational Psychology was chosen by one subject or $11.11+\%$ of this category, two or $22.22+\%$ in Special Education, two or $22.22+\%$ in Secondary Education and one or $11.11+\%$ in each of the following areas: Educational Administration, General Education, Special

TABLE 4
TYPE OF INSTITUTION, UNDERGRADUATE MAJORS, MINORS, POST-MASTER'S MAJORS, MINORS AND GRADE POINT AVERAGE OF SEF FELLOWS WHO SUCCESSFULLY COMPLETED DOCTORAL STUDY a. Male



|  |  |  | Educa- <br> tion | 2 | 7.41 | Mathematics | 1 | 3.70 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Elementary <br> Education | 3 | 11.11 | Psychology | 2 | 7.41 |  |  |  |
|  |  |  | English | 3 | 11.11 | $\begin{aligned} & \text { Phys- } \\ & \text { ical } \\ & \text { Science } \end{aligned}$ | 2 | 7.41 |  |  |  |
|  |  |  | History | 3 | 11.11 | Secondary Education | 1 | 3.70 |  |  |  |
|  |  |  | Ma thematics | 1 | 3.70 | $\begin{array}{\|l} \text { Soci- } \\ \text { ology } \end{array}$ | 1 | 3.70 |  |  |  |
|  |  |  | Music Education | 1 | 3.70 | Social <br> Science | 2 | 7.41 |  |  |  |
|  |  |  | Psychology | 1 | 3.70 | Speech \& Drama | 1 | 3.70 |  |  |  |
|  |  |  | Science | 2 | 7.41 | Not given | 7 | 25.93 |  |  |  |
|  |  |  | Social <br> Studies | 1 | 3.70 |  |  |  |  |  |  |
|  |  |  | Sociology | 1 | 3.70 |  |  |  |  |  |  |
| Total | 27 | 100.00 |  | 27 | 99.97 |  | 27 | 99.99 |  |  | 99.99+ |

> TABLE 4, a--Continued

Male

| Post-Master's |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major | Frequency | \% | Minor | Frequency | \% | Grade Point Average | Frequency | \% |
| Administration of Higher Education | 4 | 14.81 | Administra- <br> tion | 4 | 14.82 | 3.00-3.49 | 5 | 18.52 |
|  |  |  | Anthropology | 1 | 3.70 | 3.50-3.99 | 13 | 48.15 |
| Educational Administration | 10 | 37.04 | Audio <br> Visual <br> Education | 1 | 4.70 | 4.00 |  |  |
| Education | 4 | 14.81 | Behavioral <br> Science | 2 | 7.41 | None given | 9 | 33.33 |
| Guidance | 1 | 3.70 | Botany | 1 | 3.70 |  |  |  |
| Secondary Education | 7 | 25.93 | Development Curriculum | 2 | 7.41 |  |  |  |
| Social Foundations of Education | 1 | 3.70 | Educational <br> Measurements | 1 | 3.70 |  |  |  |


|  |  |  | Elementary <br> Education | 2 | 7.41 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Natural <br> Sciences | 1 | 3.70 |  |  |  |
|  |  |  | Psychology | 3 | 11.11 |  |  |  |
|  |  |  | Secondary <br> Education | 5 | 18.52 |  |  |  |
|  |  |  | Social <br> Studies | 1 | 3.70 |  |  |  |
|  |  |  | Sociology | Speech <br> \& Drama | 1 | 3.70 |  | 3.70 |
|  | Special <br> Education | 1 | 3.70 |  |  |  |  |  |
|  |  |  |  |  |  | 27 | $99.98+$ |  |

TABLE 4--Continued
b. Female

| Undergraduate |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type <br> of <br> Insti- <br> tution | Frequency | \% | Major | $\left\lvert\, \begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}\right.$ | \% | Minor | $\left\lvert\, \begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}\right.$ | \% | Under- <br> graduate <br> Grade <br> Point | Frequency | \% |
| State Supported 4-year College | 6 | 66.67 | Business Education | 1 | 11.11+ | Biology | 1 | $11.11+$ | 2.00-2.99 | 4 | 44.44 |
| Private 4-year College | 3 | 33.33 | Elemen- <br> tary <br> Edu- <br> cation | 1 | 11.11+ | Business Education | 1 | $11.11+$ | 3.00-3.99 | 5 | 55.56 |
|  |  |  | $\left\lvert\, \begin{aligned} & \text { Eng- } \\ & \text { lish } \end{aligned}\right.$ | 3 | 33.33+ | Education | 1 | $11.11+$ | 4.00 |  |  |
|  |  |  | Music | 1 | $11.11+$ | Eng1ish | 1 | $11.11+$ |  |  |  |
|  |  |  | Physical Education | 2 | 22.22+ | History | 1 | $11.11+$ |  |  |  |



TABLE 4, b--Continued Female

| Post-Master's |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major | Fre- <br> quency | $\%$ | Minor | Fre- <br> quency | \% | Graduate <br> Grade Point | Fre- <br> quency | $\%$ |
| English | 1 | $11.11+$ |  <br> Instruction | 1 | $11.11+$ | $3.00-3.49$ <br> $3.50-4.00$ | 2 <br> 4 | $22.22+$ <br> 44.44 |
| Educational <br> Administra- <br> tion | 1 | $11.11+$ | Educational <br> Psychology | 1 | $11.11+$ | None given | 3 | $33.33+$ |
| Educational <br> Psychology | 1 | $11.11+$ | English | 1 | $11.11+$ |  |  |  |
| General <br> Education | 1 | $11.11+$ | General <br> Education | 2 | $22.22+$ |  |  |  |
|  <br> Counseling | 1 | $11.11+$ | Music | 1 | 11.11 |  |  |  |
| Secondary <br> Education | 2 | $22.22+$ | Psychology | 1 | 11.11 |  |  |  |
| Special <br> Education | 2 | $22.22+$ | Sociology | 1 | 11.11 |  |  |  |

Education, Guidance and Counseling and English. In this category, Educational Administration did not capture the largest group of subjects. The mean undergraduate grade point average for female SEF Fellows who successfully completed doctoral study was 3.3. The grade point averages of four or $44.44 \%$ of this group ranged between 2.00 and 2.99 and grade point averages for the other five or $55.56 \%$ ranged between 3.00 and 3.99 .

Graduate grade point averages were available for only six of the nine successful females in this category. The mean graduate grade point average was 3.49 . Two or $22.22+\%$ had graduate grade point averages of 3.00 to 3.49 and four, or $44.44 \%$ averages between 3.50 and 4.00 . The averages on verbal and quantitative parts of GRE were 443 and 383, respectively. The undergraduate mean grade point is higher than that of males, but the graduate mean grade point is higher for men. The question of motivation, aspiration, and institutional standards of performance are factors not considered in this study, and possibly reflected in undergraduate mean grade point and GRE scores.

The employment record of twenty-seven successful male SEF Fellows before and after fellowships reflects a contrast commensurate to the additional educational attainment. Of this number, fifteen or $55.56 \%$ began employment in high schools, three as principals and eleven as teachers. Six or $22.22 \%$ of these Fellows worked first in colleges, one as an
instructor, one as an assistant professor, one as a department chairman, one as a registrar and one as dean of men. At the elementary school level, three or $11.11 \%$ held beginning positions, three as teachers and one as a school principal. The three remaining fellows (3.70\% in each group) worked as an insurance salesman, personnel officer (TVA) and an assistant minister. Of this entire group, nineteen held beginning positions, four years or less, five, nine years or less and two fourteen years or less.

There is significant diversity in types of institutions in which this group of Fellows began employment and positions held since fellowships were granted. (See Table 5, a. \& b.) College positions are currently held by twenty-two or $81.48 \%$ of male Fellows upon whom degrees have been conferred, two or $7.41 \%$ are principals of high schools, and the remaining three or $11.11 \%$ are employed as superintendent of a private school, elementary school principal and executive secretary to a state teachers association. The greatest increase is reflected in college positions held ( $81.48 \%$ ) and the $22.20 \%$ who held college positions prior to fellowships.

The beginning incomes of successful male Fellows as contrasted with incomes during the year $1963-64$ give a vivid picture of a monetary return from investment in educational preparation. The range of beginning salaries was from five hundred dollars to four thousand, nine hundred ninety-nine dollars. The beginning salaries of seven or $25.93 \%$ of these

Fellows ranged between five hundred dollars and nine hundred ninety-nine dollars; an additional seven Fellows' beginning salaries fell within a one thousand to one thousand, nine hundred ninety-nine dollar interval; five Fellow's salaries ranged between two thousand and two thousand, nine hundred ninety-nine dollars, while a fourth segment for this category of Fellows had incomes between three thousand and three thousand, nine hundred ninety-nine dollars and one Fellow's beginning income fell between four thousand dollars and four thousand, nine hundred ninety-nine dollars. It is important to remember that eighteen Fellows of this category are forty years or older.

A look at incomes for this group during the 1963-64. school year is revealing. Eighteen Fellows had incomes for an eleven to twelve month period of nine thousand dollars or above. Eight Fellows had incomes of seven thousand to eight thousand, nine hundred ninety-nine dollars for a nine to ten month period. Five or $18.52 \%$ of the subjects in this category had incomes within the eleven hundred to eleven thousand, nine hundred ninety-nine dollar interval; two or $7.41 \%$ within the eleven thousand to eleven thousand, nine hundred ninetynine dollar interval. The subjects whose categories were tabulated for a $9-10$ month period, had one or $3.70 \%$ in the six thousand to six thousand, nine hundred ninety-nine dollar range, three or $11.11 \%$ in the seven thousand to seven thousand, nine hundred ninety-nine dollar range, with five or
$18.52 \%$ in the eight thousand to eight thousand, nine hundred ninety-nine dollar range. The 1963-64 incomes more than double at any level the beginning salaries of these Fellows prior to receiving fellowships for study. Only two Fellows list incomes of one thousand dollars and one thousand, five hundred dollars as income from sources other than salaries. The first amount came from investments and the latter from services as part-time minister.

All of the successful male SEF Fellows were affiliated with at least one honorary fraternity, one social fraternity and many civic organizations. All held memberships in national educational associations as well as those at the state level.

The positions held by successful female subjects in initial employment included three or $33.33+\%$ of the group as college instructors, four or $44.44+\%$ as high school teachers, one or $11.11+\%$ as an elementary teacher and one or $11.11+\%$ as a Cardineer Operator. Five of them were employed in initial positions for periods of one to four years and four for periods of from five to nine years. Positions held after the Fellowship by eight or $88.89 \%$ of these successful female Fellows were in Colleges as Professors and Associate Professors. One or $11.11 \%$ was a teacher counselor at the high school level. The per cent with positions in colleges is slightly higher for females than among males in this category. (See Table 5).

TABLE 5
POSITIONS HELD, SALARIES RECEIVED BEFORE AND AFTER FELLOWSHIP AND INCOME FROM OTHER SOURCES OF SUCCESSFUL SEF FELLOWS

| a. Before SEF |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position Held | Frequency |  | \% |  | Salary <br> (Beginning) | Frequency |  | \% |  |
|  | M | F | M | F |  | M | F | M | F |
| COLLEGE |  |  |  |  | $\begin{array}{r} 1-499 \\ 500-999 \\ \hline \end{array}$ | 7 |  | 25.92+ | 11.11+ |
| Teacher | 6 | 3 | 22.22+ | $33.33+$ | 1,000-1,999 | 7 | 2 | 25.92+ | 22.22+ |
| Department Head | 1 |  | $3.70+$ |  | 2,000-2,999 | 5 | 3 | $18.51+$ | 33.33+ |
| Registrar | 1 |  | $3.70+$ |  | 3,000-3,999 | 7 | 1 | $25.92+$ | $11.11+$ |
| Dean |  |  |  |  | 4,000-4,999 | 1 |  | $3.70+$ |  |
| President | 1 |  | $3.70+$ | . | None given |  | 2 | 99.97+ | $22.22+$ |
| HIGH SCHOOL |  |  |  |  |  |  |  |  |  |
| Teacher | 4 | 4 | $14.81+$ | 44.44+ |  |  |  |  |  |
| Counselor | 1 |  | $3.70+$ |  |  |  |  |  |  |
| Principal | 11 |  | $40.74+$ |  |  |  |  |  |  |
| ELEMENTARY |  |  |  |  |  |  |  |  |  |
| Teacher | 1 | 1 | $3.70+$ | 11.11+ |  |  |  |  |  |
| Principal | 1 |  | $3.70+$ |  |  |  |  |  |  |
| Cardineer Operator |  | 1 |  | 11.11+ |  |  |  |  |  |
| Total | 27 |  | 99.97+ | 99.99+ |  | 27 | 9 | $99.97+$ | 99.99+ |

TABLE 5--Continued

| b. After SEF |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position Held | Frequency |  | \% |  | $\begin{aligned} & (11-12 \\ & \text { Month }) \\ & \text { Salary } \end{aligned}$ | Frequency |  | \% |  | Outside <br> Income | Source |  |
|  | M | F | M | F |  | M | F | M | F |  | M | F |
| COLLEGE |  |  |  |  | $\begin{aligned} & 6,000- \\ & 6,999 \end{aligned}$ |  |  |  |  |  |  |  |
| Associate Professor | 11 | 3 | $40.74+$ | 33.33 | $\left\lvert\, \begin{aligned} & 7,000- \\ & 7,999 \end{aligned}\right.$ |  | 1 |  |  | $\begin{array}{r} 500- \\ 1,000 \end{array}$ | Investments |  |
| Professor | 9 | 5 | $33 \cdot 33+$ | 55.56 | $\begin{aligned} & 8,000- \\ & 8,999 \end{aligned}$ |  |  |  |  | $\begin{aligned} & 1,000- \\ & 1,500 \end{aligned}$ | Part time Minister |  |
| Department Chairman | 1 |  | $3.70+$ |  | $\begin{aligned} & 9,000- \\ & 9,999 \end{aligned}$ | 5 |  | $18.51+$ |  | $\begin{array}{\|l\|} 1,501- \\ 2,000 \\ 2,001- \\ 2,999 \\ \hline \end{array}$ |  | Child Support |
| Dean of College | 1 |  | $3 \cdot 70+$ |  | $\left\lvert\, \begin{aligned} & 10,000- \\ & 10,999 \end{aligned}\right.$ | 10 | 2 | 37.03+ |  | 7,000- |  | Business Returns |
| HIGH SCHOOL |  |  |  |  | $\begin{aligned} & 11,000- \\ & 11,999 \end{aligned}$ | 2 |  | $7 \cdot 40+$ |  |  |  |  |


| Principal | 2 |  | $7.40+$ |  | $\begin{aligned} & 12,000- \\ & 12,999 \end{aligned}$ | 1 |  | 3.70 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TeacherCounselor |  | 1 |  | 11.11 |  |  |  |  |  |  |  |  |
| ELEMENTARY |  |  |  |  | $\begin{aligned} & 13,000- \\ & \text { Above } \end{aligned}$ |  |  |  |  |  |  |  |
| Principal | 1 |  | $3.70+$ |  |  |  |  |  |  |  |  |  |
| Superin- <br> tendent of <br> Private <br> School | 1 |  | $3.70+$ |  | $\begin{aligned} & (9-10 \\ & \text { Month }) \\ & 6,000- \\ & 6,999 \end{aligned}$ | 1 | 2 | $3.70+$ |  |  |  |  |
| Executive Secretary of State |  |  | ' |  | $\begin{aligned} & 7,000- \\ & 7,999 \\ & 8,000- \\ & 8,999 \\ & \hline \end{aligned}$ | 3 5 | 1 | $\begin{array}{\|l} 11.11+ \\ 18.51+ \\ \hline \end{array}$ |  |  |  |  |
| Teacher's Association | 1 |  | 3.70 |  | \|9,000- |  | 1 | 99.96+ |  |  |  |  |
|  |  |  |  |  | $\begin{aligned} & 10,000- \\ & 10,999 \\ & 11,000- \\ & 11,999 \\ & 12,000- \\ & 12,999 \\ & 13,000- \\ & 13,999 \\ & \text { Above } \end{aligned}$ |  | 2 |  |  |  |  |  |
| Total | 27 | 9 | 99.97+ | 100.00 |  | 27 | 9 | 99.96+ |  |  |  |  |

There is noteable contrast between incomes from initial positions and incomes for the 1963-64 school year. Beginning salaries in initial employment in this group ranged from three hundred twenty dollars to three thousand, nine hundred ninety-nine dollars. One subject or $11.11+\%$ fell in the category below four hundred ninety-nine dollars, two or $22.22+\%$ had incomes ranging from one thousand to one thousand, nine hundred ninety-nine dollars, three or $33.33+\%$ had incomes between two thousand and two thousand, nine hundred ninety-nine dollars, one or $11.11+\%$ had an income within three thousand and three thousand, nine hundred ninety-nine dollars. Two of the subjects listed no initial income. Incomes given for the 1963-64 school year were all above the six thousand dollar bracket. In the group receiving incomes for an eleven to twelve month period, one or $11.11+\%$ received an income between seven thousand and seven thousand, nine hundred and ninety-nine dollars and two or $22.22+\%$ received between ten thousand and ten thousand, nine hundred and ninety-nine dollars. In the group receiving incomes for nine to ten months, two or $22.22+\%$ received an income within the eight thousand to eight thousand, nine hundred ninetynine dollars, one or $11.11+\%$ in the nine thousand to nine thousand, nine hundred ninety-nine dollars and two or $22.22+\%$ in the ten thousand to ten thousand, nine hundred ninetynine dollar bracket. Two of these subjects reported income from sources other than salary. One received one thousand
dollars for child support and the other reported seven thousand dollars as income from an estabiished business.

Affiliation with local state and national educational organizations is characteristic of this group. In addition to belonging to three or more professional organizations, all, except three, are members of social sororities and civic organizations. If organizational affiliation is an indication of activities, this group is a vital part of community living.

The positions held and income before and after SEF Fellowship among male and female successful SEF Fellows point out the opportunities for employment at the college level for individuals upon whom doctoral degrees have been conferred. This meets a purpose of the Foundation of bringing about improvement of educational leadership primarily upon Negroes in Southern States. Those SEF Fellows upon whom doctoral degrees have been conferred all hold positions where educational leadership may determine success or failure of a program.

The affiliations with professional and civic organization are perhaps indicative of a desire to constantly seek additional information and to actively participate in programs to improve and implement community activities.

Scores on the Study of Values for successful male SEF Fellows are interesting. In this group of Fellows, fourteen fell within the average group on the Theoretical Value, (see

Table 6), seven or $25.92 \%$ made scores considered high on this value and six or $22.22 \%$ made scores considered low. On the Economic Value, fourteen fell within the range of scores considered normal, two or $7.41 \%$ made scores within the range considered high and eleven or $40.74 \%$ in the range considered low. Scores on the Aesthetic Value reveal twenty-one Fellows scoring in the range considered average, six or $22.22 \%$ in the range considered high and two or $7.41 \%$ in the low range. Sixteen Fellows scored within the normal range on Social Value, ten or $37.04 \%$ high and one or $3.70 \%$ low. On the Political Value seventeen scored in the average range, two or $7.41 \%$ in the range of scores considered high and eight or 29.63\% low; on the Religious Value, twelve Fellows made scores in the average range, eleven or $40.74 \%$ high and four or $14.81 \%$ low. The per cents indicate that slightly more than $50 \%$ of this group of successful Fellows scored in the average range of scores on Theoretical and Economic Values, $75 \%$ in the average range on Aesthetic Value, more than 50\% in the average range on Social, Political and Religious Values. (See Table 6).

When high and low scores on the Study of Values were isolated for this category of female Fellows who had successfully completed doctoral study, three or $33.33 \%$ scored high on Theoretical Value, none scored low; none scored high on Economic Value, but one or $11.11 \%$ scored high on Aesthetic Value while two, or $22.22 \%$ scored low. Scores on Social

TABLE 6
SCORES ON THE STUDY OF VALUES MADE BY SUCCESSFUL SEF FELLOWS WITH FREQUENCIES OF HIGH AND LOW SCORES FOR EACH VALUE

| Theoretical |  | Economic |  | Aesthetic |  | Social |  | Political |  | Religious |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | F | M | F | M | F | M | F | M | F | M | F |
| 44 49 $55.5 * *$ $55 . *$ 40 | 41 $42 * *$ $45 * *$ 41 $49 * *$ | $31 *$ $52 * *$ $32 *$ 46 39 | 34 $26 *$ 40 39 $32 *$ | $46 * *$ 33 32.5 32 $44 * *$ | 41 $29 *$ 37 43 $33 *$ | 36 37 $45 * *$ $31 *$ 32 | $48 * *$ $54 * *$ 38 46 41 | 39 41 $48 * *$ 38 42 | 40 39 28 39 32 | 44 $28 *$ $27 *$ 38 43 | $\begin{aligned} & 45 \\ & 50 \\ & 52 * * \\ & 32 \\ & 53 * * \end{aligned}$ |
| $33.5 *$ $34 * *$ $50 * *$ $52 * *$ $52 * *$ | 41 34 41 37 | $34.5 *$ 44 $28 *$ 38 37 | 38 39 36 18.5 | $\begin{aligned} & 52 * * \\ & 19 * \\ & 33 \\ & 36 \\ & 41 \end{aligned}$ | $51 * *$ 42 47 43 | $53 * *$ $52 * *$ 39 41 34 | $31 *$ 46 $48 * *$ 40.5 | $\begin{aligned} & 32.5 \\ & 42 \\ & 50 * * \\ & 37 * \\ & 39 \end{aligned}$ | 42 38 37 38 | $\begin{aligned} & 34.5 \\ & 49 * * \\ & 40 \\ & 36 \\ & 37 \end{aligned}$ | $\begin{aligned} & 37 \\ & 41 \\ & 31 * \\ & 53 * * \end{aligned}$ |
| 41 43 $38 *$ 45 $38 *$ |  | $30 *$ 39 35 $25 *$ 46 |  | $53 * *$ $4^{* * *}$ 34 41 30 |  | 42 39 $46 * *$ 37 $43 * *$ |  | $28 *$ 40 $32 *$ 46 42 |  | $46 * *$ $25 *$ $54 * *$ $46 * *$ 41 |  |
| 49 $34 *$ 46 49 42 |  | 37 $34 *$ $30 *$ 39 $35 *$ |  | 40 38 41 30 37 |  | 37 $48 * *$ 37 39 39 |  | $32 *$ 36 $30 *$ 37 39 |  | $49 * *$ $51 * *$ $56 * *$ $46 * *$ $48 * *$ |  |


** High Score

Value were high for two or $22.22 \%$ of this category and low for one or $11.11 \%$. No subject scored high on Political Value, but two or $22.22 \%$ scored low. Only on Religious Value were $50 \%$ of the scores high and low; three or $33.33 \%$ scored high on this value and two or $22.22 \%$ low. The scores on Theoretical, Economic, Aesthetic, Social and Political Values vary somewhat from the $50 \%$ of the scores made by subjects upon which the test was standardized. (See Table 6).

Among the successful SEF Fellows, ten had high scores on Theoretical Value which indicates an interest for discovery of the truth and a desire to order and systematize his knowledge. The six Fellows with low scores on Theoretical Value lack the value pattern described above. The high scores of two Fellows on Economic Value often describe individuals who want education to be practical; thirteen Fellows had low scores on Economic Value reflecting an attitude less conflicting with Aesthetic and Social Values. Seven Fellows with high scores on Aesthetic Value revealed strong interest in the artistic episodes of life. Four Fellows made low scores on the Aesthetic Value. Thirteen of the successful SEF Fellows scored high on the Social Value revealing a love for people. Two Fellows had low scores on this value. High scores on Political Value made by two successful Fellows reflect an interest in power; low scores on this value were made by ten Fellows. Low scores were not made by that number of Fellows on any value except the thirteen who made low
scores on the Economic Value. Fourteen Fellows made high scores on Religious Value, a larger number of high scores than for any other value. Six Fellows made low scores on the Religious Value. These high and low scores point out attitudes of subjects on relative value patterns in the Study of Values.

The Strong Vocational Interest Blank provided scores for occupational groups similar to interests of the Artist, Engineer, Mathematics-Science Teacher, Y.M.C.A. Director, Senior C.P.A., Sales Manager and Advertising man, occupations typical of occupational groups. Raw scores were converted to standard scores and ratings assigned to establish strong interests and rejections. The high scores assigned $A$ and $B+$ ratings indicated interest patterns similar to those of successful men in the respective occupational group. Seven subjects in this category of male SEF Fellows who successfully completed doctoral study had interests similar to successful artists, none had interests similar to successful Engineers (Group IV), four had interests patterns similar to Mathematics-Science Teachers (Group III), nineteen had interest patterns similar to a Y.M.C.A. Director (Group V), three, interests similar to a Senior C.P.A. (Group VIII), eleven, interests similar to a Sales Manager (Group IX), and eight, interests similar to an Advertising Man (Group X). Ratings indicated rejection of Group I as an occupation by twelve, of Group II by twenty-six, Group IV by nineteen, Group V by two,

Group VIII by twenty, Group IX by seven and Group X by ten. (See Table 7, a). Although fifteen of this group received ratings of $A$ in several of the occupations, none hold positions in that particular field. The fact that nineteen of this group had ratings of B+ or above on Group V (Social Service or Welfare) is interesting in view of the fact that the male subjects in this category are currently employed in positions where relationships with large numbers of people are important.

Few strong vocational interests are revealed for female SEF Fellows who have successfully completed doctoral study. Ratings show interest patterns associated with women successful in occupations for two on the scale for Artist, two on the scale for English Teacher, three on the scale for Social Worker and two on the scale for Social Science Teacher. None of these subjects had interest patterns similar to those of successful Business Education Teachers, one on Elementary Teacher, none with rating indicating high interest patterns on the scale for Home Economics Teacher, and one on the scale for Physical Education Teacher and eight on the scale for masculinity-femininity. Low ratings were assigned scores made by five of the subjects on the scale for English Teacher, four on the scale for Social Worker, four on the scale for Social Science Worker, four on the scale for Social Science Teacher, nine on the scale for Home Economics Teacher, eight on the scale for Physical Education

TABLE 7
RATINGS ON STRONG VOCATIONAL INTEREST BLANK FOR SEF FELLOWS WHO SUCCESSFULLY COMPLETED DOCTORAL STUDY •
a. Males

| Rating | Artist <br> Group I | Engineer <br> Group II | Mathe- <br> matics <br> Science <br> Teacher <br> Group IV | Y.M.C.A. <br> Director <br> Group V | Senior <br> C.P.A. <br> Group VIII | Sales <br> Manager <br> Group IX | Advertising <br> Man <br> Group X |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C |  | 16 | 7 |  | 8 | 1 | 2 |
| C+ | 5 | 7 | 5 |  | 4 | 1 | 2 |
| B- | 7 | 3 | 7 | 2 | 8 | 6 | 6 |
| B | 8 | 1 | 4 | 6 | 4 | 9 | 9 |
| B+ | 6 |  | 3 | 9 | 2 | 9 | 8 |
| A | 1 |  | 1 | 10 | 1 | 2 | 27 |
| Total | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| $*$ Rejects | 12 | 26 | 19 | 2 | 20 | 7 | 10 |
| $* *$ Interests | 7 | 0 | 4 | 19 | 3 | 11 | 8 |

* Ratings of $\mathrm{B}-$ or below
**Ratings of $\mathrm{B}+$ or above

| 8 | 0 | 1 | 0 | 1 | 0 | $\Sigma$ | $\varepsilon$ | 乙 | 己 | şsə．ฮəてuI＊ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | L | 8 | 6 | 8 | 6 | $\dagger$ | $\dagger$ | 5 | 5 | s7วə¢əy＊ |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | ［ع704 |
| $L$ |  | 1 |  | 1 |  | 乙 | $\varepsilon$ | 1 |  | V |
| 1 |  |  |  |  |  |  |  | 1 | 己 | $+q$ |
|  | 2 |  |  |  |  | 乙 | 2 | 己 | 2 | G |
| 1 | 1 |  |  | H | $\downarrow$ | $\varepsilon$ | $\varepsilon$ | $\varepsilon$ | $\downarrow$ | －G |
|  | 2 | $\varepsilon$ |  | \＃ | 2 | 1 |  |  | $\varepsilon$ | $+0$ |
|  | 7 | $\zeta$ | 6 |  | 9 | 1 | 1 | Z | 1 | 2 |
|  |  |  |  |  |  |  |  |  |  | 翟 |

[^10]$\angle$ HTg＊J

Teacher and seven on the scale for Mathematics-Science Teacher. Occupation interest of Social Worker was highest for the females in the category of successful SEF Fellows. The largest number of subjects among males had high ratings on occupations in the Social Welfare group. (See Table 7, b).

The Sims SCI Occupational Rating Scale for male Fellows who successfully completed doctoral programs revealed three social-class identification groups; (see Table 8), five or $18.52 \%$ of this group identified with the middle-class, eighteen or $66.67 \%$ identified with the upper-middle-class and four or $14.81 \%$ with the upper class. This group identifies with the middle-class and above; it is probably safe to say their values for and toward education are definitely middleclass values.

Female SEF Fellows who have successfully completed doctoral study had a mean score of 25.33 on the Sims SCI Rating Scale and, thereby, indicated an association with the upper-middle class. (See Table 8). In this group, one or $11.11+\%$ associated herself with the middle working class, three or $33.33+\%$ associated themselves with the middle class, three or $44.44+\%$ identified with the upper-middle class, and one or $11.11 \%$ identified with the upper class. The association with the middle-class is common to both males and females in the category of successful SEF Fellows.

The characteristics of successful SEF Fellows were similar in age, marital status and parental background for
both male and female. The majority of the category, twothirds, graduated from four year state supported colleges and universities; their educational backgrounds varied, but were similar in terms of predominant choices in the field of Education. Similar occupational and non-occupational interests were common, as were value patterns and associations of subjects with the middle class and above.

TABLE 8
FREQUENCY OF SCORES OF SIMS SCI OCCUPATIONAL RATING
SCALE FOR SEF FELLOWS WHO SUCCESSFULIY COMPLETED DOCTORAL STUDY

| Score Range | Frequency |  | $\%$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $7-12$ |  |  |  |  |
| $13-18$ | 5 | 3 |  |  |
| $19-24$ | 18 | 4 | 18.52 | $33.33+$ |
| $25-30$ | 4 | 1 | 14.81 | $11.11+$ |
| $31-36$ |  |  |  |  |
| $37-42$ | 27 | 9 | 100.00 | $99.99+$ |

Full-time Students or Completing Doctoral Study

The second category of SEF Fellows who are full-time students or completing doctoral dissertations consists of
twenty-eight subjects, twenty-one males and seven females. The twenty-eight Fellows in this category have age distributions as indicated. (See Table 9). This group ranged from age twenty-four to age fifty-five with sixteen subjects thirty-five years or less. Two groups of six and seven each were evident in the 30-34 and 35-39 intervals, and only eleven were above forty years old. Eleven Fellows in this category are in the process of writing dissertations and seventeen are full-time students completing course requirements on doctoral programs. (See Table 9).

TABLE 9
AGE DISTRIBUTION, MARITAL STATUS AND NUMBER OF DEPENDENTS OF SEF FELLOWS WHO ARE FULL-TIME STUDENTS OR COMPLETING DOCTORAL DISSERTATIONS

| Age | Frequency |  | Marital Status | Frequency |  | Number of Dependents | Frequency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| 20-24 | 1 |  | Single | 1 |  | 0 | 1 | 2 |
| 25-29 | 3 |  | Married | 19 | 5 | 1 | 4 | 1 |
| 30-34 | 6 |  | Separated |  | 1 | 2 | 2 | 3 |
| 35-39 | 6 | 1 | Widowed |  |  | 3 | 5 |  |
| 40-44 | 3 | 3 | Divorced | 1 | 1 | 4 | 9 |  |
| 45-49 |  | 1 |  |  |  |  |  |  |
| 50-54 | 2 | 1 |  |  |  | 6 |  |  |
| 55-59 |  | 1 |  |  |  | 7 |  | 1 |
| None given |  |  |  |  |  | 8 |  |  |
| Total | 21 | 7 |  | 21 | 7 |  | 21 | 7 |

As in the category of Fellows who have completed doctoral studies and upon whom doctoral degrees have been conferred, these full-time students or students working on dissertations are married in twenty-four of twenty-eight cases. One male Fellow is single and a second one is divorced. One female Fellow is divorced and one separated from her spouse. Apparently, marriage predominantly is characteristic of this category of Fellows.

The number of dependents ranged from none for three Fellows, to four dependents for nine Fellows. This indicates the responsibility that of necessity was assumed by this category of Fellows as they pursued doctoral studies.

The larger numbers of Fellows in this category had parents who were living. Twenty-three mothers were living and five were deceased.

The educational background (see Table 10, a) of parents, which sometime influences educational patterns in children, varied from the college graduate to those with educational levels attained of eighth grade or below. Among the mothers of this group, five were college graduates, six attended college, five were graduated from high school, four attended high school. and five reached eighth grade or below before , terminating their formal school work.

The occupations of the mothers reflect the levels of formal educational attainment. Two mothers were interior decorators, four were teachers, thirteen were housewives,

TABLE 10
PARENTS OF MALE SEF FELLOWS WHO ARE FULL-TIME STUDENTS OR COMPLETING DOCTORAL DISSERTATIONS a. Mothers

|  | Frequency |  | Educational Attainment | Frequency |  | Occupations | Frequency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| Living | 18 | 5 | College Graduate | 3 | 2 | Civilian <br> Workers <br> Funeral Director | 1 | 1 |
| Deceased | 3 | 2 | Attended College | 4 | 2 | Housewife | 11 | 2 |
|  |  |  | High School Graduate | 5 |  | Interior Decorator | 2 |  |
|  |  |  | Attended High School | 4 | 2 | Librarian | 1 |  |
|  |  |  | 8th Grade or below | 5 | 1 | Merchant | 1 |  |
|  |  |  |  |  |  | Nurse | 1 |  |
|  |  |  |  |  |  | Seamstress | 1 | 1 |
|  |  |  |  |  |  | Teacher | 1 | 3 |
|  |  |  |  |  |  | None given | 2 |  |
| Total | 21. | 7 |  | 21 | 7 |  | 21 | 7 |

TABLE 10--Continued
b. Fathers

|  | Frequency |  | Educational Attainment | Frequency |  | Occupations | Frequency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| Living | 10 | 4 | College Graduate | 2 | 4 | Building <br> Contractor <br> Bus Driver | 1 | 1 |
| Deceased | 11 | 3 | Attended College | 4 |  | Carpenter | 1 |  |
|  |  |  | High School Graduate | 3 | 1 | Civilian <br> Worker | 1 |  |
|  |  |  | Attended High School | 2 | 1 | Farmer | 4 |  |
|  |  |  | 8th Grade or below | 10 | 1 | Laborer | 1 | 1 |
|  |  |  |  |  |  | Medical Doctor | 1 |  |
|  |  |  |  |  |  | Merchant | 2 |  |
|  |  |  |  |  |  | Millworker | 1 |  |
|  |  |  |  |  |  | Minister | 1 | 2 |
|  |  |  |  |  |  | Mortician |  | 1 |
|  |  |  |  |  |  | Oil Worker | 1 |  |
|  |  |  |  |  |  | Postman | 1 |  |
|  |  |  |  |  |  | Railroad Attendant | 1 |  |
|  |  |  |  |  |  | Teacher | 2 | 1 |
|  |  |  |  |  |  | Not given | 3 | 1 |
| Total | 21 | 7 |  | 21 | 7 |  | 1 | 7 |

two were seamstresses, occupations were not indicated for two and one each was occupied as a librarian, nurse, merchant, civilian worker and funeral director. In view of needs of youngsters as expounded by proponents of Child Growth and Development, it may be significant that thirteen, slightly less than fifty per cent of these mothers were housewives. This was substantially true among mothers of Fellows who successfully completed their doctoral programs.

Fourteen fathers of these subjects were living and fourteen were deceased. The fathers of this category of SEF Fellows were employed in fifteen different occupations with four Fellows indicating no occupations for their fathers. Three were teachers, four were farmers, two were merchants, three were ministers and one each was employed as a postman, millworker, medical doctor, mortician, laborer, civilian worker, railroad attendant, carpenter, oil worker, building contractor and bus driver. Six fathers were college graduates, four attended college, four graduated from high school, three attended high school and eleven completed eighth grade or below.

Educational levels attained and occupations of parents give a generalized picture of the economic backgrounds brought to the program by Fellows. It could, for example, account for the large number of Fellows who postponed doctoral studies until their mid-thirties. This coupled with the number of dependents listed could be
associated with the economic factor involved in doctoral study at an earlier age.

The evidence from educational backgrounds of subjects in this category of full time students or completing dissertations contributes to the characteristics the writer endeavored to identify. Of the twenty-one male subjects in this category, seventeen or $80.95 \%$ graduated with bachelor degrees from seventeen state supported colleges and four or $19.05 \%$ private 4 year colleges. (See Table 11, a). They were graduated with majors in eleven fields of study.

Six have undergraduate majors in History, two in English, two in Mathematics, two in Education, two in Biology, two in Chemistry, one each in Business Education, Industrial Education, Speech, Music and Religion. The postmaster's major's are inclusive of nine areas in Education with two Fellows indicating no majors at this level. Eight undertook majors at the post-master's level in Educational Administration, four in General Education and one each in Science Education, English, History, Educational Psychology, Administration of Higher Education, Elementary Education and Secondary Education. In terms of percentages, eight Fellows or $38.10 \%$ are majoring in Educational Administration, four or $19.05 \%$ in General Education, two or $9.52 \%$ listed no majors and $33.33 \%$ majored in the seven remaining fields. This is approximately $4.76+\%$ for Science Education, English, History, Educational Psychology, Administration of Higher

TABLE 11
TYPE OF INSTITUTION, UNDERGRADUATE MAJORS, MINORS, POST-MASTER'S, MAJORS, MINORS AND GRADE POINT AVERAGES OF SEF FELLOWS, WHO ARE FULL-TIME STUDENTS OR WHO ARE COMPLETING DOCTORAL DISSERTATIONS
a. Males

| Undergraduate |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Institution | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% | Major | Frequency | \% | Minor | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% | Undergraduate Grade Point Average | $\left\lvert\, \begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}\right.$ | \% |
| State Supported 4-year College <br> Bus. <br> Ed. | 17 | 80.95 | $\mid \text { Biology } \mid$ <br> Business Education | $2$ $1$ | $\begin{array}{r} 9.52+ \\ 4.76+ \end{array}$ | Biology <br> English | 1 <br> 2 | $\begin{gathered} 4.76+ \\ 9.52+ \end{gathered}$ | $\left\lvert\, \begin{array}{\|l\|} 2.00-2.49 \\ 2.50-2.99 \\ 3.00-3.49 \\ 3.50-3.99 \\ 4.00 \end{array}\right.$ | $\begin{aligned} & 2 \\ & 7 \\ & 6 \\ & 1 \end{aligned}$ | $\begin{array}{r} 9.52 \\ 33.33 \\ 28.57 \\ 4.76 \end{array}$ |
| Private <br> 4-year College | 4 | 19.05 | Education | 2 | 9.52+ | Geography | 1 | $4.76+$ |  |  |  |
|  |  |  | \|lishem- | 2 | 9.52+ | General Education | 2 | 9.52+ |  |  |  |


|  |  |  | English | 2 | 9.52+ | General Science | 1 | $4.76+$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | History | 6 | $28.57+$ | History | 1 | $4.76+$ |  |  |  |
|  |  |  | Indus- <br> trial <br> Educa- <br> tion | 1 | 4.76+ | Music | 1 | $4.76+$ |  |  |  |
|  |  |  | Mathematics | 2 | 9.52+ | Physics | 1 | $4.76+$ |  |  |  |
|  |  |  | Music | 1 | 4.76 | Science | 3 | 14.29+ |  |  |  |
|  |  |  | Re- | 1 | 4.76 | Social Studies | 2 | 9.52+ |  |  |  |
|  |  |  | Speech | 1. | 4.76 | Sociology | 2 | $9.52+$ |  |  |  |
|  |  |  |  |  |  | Speech | 1 | $4.76+$ |  |  |  |
|  |  |  |  |  |  | No minor given | 3 | 14.29 |  |  |  |
| Total | 21 | 100.09 |  | 21 | 99.99+ |  | 21 | 99.98+ |  |  |  |

TABLE 11, a--Continued

| Post-Master's |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major | $\begin{array}{\|c\|} \hline \text { Fre- } \\ \text { quency } \end{array}$ | \% | Minor | Fre- <br> quency | \% | Grade Point | $\begin{array}{c\|} \hline \text { Fre- } \\ \text { quency } \\ \hline \end{array}$ | \% |
| Administra- <br> tion of Higher Education | 1 | 4.76 | Behavioral <br> Sciences | 2 | 9.52+ | $\begin{array}{\|l} 2.00-2.99 \\ 3.00-3.99 \\ 4.00 \\ \text { None given } \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ 15 \\ 1 \\ 2 \\ \hline \end{array}$ | $\begin{array}{r} 14.25 \\ 71.37 \\ 4.76 \\ 9.52 \\ \hline \end{array}$ |
| English | 1 | 4.76 | Biology | 1 | $4.76+$ |  |  |  |
| Educational Administration | 8 | 38.10 | Business Administration | 2 | 9.52+ |  |  |  |
| Educational Psychology | 1 | 4.76 | Educational Guidance | 1 | $4.76+$ |  |  |  |
| Elementary <br> Education | 1 | 4.76 | Educational Administration | 2 | 9.52+ |  |  |  |
| General <br> Education | 4 | 19.05 | Elementary <br> Ed. <br> English | 3 <br> 1 | $\begin{array}{r} 14.29+ \\ 4.76+ \\ \hline \end{array}$ |  |  |  |
| History | 1 | 4.76 | History Music | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.76+ \\ & 4.76+ \\ & \hline \end{aligned}$ |  |  |  |
| Science Education | 1 | 4.76 | Psychology | 1 | $4.76+$ |  |  |  |
| Secondary Education | 1 | 4.76 | Secondary Education | 3 | 14.28 |  |  |  |
| None given | 2 | 9.52 | None given | 4 | 19.05 |  |  |  |
| Total | 21 | 99.99+11 |  | 21 | 99.99+ |  |  |  |

Education, Elementary Education and Secondary Education. Without exception, the subjects in this category chose areas within the field of Education.

The male full-time students or students completing doctoral study, who comprised the second category of SEF Fellows, had a higher mean undergraduate grade point average than did the Fellows who have successfully completed doctoral programs. The former had a mean grade point of 3.38 at the post-master's level and 3.36 at the undergraduate level. The range of undergraduate grades was 2.49 and at the postmaster's level a range of 1.2. There is a greater similarity between grades at these two levels for this category than for the Fellows upon whom degrees have been conferred.

Scores on the GRE are higher for male Fellows in this category than for those upon whom degrees have been conferred. The means for scores on the verbal and quantitative parts of GRE were 472.30 and 490.05 , respectively. Perhaps, more emphasis is being placed upon scores from the GRE as one requirement for admission to doctoral study.

In studying the educational backgrounds of seven female subjects in this category; it was discovered that six or $85.71 \%$ graduated from state supported four year colleges, and the remaining one or $14.29 \%$ graduated from a privately endowed college. Their urdergraduate majors were restricted to four subject areas; two or $28.57 \%$ in Elementary Education, one or $14.29 \%$ in History, two or $28.57 \%$ in Home Economics
and two in Mathematics. Three areas were given as majors at the post-master's level, General Education, Secondary Education and Vocational Education. Two or $28.57 \%$ of the subjects did not indicate majors, one or $14.29 \%$ is working toward a major in Administration and Supervision, three or $42.85 \%$ are in Secondary Education and one or $14.29 \%$ is in Vocational Education. Minors were listed by this category as Curriculum Development, Home Economics and Educational Measurements. (See Table $11, \mathrm{~b}$ ).

The undergraduate grade point average for the seven females who were full-time students or completing dissertations have a mean grade point average of 3.08 which is .25 of a grade point less than the average successful female SEF Fellows. The range in grades was 1.67. The mean graduate grade point average was 3.27 with a range of .46 of a grade point. The average obtained for scores on the GRE (verbal and quantitative) were 495 and 430, respectively. These three items do not differ substantially from the category of successful SEF Fellows.

When one studies the position held, tenure, and salaries before and after SEF Fellowship another profile is presented for the category of full-time students or students working on research associated with proposed dissertation. (See Table 12, a.). From the twenty-one male subjects, five or $23.80 \%$ started employment as college instructors, thirteen or $61.90 \%$ as high school teachers and the three or

TABLE 11
TYPE OF INSTITUTION, UNDERGRADUATE MAJORS, MINORS, POST-MASTER'S MAJORS, MINORS AND GRADE POINT AVERAGES OF SEF FELLOWS WHO ARE FULL-TIME STUDENTS OR WHO ARE COMPLETING DOCTORAL DISSERTATIONS
b. Females

| Undergraduate |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Institution | Frequency | \% | Major | $\left\lvert\, \begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}\right.$ | \% | Minor | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% | Grade <br> Point <br> Average | Frequency | \% |
| State Supported 4-year College | 6 | 85.71 | Elementary Education | 2 | 28.57 | Education | 2 | 28.57 | 2.00-2.99 | 4 | 57.14 |
| Private College | 1 | 14.29 | History | 1 | 14.29 | English | 2 | 28.57 | 3.00-3.99 | 2 | 28.57 |
|  |  |  | Home Economics | 2 | 28.57 | Science | 2 | 28.57 | 4.00 | 1 | 14.29 |
|  |  |  | Mathematics | 2 | 28.57 | None given | 1 | 14.29 |  |  |  |
| Total | 7 | 10000 |  | 7 | 100.00 |  | 7 | 100.00 |  | 7 | 100.00 |

TABLE 11, b--Continued

| Post-Master!s |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major | Frequency | \% | Minor | Frequency | \% | Grade Point | Frequency | \% |
| Administration and Supervision | 1 | 14.29 | Educational <br> Measurement | 2 | 28.57 | $\begin{aligned} & 2.00-2.49 \\ & 2.50-2.99 \end{aligned}$ | 2 | 28.47 |
| Secondary <br> Education | 3 | 42.85 | None given | 5 | 71.43 | 3.00-3.49 | 3 | 42.86 |
| Vocational Education | 1 | 14.29 |  |  |  | 3.50-4.00 | 2 | 28.47 |
| None given | 2 | 28.57 |  |  |  |  |  |  |
| Total | 7 | 100.00 |  | 7 | 100.00 |  | 7 | 100.00 |

$14.21 \%$ remaining were employed as an elementary school principal, minister and one indicated this bit of information was not significant. (sic.). Worth mentioning is the fact that eighteen or $85.71 \%$ remained in beginning positions from one to four years and the other three or $14.29 \%$ remained in their beginning positions from five to nine years.

Positions held since fellowship by subjects in this category give a less vivid picture than do other categories because twelve of the males or $57.15 \%$ are full-time students in cooperating centers. Two or $9.52+\%$ of these subjects are Assistant Professors in colleges, two or $9.52+\%$ are Research Assistants, and the five remaining or $23.81 \%$ are employed as high school principal, superintendent of schools, assistant superintendent of schools, one as a personnel consultant with an engineering firm and one did not list a position or indicate a school experience. (See Table 12, b.).

Immediate employment upon graduation from college was indicated by the subjects in this category and beginning salaries ranged from five hundred dollars annually to four thousand, five hundred dollars. Three subjects or $14.28 \%$ in this category had beginning salaries within the interval of five hundred dollars and nine hundred and ninety-nine dollars; one or $4.76 \%$ had a beginning salary of one thousand, two hundred fifty dollars; five or $23.81 \%$ fell within the range of two thousand, to two thousand, nine hundred ninetynine dollars; eight or $38.10 \%$ within the range of three

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POSITIONS HELD, SALARIES RECEIVED BEFORE AND AFTER FELLOWSHIPS
    AND INCOME FROM OTHER SOURCES OF SEF FELLOWS WHO ARE
        FULL-TIME STUDENTS OR COMPLETING DISSERTATIONS
```

| a. Before SEF |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position Held | Frequency |  | \% |  | $\begin{gathered} \text { Salary } \\ \text { (Beginning) } \end{gathered}$ | Frequency |  | \% |  |
|  | M | F | M | F |  | M | F | M | F |
| COLLEGE |  |  |  |  | $\begin{array}{r} 100-499 \\ 500-999 \\ \hline \end{array}$ | 3 | 2 | 14.28+ | $\begin{aligned} & 14.28+ \\ & 28.57 \\ & \hline \end{aligned}$ |
| Instructor | 5 |  | 23.81 |  | 1,000-1,999 | 1 | 1 | 4.76 | 14.28+ |
| HIGH SCHOOL |  |  |  |  | 2,000-2,999 | 5 |  | 23.81 |  |
| Teacher | 13 | 4 | 61.90 | 57.14 | 3,000-3,999 | 8 | 1 | 38.10 | 14.28+ |
| ELEMENTARY SCHOOL |  |  |  |  | 4,000-4,999 | 2 |  | 9.52 |  |
| TeacherPrincipal Teacher | 1 | 3 | 14.29 | 42.86 | None given | 2 | 2 | 9.52 | 28.57+ |
| MINISTER | 1 |  |  |  |  |  |  |  |  |
| None given | 1 |  |  |  |  |  |  | . |  |
| Total | 21 | 7 | 100.00 | 100.00 |  | 21 | 7 | 99.99+ | 99.98+ |

TABLE 12--Continued

| b. After SEF |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position Held | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ |  | \% |  | (11-12 <br> Month) <br> Salary | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ |  | \% |  | Outside Income | $\begin{gathered} \text { Fre- } \\ \text { quency } \end{gathered}$ |  | Source |
|  | M | F | M | F |  | M | F | M | F |  | M | F |  |
| COLLEGE |  |  |  |  |  |  |  |  |  |  |  | . |  |
| ```Assist- ant Profes- sor``` | 2 |  | $9.52+$ |  | $\begin{aligned} & \text { 6,000- } \\ & \text { 6,999 } \end{aligned}$ | 1 |  | $4.76+$ |  | $\begin{aligned} & 1,000- \\ & 1,999 \end{aligned}$ |  | 1 | Rental Property |
| Associate Professor |  | 1 |  | $14.28+$ |  |  |  |  |  |  |  |  |  |
| Research Assistant <br> Dean of Department | 2 | 1 | $9.52+$ | 14.28+ | $\begin{aligned} & 7,000- \\ & 7,999 \\ & 8,000- \\ & 8,999 \end{aligned}$ | 1 | 2 | $4.76+$ | 27.57 |  |  |  |  |
| $\begin{aligned} & \text { HIGH } \\ & \text { SCHOOL } \end{aligned}$ |  |  |  |  | $\begin{aligned} & 9,000- \\ & 9,999 \\ & 10,000 \\ & 10,999 \end{aligned}$ | 3 |  | 14.29 |  |  |  |  |  |


| Principal <br> Special Subjects Supervisor | 1 | 1 | 4.76+ | 14.28+ | $\begin{aligned} & 11,000- \\ & 11,999 \\ & 12,000- \\ & 12,999 \end{aligned}$ |  | 1 |  | 14.29 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Superintendent of Schools | 1 |  | $4.76+$ |  | $\begin{aligned} & 13,000- \\ & \text { and } \\ & \text { above } \end{aligned}$ |  |  |  |  |  |  |  |  |
| Assistant Superintendent of Schools | 1 |  | 4.76+ |  | $\begin{aligned} & \hline(9-10 \\ & \text { Months) } \\ & 6,000- \\ & 6,999 \end{aligned}$ | 2 |  | 9.52 |  |  |  |  |  |
| Full-time Students | 12 | 4 | 57.14 | 57.14 | Study grants only | 12 | 4 | 57.14 | 57.14 |  |  |  |  |
| Personnel consultant with Engineering Firm | 1 |  | $4.76+$ |  | Income from part- time teach- ing $2,000-$ 2,999 | 1 |  | $4.76+$ |  |  |  |  |  |
| None given | 1 |  | 4.76+ |  | $\begin{aligned} & \hline 3,000- \\ & 3,999 \\ & 4,000- \\ & 4,999 \end{aligned}$ | 1 |  | 4.76+ |  |  |  |  |  |
| Total | 21 | 7 | 99.98+ | 99.98+ |  | 21 | 7 | 99.99+ | 100.00 |  |  |  |  |

thousand to three thousand, nine hundred ninety-nine dollars and two or $9.52 \%$ within the range of four thousand to four thousand nine hundred ninety-nine dollars. Two or $9.52 \%$ of the subjects gave no beginning salaries as part of the employment record. There is a slight decrease in percent of persons in the five hundred to nine hundred ninety-nine category over the subjects in the category having doctoral degrees conferred. This may well be due to the age factor; percentage wise, there are more subjects in this category in the thirty-five to thirty-nine year group than in the first category.

Nine of the male subjects in this category have incomes from positions held since fellowships were granted; two or $9.52 \%$ are doing part-time teaching and study as mentioned above, twelve or $57.14 \%$ are full-time students, of the remaining subjects one or $4.76 \%$ has an income between six thousand and six thousand, nine hundred ninety-nine dollars, one or $4.76 \%$ an income between eight thousand and eight thousand, nine hundred ninety-nine dollars. Three or $14.29 \%$ have incomes between ten thousand and ten thousand nine hundred, ninety-nine dollars for an eleven to twelve month period. Two or $9.52 \%$ of these subjects have incomes of between six thousand and six thousand nine hundred ninety-nine dollars for a nine to ten month period. The two research assistants with teaching responsibilities receive between four thousand and four thousand, nine hundred and ninety-nine
dollars and between two thousand and two thousand, nine hundred ninety-nine dollars, respectively. Without exception, these SEF Fellows who are full-time students or completing doctoral dissertations have no income from sources other than salary.

The positions of employment held by the seven females in this category were high school teachers and elementary teachers. Three or $42.86 \%$ commenced working as elementary school teachers and four or $57.14 \%$ as high school teachers. Five of this group remained in these positions for one to four years, one five to nine years and two remained ten to fourteen years.

In the interim between the granting of the Fellowships and during the period before completion of doctoral study, two of this group are employed in colleges, one as an Assistant Professor and one as Dean of a Department; the two subjects comprise $28.6 \%$ of this category; one subject works as a special subjects supervisor and represents $14.3 \%$ of this group. Four or $57.1 \%$ are full time students in the cooperating centers. This shows an almost complete reversal of positions held by SEF Fellows since receiving fellowships and points up the effectiveness of additional formal education even before doctoral work is completed.

Beginning salaries for initial employment were all less than three thousand, nine hundred and ninety-nine dollars. One of the subjects in this category had an income of
less than four hundred ninety-nine dollars; this represented $14.29 \%$ of the subjects. Two or $28.5 \%$ received incomes of between five hundred and nine hundred ninety-nine dollars; one, or $14.29 \%$ had an income of between three thousand and three thousand, nine hundred ninety-nine dollars. Two of the subjects reported no income for beginning employment. While four or $57.14 \%$ of these subjects reported no income other than stipends from the Southern Education Foundation because of their status as full-time students, the remaining three or $27.57 \%$ had incomes above the eight thousand dollar category. Two of them or $27.57 \%$ had incomes of between eight thousand, nine hundred ninety-nine dollars and the other $14.29 \%$ representing one subject's income was in the eleven thousand to eleven thousand, nine hundred ninety-nine dollar bracket.

Income from sources other than salary was reported by only one or $14.29 \%$ of these subjects; this income was from rental property and fell in the range between one thousand and one thousand, nine hundred ninety-nine dollars. The fact that $85.71 \%$ had no income fromother sources indicates the determined outlook of these subjects in aspiring to do additional study with reduced incomes.

The category of SEF Fellows who are full-time students or completing doctoral study includes twenty-one males and seven females ranging in age from twenty-four years to fifty-five years. They are married in twenty-four instances;
two are separated from mates, one is divorced and one is single. They are subjects with dependents, except three. The parental background reveals a majority of parents attended high school or above, whose occupations were predominantly semi-skilled with a few in the professions.

Full-time students and those completing doctoral study, including both male and female are affiliated with honorary, professional, civic and social organizations. Sixteen are members of honorary fraternities, twenty-one are members of social sororities and fraternities and all of this category belong to professional organizations at both the national and state levels. Affiliations with numerous civic organizations are common to all of this category except three males.

Test scores made on the Study of Values by SEF Fellows who are fuil-time students or completing dissertations show high scores made by six male Fellows or $25.57 \%$ on Theoretical Value, and eight Fellows or $38.10 \%$ low scores on this same value. Scores on the Economic Value revealed one or $4.76 \%$ who scored high and seven or $33.33 \%$ who scored low. Of this group, seven or $33.33 \%$ scored high on Aesthetic Value and two or $9.52 \%$ scored low. Nine or $42.86 \%$ made high scores on Social Value, one or $4.76 \%$ made a high score on Political, but six or $28.57 \%$ made low scores on this value. Over $50 \%$ made high or low scores on Religious Values, seven or $33.33 \%$ scored high and five or $23.81 \%$ low. These scores,
although not typical, reflect middle class values of the Fellows in this category.

High and low scores obtained on the Study of Values by female SEF Fellows, who are full-time students or completing doctoral dissertations show no high scores on Economic, Aesthetic, Social or Political Values. (See Table 13). One, or $14.28 \%$ scored high on the Theoretical Value, and one scored high on Religious Value. One subject or $14.28 \%$ scored low on each of four values--Theoretical, Economic, Social and Political. Six, or $85.71 \%$ scored low on Aesthetic Value. There was one outstandingly high score on Theoretical Value and two outstandingly low scores on Aesthetic Value.

Male SEF Fellows who are full-time students or completing doctoral study made scores on the Strong Vocational Interest Blank, which when given ratings, included eleven ratings of B- or below on the scale for Artist (Group I), nineteen ratings of $B$ - or below on the scale for MathematicsScience Teacher (Group II), one on the scale for Y.M.C.A. Director (Group V), fifteen on the scale for Senior C.P.A. (Group VIII), six on the scale for Sales Manager (Group IX) and nine on the scale for Advertising Man (Group X). High interest patterns were reflected in ratings, four Fellows on the scale for Artist, none on the scale for Engineer, four on the scale for Mathematics-Science Teacher, sixteen on the scale for Y.M.C.A. Director, none for C.P.A., two for

TABLE 13
SCORES ON STUDY OF VALUES MADE BY FULL-TIME STUDENTS
OR FELLOWS COMPLETING DOCTORAL DISSERTATIONS

| Theoretical |  | Economic |  | Aesthetic |  | Social |  | Political |  | Religious |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | F | M | F | M | F | M | F | M | F | M | F |
| 47 | 64** | 31* | 42 | 43** | 32* | 38 | 26* | 32* | 42 | 44 | 34* |
| 52** | 41 | 33* | 40 | 27* | 30* | 43** | 30* | 41 | 41* | 44 | 45 |
| 38* | 41 | 38 | 35 | 46** | 30* | 29* | 30* | 50** | 30* | 39 | 44 |
| 49 | 35 | 41 | 41 | 45** | 34* | 29* | 34* | 37* | 35* | 39 | 49 |
| 32** | 39 | 39 | 30* | 36 | 45 | 49** | 45 | 44 | 35* | 40 | 45 |
| 45.5** | 28* | 16.5* | 39 | 56** |  | 49** | 33* | 42 | 42* | 31* | 51** |
| 26* | 35 | 33 | 41 | 42** | 34 | 42 | 34* | 44 | 35* | 53** | 49 |
| 41 |  | 31 |  | 36 |  | 49* |  | 40 |  | 43 |  |
| 39 |  | 50** |  | 30 |  | 39 |  | 35* |  | 47** |  |
| 36* |  | 36* |  | 49** |  | 46** |  | 44 |  | 29* |  |
| 52** |  | 46 |  | 38 |  | 42 |  | 35* |  | 27* |  |
| 40 |  | 34.5* |  | 26* |  | 35 |  | 42.5 |  | 59** |  |
| 36* |  | 39 |  | 36 |  | 31* |  | 45 |  | 53** |  |
| 47 |  | 45 |  | 30 |  | $31 *$ |  | 41 |  | 46* |  |
| 52** |  | 28* |  | 31 |  | 50** |  | 35* |  | 44 |  |



Sales manager and three on the scale for Advertising Man. The large number of Fellows whose scores indicated interest patterns associated with successful Y.M.C.A. Directors (Group V) is a pattern that was characteristic of Fellows upon whom doctoral degrees were conferred. There is a similar pattern in both of these groups of a lack of interests characteristic of successful Engineers and Senior C.P.A.'s. (See Table 14, a.).

Ratings of vocational interests of this category of female Fellows are tabulated in Table 14, b. Ratings of B+ and above are evident for one subject on the scale for English Teacher, two on the scale for Social Worker, three on the scale for Social Science Teacher, two on the scale for Elementary Teacher, two on the scale for Mathematics-Science Teacher and six on the Femininity-Masculinity scale. Ratings of B- or below were indicative of little or no interests by seven subjects on the Artist Scale, six on the scale for English Teacher, five on the scale for Social Worker, four on the scale for Social Science Teacher, seven each on the scales for Business Education Teacher, Home Economics Teacher and Physical Education Teacher, and five each on scales for Elementary Teacher and Mathematics-Science Teacher.

The social classes with which male SEF Fellows, who are full-time students or completing doctoral programs, identified included middle working, middle, upper middle and upper, the largest number identifies with the middle class.

TABLE 14
RATINGS ON THE STRONG VOCATIONAL INTEREST BLANK FOR SEF FELLOWS WHO ARE FULL-TIME STUDENTS OR COMPLETING DISSERTATIONS
a. Males

| Rating | Artist <br> Group I | Engineer <br> Group II | Mathematics Science Teacher Group IV | Y.M.C.A. Director <br> Group V | Senior <br> C.P.A. <br> Group VIII | Sales Manager <br> Group IX | ```Advertising Man Group X``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C |  | 9 | 2 |  | 4 | 1 | 1 |
| C+ | 2 | 9 | 5 | 1 | 5 | 2 | 3 |
| B- | 9 | 1 | 4 |  | 6 | 3 | 5 |
| B | 5 | 1 | 5 | 3 | 5 | 12 | 8 |
| B+ | 1 | . | 4 | 6 |  | 1 | 3 |
| A | 3 |  |  | 10 |  | 1 |  |
| Total | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| *Rejects | 11 | 19 | 11 | 1 | 15 | 6 | 9 |
| **Interests | 4 | 0 | 4 | 16 | 0 | 2 | 3 |

*Ratings of B- or below.
**Ratings of $\mathrm{B}+$ or above.
(See Table 15). Two or $9.52 \%$ identified with the middle working class, nine or $42.85 \%$ with the middle class, eight or $38.10 \%$ with the upper middle class and two or $9.52 \%$ with the upper class. (See Table 13). This differs slightly from those Fellows upon whom doctoral degrees have been conferred. (See Table 15).

The full-time female students and/or those completing doctoral study all identified with middle, upper middle and upper classes. (See Table 15). The mean score was 24.86, slightly lower than the group of subjects having successfully completed study but more than the unsuccessful group. Four or $57.14 \%$ identified with the upper middle class, and one or $14.29 \%$ identified with the upper class. It could well be hypothesized that this group reflects strong middle class values with emphasis on the importance of education.

The average GRE scores (verbal and quantitative) for males in this category were 472.30 and 490.05 , respectively. The averages for females was 495 and 430 . There were no substantial differences in mean grade point and GRE scores for successful SEF Fellows and SEF Fellows who are full-time students or completing doctoral study.

The pattern of post-employment records of this category are inconclusive because of the sixteen who are fulltime students. College positions were held by twenty-two of this category prior to SEF Fellowship and incomes reported
were all less than four thousand, five hundred dollars.
It is highly probable that some intangible factor in the cultural background of this category of Fellows accounts for the value patterns which were low on Aesthetic Value and Social Value for the females and the fact that so few scored high on Economic and Political Values. A sociological factor may be the cause of occupational interests of the larger per cent of these fellows in occupations in the Social Welfare group. As was the case with the successful category of Fellows, this category associated itself with the middle class as determined by the Sims SCI Occupational Rating Scale.

TABLE 15
FREQUENCY OF SCORES ON SIMS SCI OCCUPATIONAL RATING
SCALE FOR SEF FELLOWS WHO ARE FULL-TIME STUDENTS OR COMPLETING DISSERTATIONS

| Score Range | Frequency |  | $\%$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F |
| $1-6$ |  |  |  |  |
| $7-12$ |  |  |  |  |
| $13-18$ | 2 |  | 9.52 |  |
| $19-24$ | 9 | 4 | 42.85 | 57.14 |
| $25-30$ | 8 | 2 | 38.10 | 28.57 |
| $31-36$ | 2 | 1 | 9.52 | 14.29 |
| $37-42$ |  |  |  |  |
| Total | 21 | 7 | 100.00 | 100.00 |

The full-time students or those completing doctoral study were graduated in more than $80 \%$ of the cases from four year state supported colleges. Their undergraduate majors were selected from thirteen subject fields all in teaching areas except one, who completed undergraduate work in Religion. The post-master's work was done in eleven areas in Education. Educational Administration was elected as a major field by nine Fellows in this category. This could be related to the positions of principals and supervisors held before SEF Fellowships were granted, without exception, the subjects in this category chose subject areas in the field of Education.

The mean grade point of male SEF Fellows who were full-time student was 3.36 at the undergraduate level and 3.38 at the post-master's level. Females in this category possessed a mean grade point of 3.08 at the undergraduate level and 3.27 at the graduate level.

## SEF Fellows Who Have Not Successfully Completed Doctoral Study

The third category of male SEF Fellows included fifteen subjects who did not complete doctoral studies. One was in the age range of thirty to thirty-four, three were in the age bracket thirty-five to thirty-nine years, four were in the forty to forty-four age range, two were in the fortyfive to forty-nine age range, three were in the fifty to
fifty-four range and one in the fifty-five to fifty-nine bracket. One subject gave no age. All the subjects. in this group were thirty years of age or above. There are six males and nine females, the only category of subjects in which the number of females exceeds the males. Twelve of these Fellows are married, and one each is single, widowed and divorced. The number of dependents of these subjects varies from four with no dependents to two with five dependents. (See Table 16).

The mothers of eight of the subjects being described are living and seven are deceased. The educational levels of the mothers are concentrated at the upper end of the educational ladder. Six are college graduates and three attended college, two were graduated from high school, two attended high school and two completed eighth grade or below: These mothers worked in five different occupations. Seven were housewives, one was a nurse, one a seamstress, one a supervisor of school and five were teachers. (See Table 17, a.).

Among the fathers of these Fellows who failed to complete doctoral study, eight are living and seven deceased. The pattern of educational attainment of the fathers of subjects being described is similar to mothers of these subjects. One father was a college graduate, four attended college, two were graduated from high school, three attended high school and five completed eighth grade or
below. (See Table 17, b.).

TABLE 16
AGE DISTRIBUTION, MARITAL STATUS AND NUMBER OF DEPENDENTS. OF SEF FELLOWS WHO DID NOT COMPLETE DOCTORAL STUDY

| Age | Frequency |  | Marital Status | Frequency |  | Number of Dependents | Frequency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F |  | M | F |  | M | F |
| 20-24 |  |  | Single |  | 1 | 0 | 1 | 3 |
| 25-29 |  |  | Married | 6 | 6 | 1 |  | 3 |
| 30-34 |  | 1 | Separated |  |  | 2 |  | 1 |
| 35-39 | 2 | 1 | Divorced |  | 1 | 3 | 3 | 1 |
| 40-44 | 1 | 3 | Widowed |  | 1 | 4 |  | 1 |
| 45-49 |  | 2 |  |  |  | 5 | 2 |  |
| 50-54 | 2 | 1 |  |  |  |  |  |  |
| 55-59 | 1 |  |  |  |  |  |  |  |
| None given |  | 1 |  |  |  |  |  |  |
| Total | 6 | 9 |  | 6 | 9 |  | 6 | 9 |

TABLE 17
PARENTS OF SEF FELLOWS WHO DID NOT COMPLETE DOCTORAL STUDY


A study of undergraduate institutions from which the male subjects in this category graduated revealed $83.33 \%$ or five were graduated from four year state supported colleges and one or $16.67 \%$ was graduated from a private four year college. There were four major areas indicated as part of the undergraduate educational background of this group--Physical Science, History Sociology and Industrial Education. One or $16.67 \%$ majored in Physical Sciences, two or $33.33 \%$ in History, one or $16.67 \%$ in Sociology and two or $33.33 \%$ in Vocational and Industrial Education. Majors at the postmaster's level were limited to two areas as three or $50 \%$ of the subjects indicated no majors at this level. One or $25 \%$ had geared his work toward General Education, and the other 1 or $25 \%$ toward Foundations of Education. (See Table 18, a).

The lowest mean grade point of any of the three categories of male SEF Fellows at the undergraduate level was 1.89 which was made by the group which did not complete doctoral study. The range was 1.07 at the post-master's level. The range of grades was .75 and the mean grade point 3.35 with no pattern of relationship established between mean undergraduate grade point and mean graduate grade point. (See Table 18, a).

On the GRE, this group of male Fellows not completing doctoral study had a higher average on the verbal section than did either other categories. The average score on the verbal section was 516.73 and 453.39 on the quantitative

TABLE 18
TYPE OF INSTITUTION, UNDERGRADUATE MAJORS, MINORS, POST-MASTER'S MAJORS, MINORS AND GRADE POINT AVERAGES OF SEF FELLOWS WHO HAVE NOT COMPLETE DOCTORAL STUDY
a. Male

| Undergraduate |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Institution | Frequency | \% | Major | Frequency | \% | Minor | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% | \|Undergraduate Grade Point Average | Frequency | \% |
| State Supported 4-year College | 5 | 83.33 | History | 2 | 33.33 | Cabinet Making | 1 | 16.67 | $\left\|\begin{array}{l} 1.00-1.99 \\ 2.00-2.99 \\ 3.00-3.99 \end{array}\right\|$ <br> None given | $\begin{aligned} & 3 \\ & 2 \\ & 1 \end{aligned}$ | $\begin{aligned} & 50.00 \\ & 33.33 \\ & \\ & 16.67 \end{aligned}$ |
| $\begin{aligned} & \text { Private } \\ & \text { College } \end{aligned}$ | 1 | 16.67 | Phys- ical Science | 1 | 16.67 | Chemistry | 1 | 16.67 |  |  |  |
|  |  |  | Sociology | 1 | 16.67 | Education | 2 | 33.33 |  |  |  |
|  |  |  | Vocational \& Indus trial Art | 2 | 33.33 | English | 2 | 33.33 |  |  |  |
| Total | 6 | 10000 |  | 6 | 100.00 |  | 6 | 10000 | , | 6 | 100.00 |

TABLE 18, a--Continued

| Post-Master's |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major | Fre- <br> quency | $\%$ | Minor | Fre- <br> quency | $\%$ | Grade Point <br> Average | Fre- <br> quency | $\%$ |
| Foundations <br> of Education | 1 | 25 | Administra- <br> tion | 1 | 25 | $3.00-3.99$ <br> None given | 5 <br> 1 | 83.33 <br> 16.67 |
| General <br> Education | 1 | 25 | Sociology | 1 | 25 |  |  |  |
| None given | 3 | 50 | None given | 3 | 50 |  |  |  |
| Total | 6 | 100 |  | 6 | 100 |  | 6 | 100.00 |

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section. The average for this group was higher on both sections of GRE than the average for both sections made by the group completing doctoral study, but scores were not available for all subjects in this category. This could indicate that other factors not discussed in this investigation have been deterrents to completion of doctoral study by these Fellows.

Similar to all categories in this investigation, the larger number of female subjects in this category graduated from four year state supported colleges. Six or $66.67 \%$ fall in this category. The other three or $33.33 \%$ graduated from private four year colleges. The undergraduate majors were taken in Home Economics, Elementary Education, Sociology, Teacher Education, English and History. Two or $22.22 \%$ had majors in Home Economics, three or $33.33 \%$ majored in Elementary Education and one each or $11.11+\%$ majored in Sociology, Teacher Education, English and History. In the section on majors at the post-master's level, five or $55.56 \%$ listed no majors, one or $11.11 \%$ gave Sociology as a major, two or $22.22 \%$ Education. None listed minors at this level indicating their programs may not have been well organized. (See Table 18, b).

The category of SEF Fellows who have not successfully completed doctoral study have a mean undergraduate grade point of 3.03 (less than averages for the other categories of female SEF Fellows). The graduate mean grade point was

TABLE 18
TYPE OF INSTITUTION, UNDERGRADUATE MAJORS, MINORS, POST-MASTER'S MAJORS, MINORS AND GRADE POINT AVERAGES OF SEF FELLOWS WHO HAVE NOT COMPLETED DOCTORAL STUDY
b. Female

| Undergraduate |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Institution | Frequency | \% | Major | Frequency | \% | Minor | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% | Grade Point Average | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% |
| State Supported 4-year College | 6 | 66.67 | Elementary Education | 3 | 33.33+ | Chemistry | 1 | 11.11 | $\left\|\begin{array}{c} 2.00-2.99 \\ 3.00-3.99 \end{array}\right\|$ | 2 | 22.22 |
| Private College | 3 | 33.33 | English | 1 | 11.11+ | Elementary <br> Educa- <br> tion | 1 | 11.11 | 4.00 | 6 | 66.67 |
|  |  |  | History | 1 | 11.11+ | History | 1 | 11.11 | None given | 1 | 11.11 |
|  |  |  | Home Economics | 2 | 22.22+ | None <br> given | 6 | 66.67 |  |  |  |
|  |  |  | Sociology | 1 | 11.11+ |  |  |  |  |  |  |


|  |  |  | Teacher Education | 1 | $11.11+$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 9 | 100.0011 |  | 9 | 99.99+1 | 9 | 10000 |  | 9 | 100. 00 |

Post-Master's

| Major | Fre- <br> quency | $\%$ | Minor | Fre- <br> quency | $\%$ | Post-Master's <br> Grade Point | Fre- <br> quency | $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary <br> Education | 2 | 22.22 | None given | 9 | 100.00 | $2.00-2.99$ <br> $3.00-3.99$ | 1 <br> 4 | $11.11+$ <br> $44.44+$ |
| General <br> Education | 1 | 11.11 |  |  |  | 4.00 |  |  |
| Sociology | 1 | 11.11 |  |  |  | None given | 4 | $44.44+$ |
| None given | 5 | 55.56 |  |  |  |  |  |  |
| Total | 9 | 100.00 |  | 9 | 100.00 |  | 9 | $99.99+$ |

3.20 with a range of 1.35 , lower than the other categories, but not substantially so. The averages for the verbal and quantitative sections of GRE were 413.46 for the verbal and 320.00 for the quantitative.

Beginning positions of male SEF Fellows not successful in completing doctoral study included three areas, namely, high school, two full-time teachers and a teacherprincipal or $50 \%$, one salesman or $25 \%$ of the subjects and the final one or $25 \%$ started employment as educational advisor in the Civilian Conservation Corp. Four worked one to four years in these initial positions, one five to nine years, and one ten to fourteen years. (See Table 19, a).

Income from first positions in which subjects were employed had monetary values of from five hundred to nine hundred, ninety-nine dollars for one or $16.67 \%$, one thousand to one thousand nine hundred ninety-nine dollars for $50 \%$ or three of the subjects and between two thousand and two thousand nine hundred ninety-nine dollars for two or $33.33 \%$ of the subjects. During the year 1963-64, the incomes of five of the subjects were for eleven to twelve months. Two or $33.33 \%$ had incomes of between seven thousand and seven thousand nine hundred ninety-nine dollars, two or $33.33 \%$ had incomes of from ten thousand to ten thousand-nine hundred ninety-nine dollars, and one an income of between twelve thousand and twelve thousand nine hundred ninety-nine dollars. The one subject, whose income was based on nine to

## TABLE 19

POSITIONS HELD, SALARIES RECEIVED BEFORE AND AFTER FELLOWSHIP
AND INCOME FROM OTHER SOURCES OF SEF FELLOWS
WHO HAVE NOT COMPLETED DOCTORAL STUDY
a. Males

| Before SEF |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Position Held | Frequency | $\%$ | Salary <br> (Beginning) | Frequency | $\%$ |  |
| HIGH SCHOOL |  |  | $500-999$ | 1 | 16.67 |  |
| Teacher | 4 | 25 | $1,000-1,999$ | 3 | 50.00 |  |
| Educational <br> Advisor | 1 | 25 | $2,000-2,999$ | 2 | 33.33 |  |
| Salesman | 1 | 25 |  | 6 | 100.00 |  |
| Total | 6 | 100.00 |  |  |  |  |

TABLE 19--Continued

| After SEF |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position Held | $\begin{array}{c\|} \hline \text { Fre- } \\ \text { quency } \\ \hline \end{array}$ | \% | $\begin{gathered} \text { (11-12 Month) } \\ \text { Salary } \\ \hline \end{gathered}$ | $\left\|\begin{array}{c} \text { Fre- } \\ \text { quency } \end{array}\right\|$ | \% | Outside Income $\quad$ Source |
| COLLEGE |  |  |  |  |  |  |
| Placement Director | 1 | 16.67 | $\begin{aligned} & 6,000-6,999 \\ & 7,000-7,999 \\ & 8,000-8,999 \end{aligned}$ | 2 | 33.33 | $\left\lvert\, \begin{aligned} & 2,000-2,999 \\ & 3,000-3,999 \\ & 4,000-4,999 \end{aligned}\right.$ |
| Associate Professor | 1 | 16.67 | $\begin{gathered} 9,000-9,999 \\ 10,000-10,999 \end{gathered}$ | 2 | 33.33 |  |
| HIGH SCHOOL Principal | 2 | 33.33 | $\begin{aligned} & 11,000-11,999 \\ & 12,000-12,999 \end{aligned}$ | 1 | 16.67 |  |
| ELEMENTARY SCHOOL |  |  |  |  |  |  |
| Principal | 2 | 33.33 | 9-10 Month |  |  |  |
|  |  |  | $\begin{aligned} & 6,000-6,999 \\ & 7,000-7,999 \\ & 8,000-8,999 \end{aligned}$ | 1 | 16.67 |  |
| Total | 6 | 100.00 |  | 6 | 100.00 |  |

ten months, made $16.67 \%$ of this group of subjects, and had an income between eight thousand and eight thousand nine hundred ninety-nine dollars.

Two of these Fellows had income from sources other than salary. One receives approximately two thousand dollars as income from rental property and one about four thousand dollars as an insurance broker.

After the SEF Fellowship was granted, two held college positions, two are high school principals and two elementary principals. One or $16.67 \%$ is a College Placement Officer, one or $16.67 \%$ is an Associate Professor, two or $33.33 \%$ are principals of large high schools and two or $33.33 \%$ are principals of large elementary schools. One of the individuals at the college level stated he had reached candidacy for the doctoral degree, but had done nothing beyond that point. (He was fifty-eight years of age). Age beyond a particular interval may be a characteristic of individuals not successful in completing doctoral study. There may also be complete satisfaction among this group who hold administrative or other positions.

The beginning positions of these female subjects were almost equally divided between two of three educational levels. Four held their initial positions in Colleges, two or $22.22+\%$ as instructors, one or $11.11 \%$ as Supervisor of Student Teaching. At the high school level, the four or $44.44+\%$ were all teachers; the other one or $11.11 \%$ was an
elementary school teacher. (See Table 19, b).
Since the SEF Fellowship was granted, six have positions in colleges. Two or $22.22+\%$ as Associate Professors, one or $11.11+\%$ as an Assistant Professor, one or $11.11+\%$ as Director of Child Development Laboratory, one or $11.11+\%$ is Coordinator of Student Teaching and the other one or $11.11+\%$ is a Placement Officer. One a Jeanes Supervisor, one consultant to a State Education Department and a subject is unemployed because of illness, each represent $11.11+\%$ of these subjects. In as much as four subjects held initial positions in colleges, it may account for the large number of subjects in this category currently holding positions in colleges.

Incomes from beginning positions ranged from less than five hundred dollars to between four thousand and four thousand nine hundred ninety-nine dollars. Two subjects or $22.22+\%$ had salaries between five hundred dollars and nine hundred ninety-nine dollars, and one subject or $11.11+\%$ fell in each of the following intervals, one thousand to one thousand nine hundred ninety-nine dollars, two thousand to two thousand nine hundred ninety-nine dollars, and no beginning salary given.

The incomes identified for 1963-64, by these subjects, are all above six thousand dollars. Two received incomes for eleven to twelve months and six for a nine to ten month period. One or $11.11+\%$ in the eleven to twelve month

TABLE 19
POSITIONS HELD, SALARIES RECEIVED BEFORE AND AFTER FELLOWSHIP AND INCOME FROM OTHER SOURCES OF SEF FELLOWS WHO HAVE NOT COMPLETED DOCTORAL STUDY
b. Females

| Before SEF |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Position | Frequency | \% | $\begin{gathered} \text { Salary } \\ \text { (Beginning) } \end{gathered}$ | Frequency | \% |
| COLLEGE |  |  | 1-499 | 2 | 22.22+ |
| Instructor | 2 | 22.22+. | 500-999 | 3 | 33.33+ |
| Transcript and Record Clerk | 1 | $11.11+$ | 1,000-1,999 | 1 | $11.11+$ |
| Supervisor of Student Teaching | 1 | 11.11 | $\begin{aligned} & 2,000-2,999 \\ & 3,000-3,999 \end{aligned}$ | 1 | $11.11+$ |
| HIGH SCHOOL Teacher | 4 | 44.44 | $4,000-4,999$ <br> None given | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 11.11+ \\ & 11.11+ \end{aligned}$ |
| ELEMENTARY SCHOOL Teacher | 1 | 11.11 |  |  |  |
| Total | 9 | 99.99+ |  | 9 | 99.99+ |

TABLE 19--Continued

| After SEF |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position | Fre- quency | \% | Salary | Frequency | \% | Other Sources | Frequency | Source |
| COLLEGE |  | . | 11-12 Months |  |  | $\begin{aligned} & 500- \\ & 1,000 \end{aligned}$ | 1 | Return on In-vestments |
| Associate Professor | 2 | 22.22+ | 6,000-6,999 | 1 | 11.11+ | None given | 8 |  |
| Assistant Professor | 1 | $11.11+$ | 7,000-7,999 | 1 | 11.11+ |  |  |  |
| Director of Child Development | 1 | $11.11+$ | 9-10 Months |  |  |  |  |  |
| Laboratory <br> Coordinator of Student Teaching | 1 | 11.11+ | $\begin{aligned} & 6,000-6,999 \\ & 7,000-7,999 \end{aligned}$ | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ | $\begin{aligned} & 22.22+ \\ & 44.44 \end{aligned}$ |  |  |  |
| Placement Officer | 1 | 11.11 | No income due to illness | 1 | 11.11+ |  |  |  |
| Consultant--State <br> Department of <br> Education | 1 | 11.11+ |  |  |  |  |  |  |
| Jeanes Supervisor Not employed because of illness | $1$ | $\begin{aligned} & 11.11+ \\ & 11.11+ \end{aligned}$ |  |  |  |  |  |  |
| Total | 9 | 99.99+1 |  | 9 | 199.99+ |  | 9 |  |

period received between six thousand and six thousand nine hundred ninety-nine dollars and one or $11.11+\%$ in the eleven to twelve month period received between six thousand and six thousand nine hundred ninety-nine dollars and one or $11.11+\%$ received between seven thousand and seven thousand nine hundred ninety-nine dollars. For the nine to ten month period two or $22.22+\%$ received within six thousand to six thousand nine hundred ninety-nine dollars and four or $44.44+\%$ received within seven thousand and seven thousand nine hundred ninetynine dollars. One received no income, because of illness which prevents her employment.

Scores made on the Study of Values by the male Fellows not completing doctoral study vary from the other two male categories; on only one value (aesthetic), did this group score within the range of fifty per cent of all male scores, on Theoretical Value, three or $50 \%$ of this category scored high and one or $16.67 \%$ scored low. Equal numbers scored high and low on Economic Value, one or $16.67 \%$ scored high and two or $33.33 \%$ scored low. The largest per cent on all values scored low on Political, four or $66.67 \%$ and one or $16.67 \%$ scored high; the scores were evenly distributed on Religious Value, with two or $33.33 \%$ each scoring high and low. (See Table 20).

Once scores on the Study of Values were obtained for females not completing doctoral study, it was evident three or $33.33 \%$ scored high on Theoretical Value, one on Economic

## TABLE 20

SCORES ON STUDY OF VALUES MADE BY SEF FELLOWS
WHO HAVE NOT COMPLETED DOCTORAL STUDY


Value, three on Social Value, two on Political Value and one on Religious Value. Low value patterns were indicated in the scores by two subjects on Economic Value, five on Aesthetic Value, two on Religious Value and one each on the Social and Political Values. (See Table 20).

The SEF Fellows who did not successfully complete doctoral study had ratings on occupational scales which indicated no occupational interests peculiar to Engineer, Mathematics-Science Teacher or Sales Manager. Two have ratings of $B+$ or above and two ratings of $B-$ or less on the scale for Artist. Four of these Fellows had ratings of Bor below on Engineer (Group II) and three at the same level on Mathematics-Science (Group IV) Teacher; five had interests characteristic of a Y.M.C,A. Director (Group V) and no one was rated B- or below. Five of this category had ratings of B- or below on Senior C.P.A. (Group VIII). Three Fellows had ratings of $B$ - or below on the scale for Sales Manager (Group IX) and one, a rating of A. On the scale for Advertising Man (Group X), one had interests similar to those of successful men in this vocation and two scored Bor below. The similarity of occupational interest of this group to those of successful men as Y.M.C.A. Directors (Group V) parallels the predominant interests of subjects in the two other categories on the scale for this occupational group. (See Table 21, a). Ratings given scores on the ten scales used with

TABLE 21
RATINGS ON STRONG VOCATIONAL INTEREST BLANK FOR SEF FELLOWS WHO HAVE NOT COMPLETED DOCTORAL STUDY
a. Male

| Rating | Artist <br> Group I | Mathe- <br> Engineer <br> Group II | matics <br> Science <br> Teacher <br> Group IV | Y.M.C.A. <br> Director <br> Group V | Senior <br> C.P.A. <br> Group VIII | Manager <br> Group IX | Advertising <br> Man |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group X |  |  |  |  |  |  |  |

* Ratings of B - or below.
**Ratings of $\mathrm{B}+$ or above.
females in this investigation pointed up the fact that more subjects in the category not completing doctoral dissertations tended to reject these vocations. (See Table 21, b). There were ratings of $\mathrm{B}-$ or below for six subjects on each of the scales for Artist, English Teacher and Social Worker, two on the scale for Social Science Teacher, four for Business Education Teacher, two for Elementary Teacher, eight for Home Economics, nine for Physical Education Teacher and four for Mathematics-Science Teacher. Ratings of B+ and above, which indicate interests similar to successful persons in specific occupations, were assigned to scores of one subject on the Artist scale, three each on scales for English Teacher and Social Worker, four for Social Science Teacher, five for Elementary Teacher, two for MathematicsScience Teacher and eight on the Femininity-Masculinity Scale. Although subjects in other categories of male and female made scores indicating primary interests in occupations in Social Welfare the largest number of these female subjects had primary interests on the scale for Elementary Teachers. (See Table 21, b).

Social classification for these Fellows who did not complete doctoral study was limited to three classes, middle, upper-middle and middle. One or $16.66+\%$ identified with the middle class, four or $66.66+\%$ with the upper-middle and one or $16.66+\%$ with the upper class. This pattern is very similar to the category described in Table 7 with the

| 8 | 己 | 0 | 0 | 5 | 0 | $\dagger$ | $\varepsilon$ | $\varepsilon$ | 1 | s7səлəəuI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | $\dagger$ | 6 | 8 | 己 | $\dagger$ | 乙 | 9 | 9 | 9 | sq0ə¢ə¢ |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | ［e70］ |
| 9 |  |  |  | $\zeta$ |  | 2 | 己 | 己 | 1 | V |
| $\tau$ | $\tau$ |  |  |  |  | 2 | 1 | $i$ |  | ＋ 9 |
| 1 | $\varepsilon$ |  | 1 | 2 | 5 | $\varepsilon$ |  |  | 乙 | G |
|  | 1 | 1 | $\varepsilon$ | 1 | 1 |  | $\varepsilon$ | 2 | 乙 | $-9$ |
|  | 1 | 1 | 己 |  |  |  | 己 | 1 |  | $+0$ |
|  | 乙 | $L$ | $\varepsilon$ | 1 | $\varepsilon$ | 2 | 1 | $\varepsilon$ | $\dagger$ | 2 |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { M } \\ & \text { 品 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | ¢ |

[^11]same per cent in each of these groups identifying with the upper-middle class. (See Table 22).

TABLE 22
FREQUENCY OF SCORES ON SIMS SCI OCCUPATIONAL RATING SCALE FOR SEF FELIOWS WHO HAVE NOT COMPLETED DOCTORAL STUDY

| Scores | Frequency |  | \% |  |
| :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F |
| 1-6 |  |  |  |  |
| 7-12 |  |  |  |  |
| 13-18 |  | 4 |  | $44.44+$ |
| 19-24 | 1 | 3 | $16.66+$ | 33.33+ |
| 25-30 | 4 | 2 | $66.66+$ | 22.22+ |
| 31-36 | 1 |  | 16.66+ |  |
| 37-42 |  |  |  |  |
| Total | 6 | 9 | 100.00 | 99.99+ |

This final category of female SEF Fellows, who did not successfully complete doctoral study, presents a variation in pattern of social class association. (See Table 22). Four subjects or $44.44 \%$ indicated an association with the middle-working class. Three or $33 \cdot 33+\%$ identified with the middle class and two or $22.22+\%$ with the upper-middle class. This category of subjects gives indications of associating themselves with the middle-class, but larger numbers lean toward the lower extreme of middle-class structure as determined by Sims' ratings of the social classes.

The category of SEF who have not completed doctoral study ranged in age from thirty to fifty-eight. All the subjects were thirty years and above. Females exceeded the males in this category of fifteen subjects. The majority of these subjects were married and dependents varied from none to five.

The educational attainment of mothers of the subjects in this category was concentrated at the level of high school or above. Of the four below the level of high school graduation, two attended high school and two completed eighth grade or below. It seems important to point out what appears to je inconsistent with normal expectations of the educational attainment of mothers and children who were not somehow inspired to achieve much beyond their mothers. This inconsistency is emphasized when we consider the fact that seven of these mothers were housewives. This is contrary to what the investigator anticipated. Ten of the fathers reached levels of high school attendance or above.

The majority of these Fellows were graduated from four year state supported colleges and had the lowest undergraduate grade point average. The average was less for males than for females in this category. However, the average GRE score (verbal) was higher for the males in this category than in either of the other two.

Beginning positions and salaries of the subjects in this category do not vary from patterns of categories
discussed earlier except that a larger per cent hold initial positions at the college level. One of these subjects is ill and unemployed. One subject who is fifty-eight years stated he had been admitted to candidacy but had done nothing since then in terms of completing the program.

On the Study of Values, the male Fellows in this group scored high in fifty per cent of the cases on Theoretical value, the dominant interest being the discovery of truth. Thirty-three per cent of the females scored high on Theoretical value and none low. Two of the females scored high on Political value revealing desire for power over others.

The vocational interest patterns for males were high for Group V and paralleled males in the other categories. Primary occupational interests in Social Welfare were reflected in ratings of females, but the largest number of females had primary interest patterns in the scale for elementary teachers.

Variations were shown on the scores for the Sims.SCI Occupational Rating Scale. Four subjects in this category associated themselves with middle-working class and the others with the middle and upper-middle classes. It is apparent that some sociological and/or motivational factors not isolated in this investigation played a major part in the failure of SEF Fellows to complete doctoral study.

## Summary

The SEF Fellows were divided according to sex and further subdivided into three categories of subjects who had successfully completed doctoral programs, those who were currently enjoying success in doctoral work at the time of this study and those who failed to complete doctoral programs. The study covered a five year period from 1958-59 to 196263.

Personal characteristics were described to determine if there were differences in certain selected personal data characteristics among the three groups included in this study. (1) There were differences in age limits at either end of the continuum enrolled in the program with ages twenty-four to fifty-eight, (2) the marital status of the three categories varied slightly; one of the successful Fellows was separated from his spouse, one of the Fellows currently active in the program was single and one divorced, but all of the unsuccessful Fellows were married, (3) there is only negligible difference in average number of dependents of SEF Fellows in all three categories, (4) fifty per cent or more of mothers and fathers in all three categories are living, (5) the majority of the mothers of subjects in all categories were housewives, the others engaged in similar occupations, (6) the occupations of fathers were varied from the professional to unskilled laborers, (7) the educational
attainment of fathers of the subjects were similar and, (8) the educational attainments of mothers were similar, (9) types of beginning positions vary from category to category with the larger per cent of Fellows who completed doctoral study working in college positions, (10) organizational affiliations in both the professional and non-professional organizations are alike and (11) income after doctoral study is considerably higher.

Academic characteristics were tabulated and described to see if differences existed in academic characteristics among the three groups included in this study as evidenced by G.P.A. Evaluation of the records show (1) the majority of subjects in each category graduated from state supported four-year colleges, however, a larger per cent of Fellows in the unsuccessful group were graduated from state supported colleges, (2) there is the same type of variety in undergraduate subject majors among the three categories of Fellows, (3) the category of Fellows who did not complete doctoral study have less candid pictures of doctoral programs in terms of major and minor subject areas than subjects in the other two categories, (4) there were differences in undergraduate mean grade point averages, with the Fellows who successfully completed doctoral study and those currently engaged in the program having attained higher averages, and (5) Fellows who completed doctoral study had larger graduate mean grade point averages than Fellows in the other
categories.
Although there were differences in averages of GRE Scores (verbal and quantitative) for the categories of SEF Fellows, any conclusions drawn would be inconclusive because of the numbers of subjects for whom GRE Scores were not available. At the time many of these students started doctoral study, GRE was not a requirement for admission, and some schools required examinations other than GRE.

Value patterns were described to see if there were differences in value patterns of the three groups included in this study as assayed by the Allport, Vernon, Lindzey, Study of Values. Careful study of scores on this test for three values reveals (1) Fellows who did not successfully complete doctoral study made higher on Theoretical and Economic Values, (2) Fellows who successfully completed doctoral study and who are full-time students or completing doctoral dissertations made higher scores on Aesthetic Value, (3) Fellows not completing doctoral study made higher scores on Political Value than Fellows in the other two categories, (4) Fellows who had successfully completed doctoral study made higher scores on Religious Value than did Fellows in the other two categories. It would appear that value patterns for the three categories of SEF Fellows in this study reveal differences.

Primary interests and non-occupational information were isolated to ascertain differences in interest patterns
among the three groups included in this study as indicated by the Strong Vocational Interest Blank. The highest interest reflected by ratings was on the scale for Y.M.C.A. Director for males and the scale for Social Worker for females, with the females who did not successfully complete doctoral programs rated higher on the scale for Social Science Teacher. The primary interest appears to be in Social Service or Welfare.

In terms of intermediate, immediate and ultimate criteria, there were the three distinct categories of Fellows discussed earlier in this investigation; all were gainfully employed at the time fellowships were granted and had experienced the equivalent of at least one year of graduate work. The ultimate criterion is perhaps more readily recognizable in the advancement in position evident in all three categories, however, the Fellows who successfully completed doctoral study and those currently completing dissertations attained on-the-job success in larger numbers than did those who failed to complete doctoral study.

An array of characteristics were examined in this study in an effort to identify those characteristics which had contributed to success of SEF Fellows. The various types of data collected gave insights believed to be of significance to success but not often identifiable. The summary and conclusions follow in the next chapter.

## CHAPTER V

## SUMMARY AND CONCLUSIONS

The problem of this study was an attempt to identify personal, socio-economic and academic characteristics of SEF Fellows. The students were given fellowship grants for post-master's study by the Southern Education Foundation, a Philanthropic Organization with the primary purpose of improving educational leadership among Negroes in predominantly Southern States. They were divided into three categories-(1) those who earned doctoral degrees, (2) those who were currently engaged in the SEF Program at the time of this study, and (3) those who had failed to complete the study in participating colleges and universities, by sex. The sample included seventy-nine SEF Fellows, fifty-four males and twenty-five females. Efforts were made to determine if observable differences existed in performance on tests of graduate ability, Graduate Record Examination (VerbalQuantitative), undergraduate grade point averages and postmaster's grade point averages. Specifically, this study sought to:

1. Determine if there were differences in certain
selected personal data characteristics among the three groups identified in this study.
2. Determine if differences in academic characteristics existed among the three groups as evidenced by grade point average.
3. Determine if differences existed in value patterns of the three groups in this study as determined by the Allport, Vernon, Lindzey, Study of Values.
4. Determine if there were differences in interest patterns among the three groups included in this study as indicated by the Strong Vocational Blank.

The participating institutions in which SEF Fellows were enrolled are listed below:

University of Arkansas
University of Florida
University of Kentucky
University of North Carolina
University of Oklahoma
University of Tennessee
University of Texas
George Peabody College for Teachers
North Carolina College
Data utilized in this study came from SEF Fellows who participated in the Southern Education Foundation Program
during the years 1957-58 through 1962-63, records from colleges in which these participants completed undergraduate work and the cooperating centers in which they pursued postmaster's program, a questionnaire constructed by the writer was used to elicit personal data, tine Study of Values test to arrive at value patterns, the Strong Vocational Interest Blank to determine interests and the Sims SCI Rating Scale as an index to social class. Undergraduate and post-master's academic records and GRE scores were used in assembling academic data.

Questionnaires, Study of Values test, Strong Vocational Interest Blank, and Sims SCI Rating Scale were sent to SEF Fellows, the questionnaire completed, tests selfadministered and returned. Undergraduate grade point averages were secured by sending a card, addressed to the undergraduate institution from which the SEF Fellows were graduated, and a letter asking the Fellow to sign a card requesting that his grade point average be sent to the writer. Post-master's grade point averages and GRE scores were secured through the Directors of SEF Programs of participating colleges and universities.

Data were categorized in tabular form and descriptions given in terms of averages and per cents. The characteristics were identified for the three categories included in this study.

The data indicate the following:

1. Age does determine, at least in degree, an intangible factor which terminates in completion of doctoral study.
2. The number of dependents appears not to be a determinant for participation in doctoral study for the three categories in this investigation.
3. There is little describable difference in parental educational attainments and occupations for the three categories of SEF Fellows.
4. Marriage appears to be a characteristic common to all categories of SEF Fellows.
5. Undergraduate grade point averages do have influence on the likelihood of completion of doctoral study.
6. Post-master's grade point averages definitely contribute to completion of doctoral study.
7. Academic achievement at the post-master's level in terms of grade point averages are characteristic of all SEF Fellows.
8. There was sufficient variety in the undergraduate subject majors and minors to eliminate the supposition that undergraduate subject majors and minors contribute to successful completion of doctoral study.
9. GRE scores, which were not available for all subjects, or in the same proportion for each
category of Fellows, led to inconclusive results as a characteristic which is thought of as contributing to successful completion of doctoral study.
10. Positions held after fellowship graṇts are indicators of the ultimate criterion of on-thejob success.
11. Affiliations with honorary, civic, social, and professional organizations are characteristic of all categories of Fellows.
12. Value patterns, as assayed by Allport, Vernon, Lindzey, Study of Values, vary from one value to another for all categories of SEF Fellows.
13. There appears to be a strong interest pattern among all categories of Fellows for occupations related to Social Service and Welfare (determined by Strong Vocational Interest Blank).
14. All categories of Fellows associated themselves with the middle class and above as determined by the Sims SCI Rating Scale.

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APPENDICES

## APPENDIX A

LETTER TO DR. J. CURTIS DIXON

3140 Milam Street Shreveport, Louisiana October 3, 1964

Dr. J. Curtis Dixon
Vice President \& Executive Director 811 Cypress Street, N. E. AtIanta 8, Georgia

Dear Dr. Dixon:
Last summer when you visited the University of Oklahoma Campus, I talked with you, Dr. C. Kelley and Dr. C. M. Bridges, Jr. about a proposed topic for a doctoral dissertation and the procedure to be used in securing data in determining "Selected Personal, Social and Academic Factors Related to Achievement Among Southern Education Foundation Fellows." Subsequently, a prospectus was submitted to my Doctoral Committee and later approved.

I am interested in securing the names of the SEF Fellows who participated in the program during the years 1958-59 - 1962-63. Please include a list of the Cooperating University Centers and a list of the Coordinators in the Centers.

Thanks for your expressed interest in the proposed study and for aiding me in securing the necessary materials.
Yours truly,

Albertine Brannum Hayes
ABH

## APPENDIX B

LETTER TO DR. CLAUDE KELLEY

3140 Milam Street Shreveport, Louisiana November 6, 1963

Dr. Claude Kelley
Assistant Dean and Professor of Education
College of Education
University of Oklahoma
Norman, Oklahoma
Dear Dr. Kelley:
Prior to the end of the 1962-63 school year, I talked with you about a proposal for a doctoral dissertation. At a later date, Dr. Dixon, Dr. Bridges and I discussed with you the procedure to be used in securing data in determining "Selected Personal, Social and Academic Factors Related to Achievement Among Southern Education Foundation Fellows." Subsequently, a prospectus was submitted to my Doctoral Committee and approved by them. It was during this time that $I$ enlisted your aid in securing the academic records of work done at the post-master's level of Southern Education Foundation Fellows. I am enclosing a list of Cooperating University Centers and names of the SEF Fellows who have been in attendance at these centers. At the same time, I am asking your assistance in securing this data. In addition to academic records, I am desirous of obtaining scores on the Graduate Record Examination.

Perhaps I should tell you what I have done thus far. I am working on the first three chapters in an effort to send them to Dr. Bridges by the end of this month. Dr. Dixon sent me a list of centers and Fellows; these Fellows were sent letters with enclosures to be returned indicating their willingness to participate in the investigation. Replies are coming in daily. Questionnaires and tests to be sent to individuals included in the sample are being grouped for mailing. I am deep in activities geared to getting a reading copy in sometime during the spring semester.

When I received the material from Dr. Dixon, I was pleasantly surprised to find eight-six persons participated in the program of the Southern Education Foundation to
develop educational leadership during the five year period from 1958-59-1962-63. I had hoped for at least fifty.

My work here at Washington High School has been both challenging and demanding. I was recently offered a position as Supervisor on the Central Office Staff of Caddo Parish Schools. This appointment was made last Thursday, but duties will not be assumed until a replacement has been made for the position I now hold; perhaps not until the end of the current semester.

Last school year was no doubt the most valuable experience I have had; I find many opportunities to utilize information in implementing facets of the total school program. I will discuss with you in detail the rewarding experiences that resulted from extensive reading in Education 366.

It would be impossible to complete this letter without thanking you for your patience and understanding in working with me as an SEF Fellow and student at the University or for your help in securing data from Cooperating Centers.

I trust you will have a successful year and a promising group of SEF Fellows.

Sincerely yours,

Albertine Brannum Hayes
ABH:VLN
Enclosed: 1 SEF Fellows' list
1 Cooperating University Centers' list

APPENDIX C

LETTER TO SUBJECTS PARTICIPATING IN THE STUDY

3140 Milam Street Shreveport, Louisiana October 15, 1963

Mnl Mr. Myron R. Johnson
Gel George Peabody College for Teachers
Nay Nashville, Tennessee
Dell Dear Mr. Johnson:
During the 1962-63 school year, I was engaged in gng graduate work at the University of Oklahoma in Norman, Ok Oklahoma. It was during this time that I fully realized the imf impact of the Southern Education Foundation Program in extaf tending leadership, primarily among Negroes, through educa cational opportunities. As I sought areas of investigation fol for a doctoral dissertation, I was keenly interested in. detad termining some factors that relate to achievement among Sal Southern Education Foundation Fellows. The result, a propal posal to determine "Selected Personal, Social and Academic Chio Characteristics Related to Achievement of Southern Education Fal Foundation Fellows in Selected Colleges and Universities," ial is the reason for this letter to you.

As a former and/or present Fellow, you realize the imb importance of an adequate sample and securing specific infal formation within a reasonable length of time. I am enlistind ing your aid and enclosing a card addressed to me to indicav cate your willingness to participate. It is highly desirable thit that all former Fellows are included in the study. Dro Dr. Dixon has given me your name and is interested in the pad potential results.

Your participation will involve completing a brief qup questionnaire and taking several short, self-administered teal tests to reveal value patterns, vocational interests and adis additional background information. This material will be sen $\operatorname{sent}$ to you as soon as I receive the enclosed card.

This study may be of value to the Southern Education Foll Foundation, which has done so much in providing educational opp opportunities beyond the Master's degree.

It has been a real pleasure to communicate with you, who because of similar experiences must truly understand the problems involved. I look forward to hearing from you and for an early response to both the enclosed card and other materials to be sent at a later date.

Sincerely yours,

Albertine Brannum Hayes
ABH: VLN
Enclosed: 1 card


## APPENDIX D

THE QUESTIONNAIRE

## QUESTIONNAIRE

## Selected Factors Related to Southern Education Foundation Fellows



## EMPLOYMENT RECORD:

Please give employment record prior to the SEF Fellowship, listing the most recent position first and going back to the first position held.

| Position Held (Title) | Date |  | Location | Salary |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning | Ending |  | Beginning | Final |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | . |  |

Please give employment record since the SEF Fellowship was granted beginning with the most recent position held and going back to first position held.

| Institution | Location | Position <br> (Title) |  |
| :--- | :---: | :---: | :---: |
|  |  |  | Dates |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## EDUCATION:

Please give the information below beginning with the institution in which you did your undergraduate work.


INCOME:
Please give your annual salary for the year 1963-1964
___ Is this salary for $9-10$ months?______
11-12 months?

## C.

Do you have income from other sources? Yes- No- (e.g., inherited, business profits or profits from other investments.)
If so please list source and amount to the nearest thousand dollars.

| Income from sources other than salary: | Amount of income from other sources |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

ORGANIZATIONS
Please list affiliations with organizations:



Use other side of sheet for any additional information.

## APPENDIX D

THE QUESTIONNAIRE

## QUESTIONNAIRE

## Selected Factors Related to Southerii Education Foundation Fellows


MARITAL STATUS:
Single $\qquad$
Married $\qquad$
Separated $\qquad$
Divorced $\qquad$
Widowed
Parents living or deceased?

| Mother | Yes- | No- |
| :--- | :--- | :--- |
| Father | Yes- | No- |

Please give the following information whether parents are living or deceased. Mother's Occupation:

Father's Occupation:
EDUCATION OF PARENTS:

|  | College <br> graduate | Attended <br> college | High School <br> graduate | Attended <br> High School | 3th grade <br> or below |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Mother: | - | - |  | - |  |
| Father: |  |  |  |  |  |

## EMPLOYMENT RECORD:

Please give employment record prior to the SEF Fellowship, listing the most recent position first and going back to the first position held.


Please give employment record since the SEF Fellowship was granted beginning with the most recent position held and going back to first position held.

| Institution | Location | Position <br> (TIte) |  |
| :--- | :---: | :---: | :---: |
|  |  |  | Dates |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## EDUCATION:

Please give the information below beginning with the institution in which you did your undergraduate work.


## INCOME:

Please give your annual salary for the year 1963-1964
___ Is this salary for 9-10 months?
11-12 months?

Do you have income from other sources? Yes- No- (e.g., inherited, business profits or profits from other investments.) If so please list source and amount to the nearest thousand dollars.

| Income from sources other than salary: | Amount of income from other sources |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

ORGANIZATIONS
Please list affiliations with organizations:


Use other side of sheet for any additional information.

## APPENDIX E

LETIER TO UNDERGRADUATE INSTITUTIONS ASKING FOR GRADES OF THE SUBJECTS PARTICIPATING IN THE STUDY

3140 Milam Street Shreveport, Louisiana March 18, 1964

Office of the Registrar
Arkansas A.M. \& N. College Pine Bluff, Arkansas

Dear Sir:
Early this scmool year, I submitted a topic for approval of a doctoral Dissertation to Dr. Charle's M. Bridges, Jr., Chairmam of my Doctoral Committee, in the College of Education, University of Oklahoma, Norman, Oklahoma. The subject of the proposed dissertation, which has since been approved, is "Selected Personal, Social, and Academic Factors Related to Achievement Among Southern Education Foundation Fellows." Questionnairs and a series of tests have provided much of the data for the study, but the undergraduate grade point average would add considerably.

I am not interested in the transcripts, as names of schools nor names of individuals will be identified in this study. Grade point averages of work and sex will be the only items included in the study. This is the last bit of data needed and I am asking that you give your immediate attention to this urgent request.

The names below and year of graduation will give you the information needed to give grade point averages.

Vertia Carter 1949
Phyllis Bernard Greenhouse 1945
Electa C. Wiley 1940
Theodore B. Elliott 1949
John M. Stevenson 1952
George W. Whitfield 1958
J. B. Johnson 1947

Clifton M. Claye 1937
Autrey B. Johnson 1951

Thanking you in advance for your prompt attention given this request, I am,

Yours truly,

(Mrs.) Albertine B. Hayes 3140 Milam Street
Shreveport, Louisiana
ABH:VLN

## APPENDIX F

FOLLOW-UP LETTER TO SUBJECTS

3140 Milam Street
Shreveport, Louisiana

Sometime ago, you sent me materials to aid in the completion of a doctoral dissertation entitled, "Selected Personal, Social and Academic Factors Related to Achievement of Southern Education Foundation Fellows". This study is being undertaken under the direction of Dr. Charles M. Bridges, Jr. of the University of Oklahoma, Norman, Oklahoma. I have received all necessary information except undergraduate grade point average.

The undergraduate institution from which you were graduated needs a request for this information from you. Please use the enclosed card in requesting that this information be sent to me. No information will be identifiable by individuals.

You may be assured that I will forever be deeply grateful to you for everything you have cooperated in so effectively for this total effort.

Thanks for this continued cooperation.
Respectfully yours,
(Mrs.) Albertine Brannum Hayes
ABH: VLN
Enclosure


[^0]:    ${ }^{1}$ Carter V. Good, Introduction to Educational Research (New York: Appleton-Century-Crofts, Inc., 1959), p. 16.
    ${ }^{2}$ Ibid., pp. 166-67.

[^1]:    ${ }^{4}$ Dewey B. Stuit and Stewart C. Peterson, "The Prediction of Scholastic Success in the Graduate College of the State University of Iowa," College and University (January, 1951), pp. 265-79.

[^2]:    7 Note: Type II College refers to educational institutions on the "approved" list of the Association of American Universities.
    $8_{\text {Ibid., p. }} 279$.
    ${ }^{9}$ Janet Weber, W. G. Brink and A. R. Gilliland, "Success In Graduate School," The Journal of Higher Education, XIII (January, 1942), pp. 19-24.

[^3]:    ${ }^{12}$ Robert M. W. Travers and Wimburn L. Wallace, "The Assessment of the Academic Aptitude of The Graduate Student," Educational and Psychological Measurement, X (Autumn, 1950), pp. 371-79.

[^4]:    15 Arnold J. Hartock, "Factors in the Success of Premedical Students," Summaries of Doctoral Dissertations, Northwestern University, XX (June-September, 1952), pp. 254-59.
    $16_{\text {Ibid. }}$, p. 255.
    ${ }^{17}$ William E. Shelton and Woodson W. Fishback, "Current Practices, of Admission for Graduate Studies in Education," College and University (April, 1953), pp. 365-80.

[^5]:    ${ }^{21}$ Mary V. Seagoe, "The Prediction of Success in a Graduate School of Education," School and Society (February, 1949), LXIX, pp. 89-93.

[^6]:    ${ }^{22}$ Marion P. Capps and F. A. DeCosta, "Contributions of the Graduate Record Examination and the National Teacher Examination to the Prediction of Graduate School Success," Journal of Educational Research, L (January, 1957), pp. 38389 .
    ${ }^{23}$ Ibid., p. 383.

[^7]:    ${ }^{40}$ Verner M. Sims, Sims SCI Occupational Rating Scale, Manual of Directions (New York: World Book Company, 1952), p. 1 .

[^8]:    44
    Ibid., p. 4.
    ${ }^{45}$ Ibid., p. 5.

[^9]:    ${ }^{45}$ Ibid., p. 13.

[^10]:    
    
    SMOTTA甘A HFS צOA SYNVTG

[^11]:    әтвшән •q
    

