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EXPERIENCED COUNSELORS: ATTITUDE AND INTEREST
PATTERNS BY TYPE OF WORK SETTING

by

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A DISSERTATION

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	ix
 Chapter	
I. THE PROBLEM: NATURE AND SCOPE	1
The Problem	2
Need for the Study	5
II. RELATED RESEARCH	10
Vocational Development Theories	10
Occupational Differentiation of Interests	16
Characteristics of Counselors	25
Summary	41
III. METHODOLOGY	44
Subjects	46
Secondary School Counselors (SSC)	47
Student Personnel Workers in Higher Education (SPW)	48
Vocational Rehabilitation Counselor (VRC)	49
Variables and Instrumentation	50
Helping Relationship Inventory (HRI)	51
Strong Vocational Interest Blank-- Form M (SVIB-M)	53

Chapter	Page
Questionnaire	55
Procedures for Collection of Data	55
Scoring of Answer Sheets	58
Statistical Treatment of Data	58
Limitations of the Study	61
Sample	61
Statistical Treatment	62
IV. RESULTS	64
The Helping Relationship Inventory	69
Question 1	69
Discussion	69
The Strong Vocational Interest	
Blank--Form M	71
Question 2	71
Discussion	72
Strong Vocational Interest Blank--	
Form M: Individual Scale Analyses	76
Artist Scale	79
Architect Scale	80
Veterinarian Scale	80
Group I Scale	81
Mathematician Scale	83
Production Manager Scale	84
Aviator Scale	86
Farmer Scale	87
Carpenter Scale	88
Policeman Scale	88
Forest Service Man Scale	89
Army Officer Scale	90
Public Administrator Scale	93
City School Superintendent Scale	93
Minister Scale	94
Man Physical Therapist Scale	94
Music Performer Scale	96
Music Teacher Scale	97

Chapter	Page
CPA Scale	99
Senior CPA Scale	100
Credit Manager Scale	100
Association and Chamber of Commerce Executive Scale	101
Advertiser Scale	103
Author-Journalist Scale	104
Group X Scale	104
Librarian Scale	107
Rehabilitation Counselor Scale	107
Questionnaire	108
Question 3	108
Discussion	108
 V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	 113
Conclusions	119
The Helping Relationship Inventory	119
The Strong Vocational Interest Blank--Form M	121
Questionnaire	124
Recommendations	127
 APPENDIX A LETTER TO SECONDARY SCHOOL EMPLOYERS	 131
APPENDIX B LETTER TO STUDENT PERSONNEL WORKER IN HIGHER EDUCATION EMPLOYER	135
APPENDIX C LETTER TO STATE VOCATIONAL REHABILITATION OFFICE	139
APPENDIX D IDENTIFICATION OF POPULATION BY EMPLOYERS	144
APPENDIX E LETTER TO COUNSELORS	146
APPENDIX F CONFIDENTIAL QUESTIONNAIRE	148
APPENDIX G RESPONSE PATTERN OF POPULATION IDENTIFIED	150

	Page
APPENDIX H	GEOGRAPHICAL DISTRIBUTION OF SECONDARY SCHOOL COUNSELORS STUDIED 152
APPENDIX I	GEOGRAPHICAL DISTRIBUTION OF STUDENT PERSONNEL WORKERS IN HIGHER EDUCATION STUDIED 154
APPENDIX J	GEOGRAPHICAL DISTRIBUTION OF VOCATIONAL REHABILITATION COUNSELORS STUDIED 156
APPENDIX K	<u>HELPING RELATIONSHIP INVENTORY</u> 158
APPENDIX L	<u>STRONG VOCATIONAL INTEREST BLANK-- FORM M</u> 160
APPENDIX M	HELPING RELATIONSHIP INVENTORY: COEFFICIENTS FOR EACH OF THREE COUNSELOR GROUPS ON FIVE SCALES COMPUTED AS A PART OF THE MULTIPLE DISCRIMINANT ANALYSIS PROGRAM 162
APPENDIX N	HELPING RELATIONSHIP INVENTORY: ANALYSIS OF VARIANCE 164
APPENDIX O	HELPING RELATIONSHIP INVENTORY: <u>t</u> RATIOS BETWEEN PAIRS OF COUNSELOR GROUPS 166
APPENDIX P	HELPING RELATIONSHIP INVENTORY: STANDARD DEVIATIONS 168
APPENDIX Q	HELPING RELATIONSHIP INVENTORY: CORRELATION RATIOS 170
APPENDIX R	STRONG VOCATIONAL INTEREST BLANK-- FORM M: COEFFICIENTS FOR EACH OF THREE COUNSELOR GROUPS ON SIXTY SCALES COMPUTED AS A PART OF THE MULTIPLE DISCRIMINANT ANALYSIS PROGRAM 172
APPENDIX S	STRONG VOCATIONAL INTEREST BLANK-- FORM M: ANALYSIS OF VARIANCE 176
APPENDIX T	STRONG VOCATIONAL INTEREST BLANK-- FORM M: <u>t</u> RATIOS BETWEEN PAIRS OF COUNSELOR GROUPS 188

	Page
APPENDIX U STRONG VOCATIONAL INTEREST BLANK--	
FORM M: STANDARD DEVIATIONS	194
APPENDIX V STRONG VOCATIONAL INTEREST BLANK--	
FORM M: CORRELATION RATIOS	198
REFERENCES	202

LIST OF TABLES

Table	Page
1. Helping Relationship Inventory: Mean Scores .	70
2. Helping Relationship Inventory: Evaluation of Classification Functions for Each Individual	71
3. Strong Vocational Interest Blank--Form M: Mean Scores	72
4. Strong Vocational Interest Blank--Form M: Evaluation of Classification Function for Each Individual	76
5. Strong Vocational Interest Blank--Form M: Analysis of Variance for the Artist, Architect, Veterinarian and Group I Scales .	78
6. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups for the Artist, Architect, Veterinarian, and Group I Scales	79
7. Strong Vocational Interest Blank--Form M: Analysis of Variance for Mathematician and Production Manager Scales	82
8. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups on the Mathematician and the Production Manager Scales	83

Table	Page
9. Strong Vocational Interest Blank--Form M: Analysis of Variance for Aviator, Farmer, Carpenter, Policeman, Forest Service Man, and Army Officer Scales	85
10. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups on the Aviator, Farmer, Carpenter, Policeman, Forest Service Man, and Army Officer Scales	87
11. Strong Vocational Interest Blank--Form M: Analysis of Variance for the Public Administrator, City School Superintendent, Minister, and Man Physical Therapist Scales	91
12. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups for the Public Administrator, City School Superintendent, Minister, and Man Physical Therapist Scales	92
13. Strong Vocational Interest Blank--Form M: Analysis of Variance for the Music Performer and the Music Teacher Scales . . .	95
14. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups for the Music Performer and the Music Teacher Scales	96
15. Strong Vocational Interest Blank--Form M: Analysis of Variance for the CPA, Senior CPA, Credit Manager, and Association and Chamber of Commerce Executive Scales	98

Table	Page
16. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups for the CPA, Senior CPA, Credit Manager, and Association and Chamber of Commerce Executive Scales	99
17. Strong Vocational Interest Blank--Form M: Analysis of Variance for the Advertiser, Author-Journalist, and Group X Scales	102
18. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups for the Advertiser, Author-Journalist, and Group X Scales	103
19. Strong Vocational Interest Blank--Form M: Analysis of Variance for the Librarian and the Rehabilitation Counselor Scales	105
20. Strong Vocational Interest Blank--Form M: <u>t</u> Ratios Between Pairs of Counselor Groups for the Librarian and the Rehabilitation Counselor Scales	106
21. Mean Rank for Seven Reasons for Entering a Special Field of Counseling	110
22. Rank of Seven Reasons for Entering a Special Field of Counseling	111

CHAPTER I

THE PROBLEM: NATURE AND SCOPE

In counselor education, as in many other fields of graduate study, educators are expressing more concern about the problems of selection, preparation, and placement of counselor candidates. The rapid growth of the field and the ever increasing variety of work settings serve to intensify these problems.

As the demand for qualified personnel has increased so has the need for more adequate means to prepare personnel to fill the variety of new jobs constantly being created. Knowledge of existing and developing services is necessary in order to develop a better understanding of the demands of the jobs and the characteristics required of the counselors serving in these positions. This knowledge is also needed to provide additional assistance in the selection and placement of counselor candidates.

The recent reviews of research in the area of counselor selection and preparation cover a wide variety of topics. Hill and Green (1960, p. 115) noted that much of the research on selection of counselor candidates was basically concerned with acceptability for graduate study. Little attention was placed on the question of why people became counselors and no consideration was given to the selection of a specialty area within the field of counseling. In the area of counselor preparation the research emphasis has been upon knowledge, attitudes, self-perceptions, the counseling relationship, and changes occurring during exposure to the counselor preparation programs (Cash & Munger, 1966, p. 256). The differences in people's preference for, or employment in, different fields has also been a popular research topic (Perrone, 1966, p. 300); however, the emphasis has been predominantly on fields other than counseling.

The Problem

Currently counseling and guidance is practiced in a wide variety of work settings. With the increasing demands for counselors to provide services in many varied

settings and at many different levels, counselor educators stand in need of some more appropriate means of identifying a variety of counselor candidates.

Although counselors tend to be similar in most characteristics, such as interests and attitudes, there remains some variability. This variability should be of concern to counselor educators and efforts should be made to determine if the differences are randomly or systematically related to special areas of counseling. Hoyt (1967, p. 627) stated:

It is time that concepts of career development be applied to counselors as well as by counselors. A prospective counselor must be prepared to answer, in sequence, two questions:
(a) Why do you want to become a counselor? and
(b) Why do you want to become a counselor in this setting?

Why does one person decide to become a secondary school counselor and another select student personnel work in higher education or vocational rehabilitation counseling? Are counselors who choose different settings basically very much alike, or do systematic differences exist among counselors?

One reason for the variety one finds among the people within any field may be due to the highly encouraging fact that people go on developing after their vocational die has been cast. It might be inferred also that changes in the nature of a profession evolve from the struggles of the individuals within it to make the profession fit them, instead of their being willing to conform to fit the profession [Elton & Rose, 1967, p. 298].

In any event, it seems important to determine if differences among counselors are, in fact, associated with different work settings.

The purpose of the study is to add to the growing amount of information available about the vocational development of counselors. The attitudes and interests of secondary school counselors, student personnel workers in higher education, and vocational rehabilitation counselors were compared to determine if statistically significant differences exist among the response patterns for the three specialty areas studied. The relative importance of several reasons for entering a current specialty area of counseling were also considered in relation to each of the three specialty areas of employment.

Need for the Study

Research has provided substantial evidence that a person's interests and attitudes are associated with his vocational development (Bare, 1967; Elton & Rose, 1967; Goldschmid, 1967; Jones, 1965; Kinnane & Suziedelis, 1962; Kriedt, Stone & Paterson, 1952; Roe, 1956; Rossman, Lips & Campbell, 1967). Occupational and professional status often has been used as a variable in studies related to interests and attitudes. Other studies have investigated the relationship among personality, self-concept, and other variables in several occupational groups. In a review of the more significant recent studies concerned with the relationship of occupational development and behavior to personality, Roe found that the studies

have confirmed the assumption that some personality characteristics are somehow and to some extent involved in occupational choice behavior. But the detailed nature of the relationship remains unknown [Roe, in Borow, 1964, p. 201].

Clarification of the relationship between vocational development and personal characteristics was viewed by Goldschmid (1967, p. 302) as a means of reducing

attrition rates in colleges and universities while increasing satisfaction with the educational and career decisions of the individual. Katzell reported that the choice of a job and continued membership in the chosen area were found to be directly related to the satisfaction received from the job itself and also from the related areas valued by the individual (in Borow, 1964, p. 360). Thus, more studies of vocational development could assist students in finding greater satisfaction in preparation for an area of work and could also result in greater happiness on the job.

If interests and attitudes do operate in the selection of a major occupational group would not the same, or similar, variables operate in the selection of a special area within the major occupational group? There are some research data which would support such a position.

Presumably, occupations within a category possess a psychological climate more similar to each other than to occupations outside the category, and occupations in categories adjacent to one another are more similar in climate than occupations in categories far removed from each other [Osipow, 1966, p. 285].

Jones (1965, p. 60) found counselors were more understanding and less evaluative in responses on the Helping Relationship Inventory (HRI) than persons not working in helping professions. Nurses and ministers were found to be more like counselors than other groups not involved in a helping type relationship (Jones, 1965, p. 65). A study by Alcorn and Erb (1967, p. 467) of the interpersonal orientation of public school administrators, public school teachers, and public school counselors revealed statistically significant differences among the three comparison groups. Most studies have considered differences between broad groups whereas only a few have been concerned with the distinction among persons within a broad group (Roe, in Borow, 1964, p. 211). Some of the similarities and differences of closely related fields can be distinguished. Is it also possible to make even finer discriminations when considering specialties within a vocational area?

The Strong Vocational Interest Blank has been helpful in the selection of a general academic area but has been less useful in attempts at finer discriminations (Rossman et al., 1967, p. 497). However, the SVIB could

become helpful in determining select areas within broad categories if more research were conducted on special areas and new scales or patterns of differences were determined.

If the SVIB is to be useful in deciding between possible disciplines for graduate study, there must be more research and scale development in areas that will enable differentiations among the various academic disciplines [Rossman et al., 1967, p. 497].

One such study was conducted by Rossman et al. (1967) and included 179 male members of the Midwest Sociological Society. When SVIB responses of the sociologists were compared "differences in vocational interest patterns were found between PhDs and non-PhDs, between sociologists in varying types of institutions, and between sociologists and psychologists [p. 497]." Cottle (1968, pp. 5-6) reported that several other studies had also been successful in attempts at determining fine differentiation within broad groups. Similar studies in counselor education should increase the ability of counselors-to-be to make more appropriate vocational decisions about an area of specialization in the field of counseling and guidance.

If future studies can provide more information about personal characteristics of even some of the various occupational groups, then it might be possible to help students make more appropriate choices of areas for vocational-educational study and thereby help students derive greater satisfaction from their educational programs. Greater satisfaction with the preparation for a vocational area might also lead to increased satisfaction with the chosen area of employment and could in turn reduce the number of job changes needed to find employment which is well suited to the needs of the individual.

Thus, the need has arisen to investigate possible differences among counselors working in various areas of specialization within the broad field of counseling and guidance. With the additional information regarding the different attitudes and interest patterns among the specialty areas counselor educators would be able to assist counselor candidates in making earlier and more appropriate decisions regarding the selection of a special area of counseling.

CHAPTER II

RELATED RESEARCH

Although the need for research data concerning similarities and differences in counselor characteristics appears to be recognized, very little has been accumulated in this area. In other fields, however, studies have been successful in the differentiation of occupational subgroups when applied to variables such as undergraduate majors, work setting after graduation, and other areas related to the identification of the occupational groups. Therefore, this review of the related literature will center about three general areas: (a) Vocational Development Theories; (b) Occupational Differentiation of Interests; and, (c) Characteristics of Counselors.

Vocational Development Theories

The importance of vocational development theories is twofold. First, the improved understanding of reasons

people select one vocation instead of another is a practical consideration for all counselors who work with vocationally undecided clients. Furthermore, counselors want to be aware of the reasons for, and influences on, the refinement of vocational selection within a broad vocational area so that greater assistance can be given the client who experiences difficulty in the selection of an area of specialization.

Many theories have been presented in attempts to explain vocational development. Comparison of the various approaches is possible when the theories are grouped by some systematic method. Osipow (1968, pp. 10-12) used four categories: trait-factor, sociological, self-concept or developmental, and personality. Other classifications could also be justified but regardless of the classification system used the categories still will not remain completely independent of one another. Thus, the theories have some concepts in common and some concepts which are unique to a given approach.

Various attempts have been made to formulate a comprehensive theory of vocational development. Three of

the major theories are those of Roe, Holland, and Super.

Roe (1956) bases her theory on personality differences as influenced by childhood experiences and family background.

In an attempt to organize a classification of occupations that would have psychological relevance, Roe (1956) developed a system with two dimensions, groups and levels. "Group" is essentially an interest classification and refers to the primary focus of the activity. In addition these groups are ordered in terms of the interpersonal interaction involved, from those groups calling for the highest degree of interpersonal interaction to groups involving very little or a stylize type of interaction. "Level" refers to the degree of responsibility, ability, and education required [Roe & Siegelman, 1964, p. 4].

Occupational titles are arranged within Roe's classification of occupations with respect to the commonalities the jobs have in the psychological climate generated for the occupation being classified. The theory concentrates on specifying the dimensions of personality which distinguish members of one occupation from members of other occupations. Roe feels that a person's preference, or lack of preference, for a given occupation is determined by the relationship between the psychological climate of early

childhood and the psychological climate of the job.

Holland recently developed a theory of personality with implications for vocational choice.

The present orientation, with its explicit recognition that vocational behavior is related to the life history, personality, and self-conceptions as well as to aptitudes and interests, has provided an intellectual climate which fosters a great variety of empirical studies and theoretical formulations [Holland, in Borow, 1964, p. 260].

Holland's theory is grounded in the belief that people behave in accordance with the characteristics of one of six major personality types: realistic, intellectual, social, conventional, enterprising, and artistic. Even though personality orientation is seen as a major factor, Holland also feels that achievement, interests, and environmental conditions are influential in vocational development. The findings of a recent study (Wall, Osipow & Ashby, 1967, p. 205) indicated that considerable construct validity existed between Strong Vocational Interest Blank scores, vocational choices of college students, and personality ratings as coded in Holland's terms.

Super has developed a revision of his earlier

theory and his current theory is based on three areas of psychology: differential, developmental, and self-concept (Osipow, 1968, p. 119).

Super elaborated on the trait-factor notion that people are differentially qualified for occupations by suggesting that interests and abilities are likely to fall into patterns more consistent with some occupations than others and that people are likely to be more satisfied if they are in occupations which require a pattern of interests and abilities closely corresponding to their own characteristics [Osipow, 1968, p. 119].

The ideas thus expressed would tend to confirm popular beliefs that there are many correlates of a person's choice of a vocation and that some people tend to resemble teachers, scientists, artists, and so forth. Put another way, Super believes that there are similarities and differences among individuals and among occupations. However, within an occupation exhibiting a certain stereotype it is possible to find minor variations. The individual's vocational preference and career patterns are seen as attempts to implement a self-concept.

Limitations found in many of the research studies related to vocational development included: (a) the

exclusion of women, (b) occupationally inexperienced students, and (c) small samples. Elton and Rose (1967) believe that the studies of vocational development have been too frequently centered on men and on high school seniors or college freshmen and have not given enough consideration to the vocational development of women and mature individuals. They stated:

Perhaps research dealing with successful women in various vocational fields would establish the influence of maturity on those personality characteristics which seem to dictate early choice [Elton & Rose, 1967, p. 298].

The need for more use of adult, occupationally experienced samples and for more studies of the vocational development of women was also recommended by Roe (in Borow, 1964, p. 199).

From this very brief review of three vocational development theories the role of interests emerges as one of the primary factors in a person's vocational development. While interests are only a part of the total picture, they should be of vital concern to anyone attempting to study the characteristics of persons within an occupational group. Knowledge of the interest patterns

of employees may not reveal much about the ability or effectiveness of the individuals but may tell a great deal about their job satisfaction and their tendency to remain in particular work settings. Also noted in this section is the need for studies dealing with larger numbers of occupationally experienced persons, with a particular need for the inclusion of women in the population studied.

Occupational Differentiation of Interests

Numerous studies have shown that successful workers in an occupation have certain similarities of interests which differentiate one occupational group from another occupational group.

Interests are a major factor in vocational choice. There is considerable evidence that persons in the same occupational groups manifest congruent interests, which are often different from the major interests of persons in other occupational groups [Roe & Siegelman, 1964, p. 3].

Generally the research consideration has involved the comparison of one large or broad occupational area with another area believed to be distinctly different from the first.

There is a growing amount of research to indicate that the range of specialization within many occupations is becoming so broad that differences can be determined within certain occupations between areas of specialization. The studies reviewed in this section are restricted to the ones primarily concerned with the differentiation of interests within some occupational group.

One of the earliest studies to consider the possible distinctions of interest within a broad occupation was an investigation of the interest patterns of experienced public administrators. Strong (1947, p. 19) sought the answer to two questions: "First, How do public administrators differ in their interests? and second, How much do they differ?" The Strong Vocational Interest Blank was completed by 550 public administrators who had been judged to be successful administrators. The participants were classified according to the functions they performed, such as welfare, personnel, taxation, and so forth resulting in 16 sub-groups which were then compared. The sub-groups differed from one another on nearly all of the 34

occupational scales. Statistically significant differences between each sub-group and the other 15 sub-groups were considered and all statistically significant differences between each sub-group and the mean of the others were noted. All differences between each sub-group and the others that amounted to overlapping between distributions of 50 percent and less were discussed. Public administrators, as a total group, did not obtain an "A" or "B+" rating on any of the 34 occupational scales. The reason given by Strong was that the interests of the administrators differed so much that the high scores of some administrators offset the low scores of other administrators. Thus, low scores for the group as a whole were inevitable.

In a similar study the interest patterns of salesmen were compared and statistically significant intergroup differences were found on seven of the nine scales studied (Witkins, 1956). The three types of salesmen were Specialty salesmen, Route salesmen, and Sales engineers. All had been judged to be effective salesmen and had worked at least one year in one of the three special areas studied. ANOVA was used to determine differences among the groups

on the nine scales studied: Production manager, Personnel manager, Accountant, Office worker, Purchasing agent, Real estate salesman, Life insurance salesman, Advertising man, and Sales manager. Differences were found for the first seven of the scales mentioned. In addition to the differentiating characteristics certain common characteristics were also revealed on five of the nine scales used in the study.

Kriedt (1949) demonstrated that it is possible to use the SVIB to make fine discrimination within a vocational area that requires a high degree of specialization for entry. A "psychologist-in-general" group was studied according to responses made by the total group and also by sub-group response patterns. Profile analysis was used to study the deviation of each of the 13 sub-group profiles from the mean profile of the total group of psychologists. The findings resulted in the development of a revised psychologist key and sub-group keys for the four largest sub-groups: clinical, guidance, industrial, and experimental psychologists. Kriedt's purpose was to make the SVIB a more useful tool for the guidance of both beginning

and advanced psychology students who were undecided as to the field of psychology in which they should specialize.

Many other studies have also been successful in discriminating among workers in broad occupational groups. Klein, McNair and Lorr (1962) investigated three mental health disciplines and found that psychologists and psychiatrists appear to have similar interest patterns when compared with psychiatric social workers. When public health nurses were compared with institutional practitioners on the SVIB-W differences were found on 20 of the 31 occupational scales. Educational level was not considered as a variable in the study but was suggested as a consideration for future studies (Carmody, 1968).

Each of the studies mentioned so far provides some indication of the variety of procedures which can be employed to distinguish among interest patterns of experienced persons employed in specialty areas within an occupation. The findings indicate why low scores for a broad occupational group may be found; that similarities as well as differences of interests can be determined; that it is not necessary to include the entire SVIB profile to

distinguish among specialty groups; and that it may be necessary, from time to time, to revise scales developed on the SVIB.

Since it is possible to determine differences among workers in many occupational fields, is it also possible to differentiate among students enrolled in various major areas of higher education? In some cases, at least, discrimination is possible. Measures of interest and attitudes were administered to freshmen, junior and senior dental students in order to study the personal and vocational characteristics of dental-students-in-general (Kirk, Cummings & Hackett, 1963). When the mean SVIB scores of the various class levels were compared differences were noted which suggested that changes occurred over time and that scores tended to become less extreme the longer the student remained in the dental program. Using a different approach Thrush and King (1964-65) found differential interests when the total SVIB profiles of 81 third-year medical students were compared. Class rank was found to be associated with the "A" or "non-A" score received on the physician scale. Primary interest patterns also

differentiated the student interested in doing medical specialization from the student planning to enter general medicine and the student doing well academically from the student doing poorly academically. In another study, the SVIB responses of agriculture students as a group were compared by Anderson (1967) and found to be similar to those of farmers; however, sub-group differences were found to exist between the mean profiles of seven different academic majors within agriculture. These are only a few of the studies related to student populations but they indicate that differentiation of groups associated with a college major is possible by comparing responses on the SVIB.

The interest patterns of engineers and engineering students has been a popular area of investigation. A review of the research in this area will give an indication of the wide range of studies which are possible within one major occupational group. Korn (1962) compared differences between freshmen students majoring in engineering, students majoring in physical sciences, and students with undecided majors using the response patterns on the California

Personality Inventory and the SVIB. The findings indicated that differentiation between majors was possible by considering areas of rejection as well as areas of shared interest. Further, it was possible that the degree and type of interpersonal orientation the individual had influenced his vocational choice (Korn, 1962, p. 311). A study of the interests of students who graduated from different engineering specialties was conducted by Apostal (1968). The interest measure was administered during the freshman year and compared according to area of employment following graduation. The results revealed that the interests of students in engineering differ statistically among the five groups studied: civil engineering, chemical engineering, electrical engineering, mechanical engineering, and engineering physics. In a much earlier study, Strong (1952) presented evidence that the SVIB interest patterns of freshmen engineering students remained relatively stable over a period of 19 years. For some individuals high levels of stability were found whereas for others there was almost no relationship. Dunnette, Wernimont and Abrahams (1964) summarized the research information

available on four special SVIB scoring keys related to the areas of research, development, production, and sales engineering. Each of the studies reviewed by Dunnette et al. (1964) had been conducted on experienced engineers and were noted to be in common agreement that engineers should not be lumped into a single category. Thus, from student to experienced specialized engineer responses on the SVIB and other personality measures have been successfully used to differentiate specialty areas of engineers.

Differentiation of individuals according to broad vocational areas, or choice of a comprehensive college major, is not enough. In light of the research evidence which continues to give indications of wide variations within broad fields a new approach allowing for finer discrimination is required. As more and more specialization takes place the range of sub-groups within many occupations will continue to increase. Eventually the differences within a major vocational area may be found to be as distinct as the differences now recognized between major vocational areas.

Characteristics of Counselors

There are many ways to study the characteristics and performance of counselors-in-general or of counselors in a given area of specialization. Rating forms, personality patterns, interest patterns, academic ability, previous work experience, client-counselor similarities, counselor effectiveness, and many other methods have been used in attempts to determine the commonalities, and sometimes the differences, of counselors. The implications of the various types of studies are of importance to counselor educators and others who are seeking to improve the selection, preparation, and placement of future counselor candidates.

The growing importance of counseling in recent years has created a host of questions regarding the selection and professional functions of counselors relative to the variety of levels and special areas employing counselors. The problems encountered in establishing counselor selection policies and procedures have been well outlined previously by Hill (1961) and Patterson (1962). The major factors used for selection of candidates for counselor

preparation traditionally have included: previous grade-point average and scores on selected tests such as the Miller Analogies Test or the Graduate Record Examination.

Some other factors less consistently used include:

interest inventories, usually the Strong Vocational Interest Blank; personality tests, generally the Minnesota Multiphasic Personality Inventory; personal interviews; recommendations; and previous course work. In his review of selection procedures Patterson (1962, p. 320) noted that the methods for selecting rehabilitation counselors are very similar to methods used to select other types of counselor candidates. In spite of continued research, surveys, and reviews of the selection procedures for counselors, no solution has been found for the problem of appropriate selection.

While there is general agreement that research on the selection of graduate students for counselor training represents an important area for investigation the research in the area has been disappointingly limited in scope and number of studies attempted (Hill & Green, 1960). In a recent study McGreevy (1967) investigated selection methods

in relation to criteria commonly used to evaluate the counseling candidates' success. A total of 47 variables were used in the analysis. These variables included: biographical and educational background information, Miller Analogies Test (MAT), Edwards Personal Preference Schedule (EPPS), Minnesota Multiphasic Inventory (MMPI), grade-point-average, NDEA Comprehensive Examination, and NDEA institute faculty ratings. The findings presented evidence that the MAT does an adequate job of identifying academic ability; however, other qualities above and beyond academic potential were not isolated in McGreevy's study. Once again the results leave the educator with only the MAT as a helpful selection variable and that one, unfortunately, related only to ability to achieve academically rather than to counsel effectively.

New approaches are needed since the research evidence has provided only very limited help. The rapid growth of the field of counseling and guidance with the diversity of specialization currently required may provide a clue to the problem. By lumping all candidates into one group, investigators may have tended to lose the fine

discrimination which might have been possible if the groups had been subdivided by intended area of specialization within the broad field of counseling. The results of one such study have been reported by Foley and Proff (1965). Personal attributes of 349 NDEA Counseling and Guidance Institute enrollees and 330 Rehabilitation Counselor trainees were compared on the Miller Analogies Test (MAT), the Edwards Personal Preference Schedule (EPPS), the Minnesota Multiphasic Personality Inventory (MMPI), and the Strong Vocational Interest Blank (SVIB). The two groups were found to be similar in cognitive ability (MAT). Statistical differences were noted on the affective measures (MMPI and EPPS) but these mean differences were found to vary less than one raw score point; therefore, the investigators decided that the differences were not of any practical significance. "However, the mean differences between the groups on the SVIB was [sic] felt to be both meaningful and significant [Foley & Proff, 1965, p. 157]." Of the four instruments used in this study the SVIB appears to be the most profitable for future research on characteristics that differentiate counselor candidates in

various specialty areas of counselor education.

Constant attention has been given to the primary parties in the counseling relationship, the counselor and the counselee. Assumptions have been made. Hypotheses have been offered and tested. Yet in spite of the research efforts very little consistency of the results is evident. Nevertheless, there seems to be general agreement that the counseling relationship should be as effective an interaction between two individuals as possible and that the personal qualities of the counselor are basic to effective functioning in the counseling relationship.

There has been much written about how personality influences counselor-client relationships. Arbuckle (1966) discussed how the counselor's view of himself could help or hinder the counseling relationship. The possibility of personality differences among clients presenting different types of counseling problems was investigated by Minge and Bowman (1967) using the Edwards Personal Preference Schedule. They found:

Vocational and educational clients often have difficulties centering around a fairly specific

problem area, while the problems of personal counseling clients tend to be more diffuse [Minge & Bowman, 1967, p. 137].

Not only do clients differ according to type of problem presented but counselors tend to vary in their ability to work with different types of clients. Gabbert, Ivey and Miller (1967, p. 131) found:

The ability of a counselor to obtain positive client attitudes may partially relate to his capacity to relate to clients of both sexes, work with problems of a vocational or personal nature, and to maintain meaningful long- or short-term relationships.

In an attempt to discover whether counselor trainees would respond differently in similar counseling situations depending upon individual personality variables, Asa (1967) compared counselor responses to counselor personality variables as measured by the Edwards Personal Preference Schedule (EPPS). As the EPPS profile varied on Dominance and Aggression, variations were also evidenced in the individual's counseling technique. Due to the small sample size--15 men--caution was urged in making inferences to other counseling students. In another study of counselor personality as related to interview behavior,

Freedman, Antenen and Lister (1967) compared responses on two personality inventories with interview responses. A strong relationship was found between counselor personality characteristics and counselor verbal response patterns. Once again the sample was small and the finding should be considered with care.

In an exploratory and descriptive study by Johnson, Shertzer, Linden, and Stone (1967) the question was asked, "What measured non-intellective variables appear to be associated with judged counseling effectiveness?" Many variables were studied but few were found to be related to the criteria employed. Essentially the findings indicated sex differences on the standardized personality instruments. Male counselors judged to be effective were affable, friendly, likable, accepting, capable, and satisfied. Women counselors judged to be effective were outgoing, confident, efficient, and assertive.

Several studies have investigated the relationship of client-counselor similarity of personality to the success of the counseling relationship. Similarity of personality patterns has generally been found to influence counseling

outcomes (Polmantier, 1966; Bare, 1967). In one such study, failure of the client to appear at a scheduled counseling session was found to be strongly associated with client-counselor similarity on Myers-Briggs Type Indicator (MBTI) profiles (Mendelsohn & Geller, 1967). For non-freshmen, proportionately more students who continued than those who terminated counseling had counselors of the same sex. The authors concluded that there seems to be evidence that counselors should look carefully at their own role behavior in the counseling session and evaluate the effect their behavior has on the client-counselor relationship.

The importance of the counselor's personality traits, attitudes, values, and philosophy seems well accepted in the profession. The personal characteristics of the counselor have been studied but the findings indicate there is much to be learned about the relationship of the personal characteristics to success in counseling. Polmantier (1966) has reported that professional literature dealing with the personality of the counselor presents evidence that counselor characteristics differ from most

comparison groups studied. Major attributes assigned to counselors by the literature have included a differentiated interest pattern on the SVIB, nurturance and affiliation needs, tolerance for ambiguity, accurate perception of self and others, empathy, emotional stability, and an understanding attitude.

The persistence of attitude changes resulting from exposure to counselor education programs has been of interest to several investigators. Munger, Myers, and Brown (1963) reported findings related to periodic assessment of attitude changes as measured by the Porter Test of Counselor Attitude (PTCA) during and following a brief training period. They noted that changes in attitudes were not permanent and attitudes changed drastically within a few months following completion of training. Another longitudinal study was conducted by Rochester (1967) using the PTCA and the Allport-Vernon-Lindzey Study of Values (SOV). Changes were evidenced between pretraining and posttraining means on the PTCA but one year after completion of the training the means scores were generally closer to the pretraining score than those at the posttraining level.

Both studies indicated that changes on the PTCA may be due to the influence of counselor education faculty preference for specific response types rather than an indication of a sincere change in counseling attitude. Jones (1963) found changes in attitude toward counselees and counseling with an increase in self-confidence following a summer institute. Patterson (1967) used the California Personality Inventory, the F-Scale, the Barron Ego Strength Scale, and a Counselor Attitude Scale to study changes in the student's attitudes and personality resulting from graduate education in counseling. Three groups were compared--53 students in an NDEA Institute in secondary school counseling, 25 students in the masters program for counseling, and 26 students in noncounseling graduate programs. The tests were administered before and after one academic year in the respective programs. The counseling students scored lower on the F-Scale than the noncounseling students on both pre- and post-test. On other variables the counseling students scored higher initially, and remained higher, on the Counseling Attitude, Self-Acceptance, Psychological-Mindedness, and Ego Strength. These studies suggest that

changes in attitudes as measured by self-report instruments, do occur during counselor education even if the changes which take place do not persist after completion of the educational process.

Statements found in the professional literature have indicated that the attitude of new counselors will be shaped by their faculty whereas the attitudes and techniques actually employed after the individual enters the profession will reflect attitude changes imposed by experience. Bost (1968) studied the change in the beginning counselor's preferred ways of relating to others in interpersonal relationships. The conclusions were that certain personality traits of counselors appear to be susceptible to change during the first year of professional experience. Counselors tended to become more altruistically oriented and more directive than at the time of graduation. Alcorn and Erb (1967) investigated the differences in interpersonal relationship orientation among experienced public school administrators, public school teachers, and public school counselors. Counselors were most altruistic and administrators least altruistic. Administrators and

teachers indicated higher levels of preference for manipulative techniques than did counselors. The findings suggest that individuals gravitate toward occupational roles that allow fulfillment of basic personality needs.

Counselors are found in many settings: schools, universities, hospitals, clinics, employment offices, and other agencies. The setting in which the counselor finds himself will determine, to some extent, what he will and can do.

Studies of counselor role should always give adequate attention to the work setting of counselors, for these settings are related to some facets of role, and they may influence role. Counselors cannot be understood apart from their situations. If these situations differ substantially, then counselor roles may differ as well [Wasson & Strowig, 1965, p. 460].

Much has been written about the role and functions of counselors both from the point of view of counselors-in-general and counselors-in-specialty-areas, but lack of general agreement is evidenced from any brief review of the related literature. The literature available is most often a simple statement of the expectations held by that one author; however, a general impression may be developed

from the review of many varied articles.

The secondary school counselor is concerned with assisting all pupils within the school to which he is assigned. The clientele is essentially normal and are generally functioning within a normal environment. Thus, the problems presented by the students are usually related to the common developmental needs of most students in the secondary school.

The question of the exact functions and the associated responsibility of the secondary school counselor has been an issue for years and the disagreement in this area continues to "muddy the waters" (Arbuckle, 1968; Brown, 1968; Dunlop, 1968; Hill, 1965).

Studies of secondary school counselor role have generally focused on personality factors and interests of counselors in preparation, or they have been surveys of the perceptions that employed counselors report regarding their positions. In either case, results have been equivocal as often as not. Counselor role seems to be heterogeneous rather than homogeneous, ambiguous rather than explicit [Wasson & Strowig, 1965, p. 457].

The secondary school counselor, however, does tend to stress an informational and educational approach to

counseling and guidance even if there is variation in the degree or type of service offered.

The student personnel worker in higher education is faced with a variety of duties related to the educational, social, and personal problems of students. The population is select but also essentially normal and requires knowledge of developmental problems facing college students. Mueller (1961, pp. ix-x) stated:

College personnel work has become a very specialized part of the broader field of Guidance, and is differentiated from it in four ways: (1) It is concerned with an individual, the young adult. . . . (2) The campus where the college student lives is also very different from that of his local secondary school, for group living replaces home life, learning competition and pace are accelerated, and all his perspectives are enlarged by travel and new friends. (3) The social milieu is different. . . . His vocation becomes more realistic, many of his classmates are married and many more are substantial earners. There is more interchange with older persons. (4) The frame of reference for the college counselor embraces a prospect quite different from that which the high school counselor encounters; there is also more pressure for study and writing and for professional leadership. The very purpose of higher education and its place in the structure of society provide a setting for the college worker which requires new methods and attitudes.

The area of roles or functions of student personnel workers in higher education has not been a very popular topic for research. Koile, Harren, and Draeger (1966) in a review of recent literature included only four studies related to role expectation. There seems to be no consensus with respect to the functions that student personnel workers in higher education should perform. "Yet it seems reasonably evident that it is not the services, but simply the point of view that defines what is unique to student personnel work and common among those who define themselves as party to it [Shoben, 1967, p. 243]." The lack of common functions would probably be related to the wide variety of services offered to students.

The rehabilitation counselor is concerned with individuals suffering from problems of physical and/or mental disability which often lead to serious maladjustment. If the client is normal he does not have need of the rehabilitation counselor's services. Frequently communication with clients can be an added problem such as in the cases of blindness, deafness, or emotional disturbances (Stone, 1968, p. 336).

The work of the rehabilitation counselor is affected by administrative settings such as agencies for the emotionally disturbed, and for the blind, the deaf, and other physical handicaps. Regardless of the employment setting counselors must help the handicapped individuals, as individuals, to receive whatever service is appropriate and available. "The counselor is responsible for aiding the disabled individual in securing employment consistent with his capacities and preparation [Bentley, 1968, p. 312]." One of the major differences between educational counselor and rehabilitation counselors, however, is the work the rehabilitation counselor does in a medical setting.

As in other specialty areas of counseling, there is also a need to define, more clearly, the function of the rehabilitation counselor. As Goldin (in Bentley, 1968, p. 340) said, "the role of the state vocational rehabilitation counselor is one of the most complex in the entire spectrum of professional roles." The reason is probably related to the statement by Hall and Warren (1956, p. 16) that these counselors must be involved in

the client's medical, educational, social, and vocational needs in addition to any psychological needs expressed during the counseling relationship.

Summary

In at least three of the major theories of vocational development the role of interest was presented as one of the primary factors related to the individual's vocational development. Differentiation of occupational groups and sub-groups using responses on the SVIB has been successful in many fields and may become even more common as the range of sub-groups within an occupation continue to increase. Differential studies related to areas of counselor specialization, however, have been very limited.

In the area of counselor selection research has yielded very little and the only major positive finding is that the MAT does an adequate job of identifying academic ability. However, the SVIB would also appear to have merit if future research evidence supports the need to differentiate counselor candidates by areas of intended specialization. Further, in spite of research efforts

very little consistency of results has been presented in other areas of counselors characteristics such as client-counselor relationship and persistence of attitude change due to graduate education. Finally, there seems to be a lack of agreement about the role and functions of counselors regardless of the type of employment setting. Therefore, the need for continued research in all areas of counseling remains as essential today as in years gone by.

Perhaps counseling does need a new approach for research efforts. Many writers have offered suggestions but the comments of Hoyt (1967) seem most pertinent at this time.

First, I feel we should seek to clarify the meaning of such terms as "counselor," "counseling," and "guidance" in ways that will differentiate counselors as an occupational group from those in other helping occupations. . . .

Second, assuming we can arrive at some agreement regarding terminology and meaning, we should be moving towards recognition of commonalities that exist among counselors in various work settings. . . .

Third, as we move towards recognizing our commonalities, we must simultaneously move towards emphasizing differences among professional counselors in various work settings. . . .

Fourth, we must recognize that to deal only with commonalities and differences as they exist among counselors in various work settings is not enough. In addition, we must concentrate on further differentiation in guidance methods and materials appropriate for performance of various specialized guidance functions. . . .

Fifth, the continuing shortages of qualified professional counselors demand that we be willing to think creatively and productively with respect to levels of preparation for those who work in the guidance field. . . .

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This paper has repeatedly emphasized commonalities that exist among professional counselors. It has also emphasized that differences among counselors from different work settings and performing different specialized guidance functions co-exist with all of the commonalities that bind counselors together in one occupational classification system. To speak in a clear and firm voice with respect to concerns, goals, and problems unique to a particular work setting or a particular guidance function is as important as to emphasize commonalities. This is why the current eight APGA Divisions--five of them setting-oriented and three function-oriented--exist. To speak only in terms of concerns common to all counselors would leave us silent on crucial issues affecting probabilities of professional success existing among counselors in particular settings and/or performing particular functions. Those who want to devote their entire energies to providing counselor perspective regardless of work setting or job function run the risk of becoming operationally ineffective in any work setting or in performing any job function [pp. 626-629].

CHAPTER III

METHODOLOGY

The professional literature has reflected great interest in the counselor's personal characteristics, goals, counseling methods, and techniques in various work settings (Daane & McGreevy, 1966, p. 264). The question, however, of why counselors select a specialty area within the field of counseling, or even why people decide to become counselors at all, has received little attention from persons conducting studies related to the field of counseling and guidance (Cash & Munger, 1966, p. 256; Hoyt, 1967, p. 627).

One example of a study indicating that systematic differences do exist between students majoring in secondary school counseling and vocational rehabilitation counseling was conducted by Foley and Proff (1965). No studies, however, were found of attempts to study differences among counselors employed in various areas of specialization within the field.

The purpose of the present investigation is to conduct an exploratory study of the interest and attitude patterns of Alabama counselors employed in the special areas of secondary school counseling, student personnel work in higher education, and vocational rehabilitation counseling. The Strong Vocational Interest Blank--Form M was used as the interest measure and the attitude measure was the Helping Relationship Inventory. Also the relative importance of several reasons for entering a current specialty area of counseling and guidance was considered in relation to each of the three areas of employment.

Since the study was of an exploratory nature, no attempt was made to test directional hypotheses of differences among the specialty groups. Instead an attempt was made to answer the following questions:

1. Do counselors employed in three sub-specialties of counseling differ in their attitude patterns as measured by the Helping Relationship Inventory?
2. Do counselors employed in three sub-specialties of counseling differ in their interest patterns

as measured by the Strong Vocational Interest Blank--Form M?

3. Do counselors employed in three sub-specialties of counseling differ in the relative importance they place on several reasons for entering their current area of employment?

Subjects

The nature of this investigation dictated that subjects be individuals who held master's degrees in counseling and guidance, who had been employed full-time for several years, and who were currently employed in one of the three areas of counseling specialization. One of the major considerations in planning the study, therefore, was the availability of subjects in each of the areas of specialization. On the basis of availability of subjects it was decided that the study should be restricted to counselors currently employed in the state of Alabama in the special areas of secondary school counseling, student personnel work in higher education, and vocational rehabilitation counseling. The final sample for each of the

groups included counselors who had been identified by their employers, met the requirements for inclusion in the study, and completed the Questionnaire, HRI, and SVIB-M.

Secondary School Counselors (SSC)

The sample of 136 secondary school counselors was employed at the time of the investigation in Alabama public school systems and assigned as full-time counselors in junior or senior high schools. They had completed a minimum of two years of full-time experience as secondary school counselors prior to the beginning of the 1968-69 school year. The experience level varied from 2 to more than 15 years with a median of 3 years of prior, full-time secondary school counseling experience. A master's degree in counseling and guidance had been earned by 97 counselors and the other 39 had completed appropriate course work to qualify for proper certification. All counselors held certificates which included endorsements in the area of counseling and guidance. Class A Alabama Teacher's Certificates were held by 123 counselors, whereas the remaining 13 held Class AA certificates. The total group

included 39 men and 97 women. The sample was almost equally representative of both city and county school systems; 70 city and 66 county secondary school counselors were included in the study. The sample, furthermore, included persons from most areas of the state of Alabama as evidenced by the geographical distribution of the group (Appendix H).

Student Personnel Workers in
Higher Education (SPW)

The sample of 31 student personnel workers in higher education was employed full-time at the time of the study in some area of student personnel work in higher education at an Alabama college or university. They had completed a minimum of two years full-time experience as a SPW prior to the beginning of the 1968-69 school year. The level of experience varied between 2 and more than 15 years with a median of 4 years. A master's degree in counseling and guidance was held by 23 persons and 8 others had completed the coursework equivalent to the MA but had not applied for degrees in the field. The total group consisted of 12 men and 19 women and included persons from

all areas of the state (see Appendix I). The following types of student personnel work in higher education were represented in the study: Deans of Women, 3; Assistant Deans of Women, 3; Deans of Students, 5; Assistant Deans of Students, 1; Deans of Student Affairs, 2; Assistant Deans of Student Life, 1; Counselors, 12; Director of Resident Life, 1; Coordinator of Mental Health, 1; Director of Learning Resources, 1; and Registrar, 1.

Vocational Rehabilitation
Counselor (VRC)

The sample of 39 vocational rehabilitation counselors was employed full-time in the state of Alabama in some area of vocational rehabilitation counseling. They had completed a minimum of two years of full-time experience in vocational rehabilitation counseling prior to September, 1968. The level of experience varied from 2 to more than 15 years with a median range of 5 to 9 years of previous employment as a VRC. The educational level was also varied and included the following groups: 16 persons held master's degrees in counseling and guidance; 12 persons had earned the equivalent of the master's degree

in counseling and guidance; and 11 persons did not have a master's degree, or its equivalent, in the field. Of the persons without the desired degree, four held a bachelor's degree and the other seven held master's degrees (Vocational Agriculture, 2; Secondary Education, 2; and School Administration, 3). All eleven, according to the state office of rehabilitation, had received extensive in-service training and had completed some graduate coursework in counseling and guidance. The sample which included 33 men and 6 women was concentrated in the central portion of Alabama with some subjects from the extreme northern and southern counties (see Appendix J).

Variables and Instrumentation

Throughout the study the three counselor groups constituted the independent variable for all statistical comparisons. For the analysis of the data related to the Helping Relationship Inventory, each scale of the HRI was considered as a separate test and the five scales were treated as five dependent variables. On the Strong Vocational Interest Blank--Form M all of the sixty occupational scales were also considered as separate tests and

were treated as sixty dependent variables when the data were analyzed.

In this investigation the term attitude was limited in meaning to the response characteristics of counselors as measured by the Helping Relationship Inventory. The term interest was used to denote the characteristics measured by the Strong Vocational Interest Blank--Form M.

Helping Relationship Inventory (HRI)

The Helping Relationship Inventory (see Appendix K) was adapted from the Porter Counseling Procedures Pre-Test (1950, pp. 10-44) by Jones (1965) to help counselors realize their preferences among various counseling procedures (Jones, 1965, p. 28). The adaptation involved a change in the scoring for the 25 items (Jones, 1965). The HRI consists of 25 items containing five alternative responses which are understanding, probing, interpretive, supportive, and evaluative. Each response is ranked by the respondent as most appropriate, "1," to least appropriate, "5." The general attitude of the counselor is determined by summing the ranks assigned to each of the five previously mentioned

categories. Scores may range from a low of 25 to a high of 125. The higher scores indicate less acceptance of a category and the lower scores indicate a preference for a category.

It seems more defensible to say that scores on the Helping Relationship Inventory are indicative of the subject's tendencies to prefer one response mode to other types of responses, when forced to choose among several. It may be inappropriate to conceive of the counselor's verbal responses as representing choices made from alternatives that can be classified as the test item alternatives were. The test's validity for predicting interview behavior may be limited to those among response modes similar to those included in the test [Jones, 1965, pp. 43-43].

Porter's five counselor attitude subscales as used by Jones (1965, p. 80) included:

- U Understanding. A response tendency which indicates that the counselor's intent is to so respond as in effect to ask the client whether the counselor understands what the client is "saying," how the client "feels" about it, how it "strikes" the client, how the client "sees" it.
- P Probing. A response tendency which indicates that the counselor's intent is to gather further information, provoke further discussion along a certain line, to query. He in some way implies that the client ought to or might profitably develop or discuss a point further.

- I Interpretive. A response tendency which indicates the counselor's intent is to teach, to impart meaning to the client, to show him. He in some way implies what the client might or ought to think, however grossly or subtly.
- S Supportive. A response tendency which indicates the counselor's intent is to reassure, to reduce the client's intensity of feeling, to pacify. He in some way implies that the client need not feel the way he does.
- E Evaluative. A response tendency which indicates that the counselor has made a judgment of relative goodness, appropriateness, effectiveness, rightness. He in some way implies what the client might or ought to do, however grossly or subtly.

Strong Vocational Interest
Blank--Form M (SVIB-M)

The Strong Vocational Interest Blank--Form M (see Appendix L) contains listings of school subjects, amusements, hobbies, kinds of people, occupations, and other types of items which a person is asked to rate as "like," "indifferent," and "dislike." Responses of the individual are then compared to response patterns of persons who have been successful in more than sixty occupational areas. The scores obtained on a given scale of the SVIB-M express the degree to which a person has expressed likes and

dislikes which distinguish members of that occupational group from men in general. Raw scores resulting from scored responses are converted to standard scores which have a mean of 50 and a standard deviation of 10 (Strong, 1959, p. 9).

Because the reference group for the SVIB-W was based on women who did not have a bachelor's degree (Strong, 1966, p. 50), the women's form did not seem as appropriate as the men's form for the current study. In addition, the number of scales included on the SVIB-W is limited and would allow for comparison on only a very few scales which are common to both forms. This comparison would not be valid, however, since the two forms were normed on different reference groups. The SVIB-M, therefore, was used for all participants, men and women, so that direct comparisons could be made.

The 1966 revision, SVIB-Form T399, was considered for use and then rejected due to current controversy related to the validity of the new form (Campbell, 1967; Rothney, 1967; Williams, Kirk, & Frank, 1968). In a recent study Williams et al. (1968) compared the SVIB-M and the

SVIB-T399 responses for the same individuals and found that (a) the overall trend in score change was to a lower range, (b) pattern change was great in Group V--the main area of consideration in this study, and (c) areas of rejection showed the greatest consistency.

As was true of the individual scale, the occupational groups evidenced great variability in amount of pattern consistency [Williams et al., 1968, p. 288].

Since the validity of the SVIB-M has been well established it was selected as more appropriate for the current study.

Questionnaire

A questionnaire accompanied the test forms so that it was possible to verify the qualifications of each respondent as to whether or not he should be included in the study (see Appendix F). Each participant was also asked to rank seven reasons in order of importance in his decision to enter his current special area of counseling and guidance.

Procedures for Collection of Data

All Alabama city and county school systems, colleges and universities, and the State Vocational

Rehabilitation Office were contacted to solicit their cooperation in furnishing the names and addresses of counselors in their employ who would meet the qualifications for the study. Letters were mailed in September, 1968 (see Appendices A, B, and C). Replies were received from 150 employers who identified 359 counselors purported to be qualified for inclusion. A total of 41 employers reported that they did not have counselors employed who met the qualifications. The reason most frequently given was lack of full-time experience. No reply was received from the remaining 16 employers contacted even after a follow-up letter was sent. (See Appendix D for a summary by areas of specialization.)

A letter stating the purpose of the study and requesting the cooperation of the counselors (Appendix E) was sent to each person identified by the employers. In addition to the letter a general questionnaire (Appendix F), the Strong Vocational Interest Blank--Form M (Appendix L), and the Helping Relationship Inventory (Appendix K), coded answer sheets, directions for recording responses for both inventories, and a stamped, self-addressed reply

envelope were included in each packet mailed. Identification numbers were assigned to participants and were coded to the specialization area of current employment.

Of the 359 persons contacted, 318 returned materials. Not all of the returns, however, could be used in the study. Most of the respondents who were dropped from the study--70 in all--did not meet the basic requirements for qualified participants. Non-participants--those who returned blank questionnaires and answer sheets--excluded another 36 persons. Incomplete returns disqualified five more counselors, and one return was not included because it was received too late for consideration. Non-respondents included three persons who stated that they did not receive a packet and 38 who did not reply even though three follow-up letters had been sent after the packets were mailed. Thus, a total of 206 persons, or 57.4 percent of the persons identified by their employers, supplied the materials included for analysis. The total sample studied included: 136 secondary school counselors, 31 student personnel workers in higher education, and 39 vocational rehabilitation counselors. (See Appendix G for a summary

by area of specialization and Appendices H, I, and J for the geographical distribution of persons included in the study.)

Scoring of Answer Sheets

All answer sheets were machine scored. A special computer program was written by the Test Service Division of the University of Alabama for machine scoring the Helping Relationship Inventory which formerly had to be hand scored. The Strong Vocational Interest Blank--Form M was also scored using a program developed especially for the University of Alabama. This program yields sixty occupational scales and four non-occupational scales. The occupational scales were the only ones used for analysis in this study.

Statistical Treatment of Data

Statistical treatment of the data included multiple discriminant analysis, analysis of variance, Scheffé t tests, and correlation ratios to identify the scales of the HRI and the SVIB-M which had contributed to the differences between groups. All computation was done on an

IBM 360-40 computer. The packaged program--Fortran IV G Level 1, MOD 3--was used for discriminant analysis and a local program--COE 1 (College of Education, University of Alabama)--was used for analysis of variance, t ratios, etas, eta-squares, and standard deviations.

Multiple discriminant analysis was selected because it could best answer the question--Do intergroup differences exist? This multivariate statistic was employed as the over-all statistical test to determine if the three counselor groups were essentially the same. The statistical test takes into consideration the interaction of all the selected dependent variables simultaneously for each group. Any overlapping is also taken into consideration. The scores of the groups are combined statistically to obtain the largest separation of the groups that the values of the variables will allow. A measure of the distance between the groups is then given as a D^2 statistic by which the significance of the differences can be tested. The following formula is one of several which may be employed to determine the level of significance (Li, 1964, p. 406):

$$F = \left[\frac{N - p - 1}{(N - 2) p} \right] D^2$$

The degrees of freedom were determined as follows: df of the numerator = p; df of the denominator = N - p - 1; when the p = the number of variables and the N = the total number of persons in the study.

In addition to answering the initial question of whether or not groups are significantly different, the LDF considers all data about all individuals simultaneously and provides for each individual a symbol of classification according to the group which his own particular set of data suggests he is "most like" [Callihan, 1966, p. 176].

The coefficients produced as one of the intermediary steps in the computation of the multiple discriminant analysis are the corresponding weights of each of the variables derived from the solution of the set of simultaneous equations and indicate the relative value of the selected variables in distinguishing the groups. The final equation employs the constant given on the computer print-out, one per function.

Analysis of variance, Scheffé t tests, and correlation ratios were also computed in addition to the

multiple discriminant analysis to find which, if any, of the individual scales of the HRI and the SVIB-M discriminated between the groups. The .10 level was employed as the confidence level necessary for rejection of the null hypothesis for all statistical tests of significance. The .10 level was selected so that it would be possible to identify tendencies.

Limitations of the Study

Sample

1. This study was limited to counselors currently employed in the state of Alabama. The geographical limitation resulted from the practical considerations of the cost and time involved in identifying and testing a nationwide sample.
2. The small number of counselors employed in some areas of counseling within Alabama limited the study to the three largest areas of specialization: secondary school counseling, student personnel workers in higher education, and

vocational rehabilitation counseling.

3. The sample was further limited to counselors who received graduate degrees in counseling and guidance and who had completed a minimum of two years of full-time work experience in their current area of employment. The purpose of the added restriction was to acquire a sample of experienced counselors with an appropriate educational background who had remained in a given area of specialization long enough to indicate their satisfaction with that area of counseling.
4. This study did not attempt in the analysis of data to examine the relationship of such variables as age, years of experience in counseling, and effectiveness as a counselor.

Statistical Treatment

The HRI scores which are ipsative in nature were tested as interval data for the purpose of analysis. Since the study was of an exploratory nature, the violation of

the basic assumptions for the use of parametric analysis was considered justified in order to determine differences among the three groups of counselors, if differences do tend to exist.

CHAPTER IV

RESULTS

The need for continued research in all areas of counseling is as essential today as in years gone by. In spite of research efforts many questions remain unanswered because of the inconsistency of the findings from one study to another. Most studies have looked for characteristics which are common to counselors-in-general and have been unconcerned about the differences which exist among the counselors, individually or in groups. The purpose of this study is to seek information regarding the interest and attitude patterns of experienced Alabama counselors. The investigation is designed to determine if differences exist between counselors who are employed as secondary school counselors, student personnel workers in higher education, and vocational rehabilitation counselors. In addition, the relative importance of seven reasons for entering a current area of counseling was considered in

relation to each of the three areas of employment.

Earlier chapters have been concerned with (a) the nature and scope of the problem, (b) the review of literature and related research pertinent to the problem, and (c) the methodology employed in the collection and treatment of the data. The present chapter reports the analysis of data for the Helping Relationship Inventory (HRI) and the Strong Vocational Interest Blank--Form M (SVIB-M). Also, a summary of the information related to the counselors' reasons for entering a certain specialty area of counseling are presented.

Since the study was of an exploratory nature, no attempt was made to produce directional hypotheses of differences among the three counselor groups. Instead a null hypothesis of no difference among the multivariate means was tested for statistical significance.

Discriminant analysis was used as an over-all statistical test to determine if intergroup differences exist on the HRI or on the SVIB-M. This technique is a multivariate statistic which considers, simultaneously, all dependent variables for each individual in several

groups. The interaction of the variables, in this case all the scales for each instrument, are considered at one time and the measure of the difference between means for the groups is yielded as a D-Square statistic. Thus, discriminant analysis provides an analysis of all dependent variables and also takes into account the extent to which they correlate. The Generalized Mahalanobis D-Square which is yielded indicates the distance between the centroids (center point) for all groups being considered. The significance of the D^2 was tested using the method described in Chapter III.

Discriminant analysis also provides a comparison of the scores of each individual with a derived discriminant function and an indication of which of the groups his set of scores is most like. The classification function was the most practical aspect of the statistical procedures since it yielded information regarding the accuracy with which the dependent variables could predict the group membership of any one individual.

Tables were prepared to report the mean scores for each of the three groups on each dependent variable as

well as the mean score for all 206 subjects. At the end of each of the tables listing the mean scores the value of the Generalized Mahalanobis D-Square, a measure of the distance between groups, is given along with the appropriate degrees of freedom required for determining the statistical significance of the D^2 .

In addition, when the Generalized Mahalanobis D-Square was found to be statistically significant ($p \leq .10$), analysis of variance was employed to locate the individual scales which yielded statistically significant differences between the means of the three counselor groups: secondary school counselors (SSC), student personnel workers in higher education (SPW), and vocational rehabilitation counselors (VRC). For analysis of variance purposes, all scales had degrees of freedom of 2 and 203. Whenever a scale comparison was found to yield a statistically significant F ratio ($p \leq .10$), means between pairs of counselors groups (SSC/SPW, SSC/VRC, SPW/VRC) were tested for statistical significance using a Scheffé t . The Scheffé t test was employed for the a posteriori comparisons since directional hypotheses had not been formulated.

This method is more rigorous than the simple t test and helps to guard against the probability of rejecting the null hypothesis when it is true, a Type I error. The Scheffé t test, therefore, leads to fewer significant results (Ferguson, 1966, pp. 295-297).

Tables summarizing the analysis of variance for each scale yielding a statistically significant difference and tables reporting the t ratios between pairs of counselor groups will precede the discussion of the scales presented in the two tables. Analyses of variance summaries and associated t ratios on scales not yielding statistical significance are presented in the Appendices.

The correlation ratios were computed for each scale of the HRI and the SVIB-M to provide an indication of the relationship between each scale and group membership. All of the eta-squares were found to be less than 0.02 on the HRI and less than 0.11 on the SVIB-M. The small correlations indicated that prediction of group membership from scores made on only one scale would be less reliable than chance (one out of three). The correlation ratios, therefore, were not discussed in the presentation

of each scale yielding a statistically significant F ratio. The correlation ratios are listed in the appendices.

The Helping Relationship Inventory

Question 1

Do counselors employed in three sub-specialties of counseling differ in their attitude patterns as measured by the Helping Relationship Inventory?

Discussion

The mean scores for all five scales of the HRI are presented in Table 1 for each of the three counselor groups and also for the group as a whole. Numbers appearing below the initials for each counselor group indicate the size of the sample for that particular group. For example, there were 136 persons in the secondary school counselor group. A visual inspection of the mean scores by groups revealed intergroup similarities on all five scales of the HRI. The results of the discriminant analysis revealed that the three counselor groups were not statistically different ($p > .10$) when all five scales were considered at the same time. Thus, the null hypothesis of

no difference between group multivariate means was not rejected.

TABLE 1
Helping Relationship Inventory: Mean Scores

Scale	Group Membership			Common N = 206
	SSC N = 136	SPW N = 31	VRC N = 39	
Understanding	53.1	54.8	57.7	54.2
Probing	67.3	64.9	67.9	67.0
Interpretive	77.4	78.2	79.4	77.9
Supportive	87.9	88.9	83.8	87.3
Evaluative	87.3	85.6	84.6	86.5

Generalized Mahalanobis $D^2 = 8.45$; $df = 5, 200$; $p > .10$.

Table 2 presents the comparison of the actual group membership with the group membership predicted on the basis of the classification function of the discriminant analysis. The most inaccurate prediction was for the SSC with only 41 secondary school counselors correctly classified; 48 were

misclassified as SPW, and 47 were misclassified as VRC. Errors in classification are noted for 132 persons or 64.1 percent of the total group.

TABLE 2

Helping Relationship Inventory: Evaluation of Classification Functions for each Individual

Actual Group Membership	Predicted Group Membership			Error
	SSC	SPW	VRC	
SSC (N = 136)	<u>41</u>	48	47	95
SPW (N = 31)	7	<u>16</u>	8	15
VRC (N = 39)	11	11	<u>17</u>	22
Total Error				132

The Strong Vocational Interest
Blank--Form M

Question 2

Do counselors employed in three sub-specialties of counseling differ in their interest patterns as measured by the Strong Vocational Interest Blank--Form M?

Discussion

Table 3 presents the mean scores on the sixty SVIB-M scales for each of the three counselor groups and for the group as a whole.

TABLE 3

Strong Vocational Interest Blank--Form M:
Mean Scores

Scale	Group Membership			Common N = 206
	SSC N = 136	SPW N = 31	VRC N = 39	
Artist	29.14	25.19	23.05	27.39
Psychologist, Rev.	33.86	33.39	30.28	33.11
Architect	27.06	22.39	21.41	25.29
Physician, Rev.	31.48	31.10	31.10	31.35
Dentist	23.20	20.55	24.18	22.98
Veterinarian	17.35	17.77	27.00	19.24
Osteopath	31.33	32.97	35.18	32.31
Psychiatrist	36.43	37.42	34.00	36.12
Group I	39.29	36.13	34.87	37.98
Mathematician	23.24	19.42	18.31	21.73
Engineer	18.47	18.52	21.08	18.97
Chemist	19.79	19.10	20.28	19.78
Physicist	13.29	11.32	11.05	12.57
Group II	23.93	23.77	25.77	24.25
Production Manager	25.20	28.94	30.38	26.74

TABLE 3--Continued

Scale	Group Membership			Common N = 206
	SSC N = 136	SPW N = 31	VRC N = 39	
Aviator	14.32	17.97	23.95	16.69
Farmer	23.31	23.77	32.28	25.08
Carpenter	13.20	12.90	18.77	14.21
Printer	26.92	27.39	29.28	27.44
Math-Science Teach.	30.77	32.35	33.20	31.47
Policeman	23.21	26.71	30.00	25.02
Forest Service Man	15.11	17.64	25.51	17.46
Army Officer	14.49	22.39	23.00	17.29
Y.M.C.A. Phy. Dir.	32.31	34.64	34.18	33.01
Personnel Manager	35.85	40.00	35.03	36.32
Public Admin.	41.07	45.52	43.33	42.17
Y.M.C.A. Secretary	33.85	36.29	32.59	33.98
Soc. Sc. HS Teach.	41.86	43.71	41.05	41.98
City Sch. Super.	39.34	39.94	34.28	38.47
Minister	35.89	35.45	29.69	34.65
Vocational Couns.	44.40	46.48	42.72	44.40
Man Phy. Therapist	31.09	34.74	36.49	32.66
Social Worker	42.34	44.39	39.31	42.07
Group V	49.20	50.61	46.64	48.93
Music Performer	39.06	37.55	32.69	37.63
Music Teacher	42.74	42.52	34.36	41.12
CPA	30.61	31.81	25.67	29.85
Junior Accountant	26.75	30.48	25.77	27.13
Office Worker	33.21	36.58	32.44	33.57

TABLE 3--Continued

Scale	Group Membership			Common N = 206
	SSC N = 136	SPW N = 31	VRC N = 39	
Purchasing Agent	24.24	25.23	27.44	25.00
Banker	32.01	32.71	32.74	32.25
Senior CPA	27.98	31.74	32.18	29.34
Pharmacist	33.29	33.74	33.82	33.46
Mortician	34.65	36.10	35.03	34.94
Credit Manager	35.54	40.35	38.62	36.84
Group VIII	32.63	35.35	33.46	33.20
Sales Manager	32.98	35.06	33.49	33.39
Real Estate Slsmn.	37.95	37.94	39.08	38.16
Life Ins. Salesman	39.15	39.48	37.64	38.91
Group IX	41.80	42.23	41.82	41.87
Advertiser	39.94	38.52	33.49	38.50
Lawyer	38.22	37.35	35.26	37.53
Author-Journalist	37.21	34.64	31.77	35.79
Group X	44.59	42.42	39.31	43.26
Pres. Mtg. Concern	33.49	34.00	31.82	33.25
Assn. & C.of C. Ex.	39.54	43.84	39.23	40.13
Biologist	28.79	26.94	26.56	28.09
Librarian	39.96	38.26	29.85	37.79
Rehab. Counselor	45.59	47.26	42.13	45.18
Bus. Educ. Teacher	37.36	40.87	38.18	38.04

Generalized Mahalanobis $D^2 = 308.83$; $df = 60, 145$; $p < .001$.

An examination of the means of the three groups suggests that while the groups are very similar on some scales they are dissimilar on many other scales. For example, the mean scores for each of the three groups on the Physician, Revised scale is 31; however, on the Veterinarian scale the mean scores of the SSC group, 17, and the SPW group, 18, are much lower than the VRC group mean score of 27.

The Generalized Mahalanobis D-Square of 308.83 was found to be statistically significant well beyond the .001 level of confidence. The null hypothesis of no difference between the means of the groups was rejected. Thus, when all sixty scales of the SVIB-M were considered at one time it was possible to differentiate the profiles of the mean scores of the three groups.

The ability of the SVIB-M to correctly classify the individual into a group on the basis of his set of scores is noted in Table 4. The total error of 44 misclassifications represents inaccurate prediction for 21.4 percent of the entire sample. The most accurate classification function was in the vocational rehabilitation

counselor group with 36 out of 39 persons correctly classified for 92.3 percent accuracy.

TABLE 4

Strong Vocational Interest Blank--Form M:
Evaluation of Classification Function
for Each Individual

Actual Group Membership	Predicted Group Membership			Error
	SSC	SPW	VRC	
SSC (N = 136)	<u>101</u>	20	15	35
SPW (N = 31)	5	<u>25</u>	1	6
VRC (N = 39)	2	1	<u>36</u>	3
Total Error				44

Strong Vocational Interest Blank--Form M:
Individual Scale Analyses

Since intergroup differences were found on the SVIB-M the investigator wanted to determine which of the occupational scales also revealed intergroup differences. For this reason analyses of variance were performed on the sixty scales. In addition, t tests were employed for pairs

of counselor groups for each scale yielding a statistically significant F ratio. The results of the analyses of variance for all scales with a level of confidence at .10, or beyond, are presented in the discussion which follows. Statistically significant Scheffé t's are also included.

Table 5 presents the summary of the analyses of variance for the Artist, Architect, Veterinarian, and Group I scales of the SVIB-M. These four scales are all related to occupations having interests in the biological sciences at a professional level. The analyses of variance summary for the other six scales related to this group are listed in the appendices since they did not achieve a level of statistical significance at, or beyond, the .10 level of confidence.

The t ratio comparisons between the mean scores for pairs of counselor groups are reported in Table 6. The scales presented in this table (Artist, Architect, Veterinarian, and Group I) correspond to the scales in Table 5 which yielded statistical significance on the analyses of variance. All levels of confidence for significant differences are based on the results of the

Scheffé t test method.

TABLE 5

Strong Vocational Interest Blank--Form M:
Analysis of Variance for the Artist,
Architect, Veterinarian and
Group I Scales

Source of Variation	SS	df	MS	F	p
<u>Artist</u>					
Between groups	1300.0625	2	650.0312	6.66	.005
Within groups	19805.1875	203	97.5625		
Total	21105.2500	205			
<u>Architect</u>					
Between groups	1273.7500	2	636.8750	6.05	.005
Within groups	21378.3750	203	105.3122		
Total	22652.1250	205			
<u>Veterinarian</u>					
Between groups	2899.3750	2	1449.6875	11.97	.001
Within groups	24582.5000	203	121.0961		
Total	27481.8750	205			
<u>Group I</u>					
Between groups	717.8125	2	358.9062	4.98	.01
Within groups	14644.1250	203	72.1385		
Total	15361.9375	205			

TABLE 6

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups for the Artist,
Architect, Veterinarian, and Group I Scales

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Artist	2.007	3.394***	0.901
Architect	2.287*	3.030**	0.396
Veterinarian	-0.192	-4.826****	3.484***
Group I	1.872	2.866**	0.615

****Significant at the .001 level.

***Significant at the .005 level.

**Significant at the .025 level.

*Significant at the .10 level.

Artist Scale

A summary of the analysis of variance for the Artist Scale scores is presented in Table 5. The differences in the mean scores of the three counselor groups were statistically significant at the .005 level of confidence. Comparisons of mean scores for pairs of groups yielded a

significant Scheffé t between the SSC and the VRC group means at the .005 level of confidence (see Table 6). Differences in means between the SSC and the SPW or the SPW and the VRC groups were not significantly different. The vocational rehabilitation counselors were less like artists in their interests than either of the other two groups.

Architect Scale

The differences in the mean scores for the three groups on the Architect Scale were statistically significant at the .005 level. A summary of the analysis of variance is presented in Table 5. Table 6 presents the Scheffé t ratios between means for pairs of groups. Significant differences were noted for both SSC/SPW ($p < .10$) and SSC/VRC ($p < .025$). The means for the SPW and the VRC groups were lower than the mean for the SSC group.

Veterinarian Scale

The analysis of variance results for the Veterinarian Scale scores are presented in Table 5. Statistical significance was found between the means of the three

groups ($p < .001$). When the differences between the means were compared for pairs of groups, significance was revealed for SSC/VRC at the .001 level and for SPW/VRC at the .005 level of confidence. The t ratios are presented in Table 6. The means for the SSC and the SPW groups were almost identical, 17.35 and 17.77 respectively. The mean for the VRC group, however, was 27.00 indicating more similarity of interests with veterinarians than either of the other groups.

Group I Scale

The analysis of variance for the Group I Scale will be found in Table 5. When the means between the groups were compared using analysis of variance the differences between the means were found to be statistically significant at the .01 level of confidence. The comparison of differences in means for pairs of counselor groups yielded significance for the Scheffé t at the .025 level for the SSC/VRC pair of means. The secondary school counselors achieved higher mean scores than the vocational rehabilitation counselors. The mean of the SPW group was between

the means of the other two groups.

Table 7 presents the analyses of variance summary for the Mathematician Scale (related to interests in physical science--Group II) and the Production Manager Scale, the only scale in Group III of the occupational interest groups. The analyses of variance for the other four scales of the Group II occupations were not statistically significant and appear in the Appendices.

TABLE 7

Strong Vocational Interest Blank--Form M:
Analysis of Variance for Mathematician
and Production Manager Scales

Source of Variation	SS	df	MS	F	p
<u>Mathematician</u>					
Between groups	930.4375	2	465.2188	5.18	.01
Within groups	18248.3750	203	89.8934		
Total	19178.8125	205			
<u>Production Manager</u>					
Between groups	990.6250	2	495.3125	6.45	.005
Within groups	15594.8125	203	76.8217		
Total	16585.4375	205			

The summary of t ratios between means for pairs of counselor groups is noted in Table 8. The two scales, Mathematician and Production Manager, are discussed following the table.

TABLE 8

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups on the
Mathematician and the Production
Manager Scales

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Mathematician	2.022	2.861**	0.487
Production Manager	-2.142	-3.258*	-0.687

**Significant at the .025 level.

*Significant at the .01 level.

Mathematician Scale

Statistical significance was found when analysis of variance was performed on the Mathematician Scale scores ($p < .01$). The results of the analysis of variance are

reported in Table 7. The Scheffé t between the means for pairs of groups yielded statistical significance for SSC/VRC at the .025 level. A survey of the means for the three groups reveals that SPW (19.42) and VRC (18.31) were less like mathematicians in their interests than the SSC group (23.24).

Production Manager Scale

A summary of the analysis of variance for the Production Manager Scale scores is presented in Table 7 and the results of the Scheffé t test are located in Table 8. The analysis of variance F ratio was significant beyond the .005 level of confidence. When the comparisons of the difference in means between pairs of groups were performed the SSC/VRC pair was found to be statistically different ($p < .01$). In this case the SSC group had the lowest mean score (25.20) while the VRC group (30.38) was most like production managers in their interests.

The scales related to trade or technical skills-- Group IV--which produced statistically significant F ratios are presented in Table 9. Differences among the means of

TABLE 9

Strong Vocational Interest Blank--Form M: Analysis of
Variance for Aviator, Farmer, Carpenter, Policeman,
Forest Service Man, and Army Officer Scales

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
	<u>Aviator</u>				
Between groups	2871.8437	2	1435.9219	10.03	.001
Within groups	29076.2734	203	143.2329		
Total	31948.1172	205			
	<u>Farmer</u>				
Between groups	2502.3750	2	1251.1875	12.09	.001
Within groups	21006.4375	203	103.4800		
Total	23508.8125	205			
	<u>Carpenter</u>				
Between groups	1002.7500	2	501.3750	3.62	.05
Within groups	28107.2773	203	138.4595		
Total	29110.0273	205			
	<u>Policeman</u>				
Between groups	1503.3125	2	751.6562	9.13	.001
Within groups	16712.6875	203	82.3285		
Total	18216.0000	205			
	<u>Forest Service Man</u>				
Between groups	3280.9414	2	1640.4707	11.52	.001
Within groups	28904.2500	203	142.3855		
Total	32185.1914	205			
	<u>Army Officer</u>				
Between groups	3141.1758	2	1570.5879	8.69	.001
Within groups	36699.3516	203	180.7850		
Total	39840.5273	205			

the three counselor groups were significant for all but two of the scales in this occupational interest group. The analysis of variance for each of those two scales is reported in the Appendices.

Table 10 reports the t ratios for comparisons between the means of pairs of counselor groups for the six significantly difference scales in Group IV. All of the SSC/VRC comparisons, for each of the six scales, were statistically significant.

Aviator Scale

Table 9 presents the analysis of variance summary for the Aviator Scale scores. When the differences in means of the three groups were compared, the F ratio was found to be statistically significant beyond the .001 level of confidence. The results of the Scheffé t tests are given in Table 10. Differences in the means of the SSC group (14.32) and the VRC group (23.95) were found to be significantly different ($p < .001$). The vocational rehabilitation counselors were more like aviators in their interests than either of the other two groups and significantly more so than the secondary school counselors.

TABLE 10

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups on the Aviator,
Farmer, Carpenter, Policeman, Forest Service
Man, and Army Officer Scales

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Aviator	-1.533	-4.431****	-2.077
Farmer	-0.230	-4.856****	-3.476***
Carpenter	0.126	-2.606*	-2.072
Policeman	-1.940	-4.122****	-1.507
Forest Service Man	-1.067	-4.799****	-2.740*
Army Officer	-2.950**	-3.483***	-0.189

****Significant at the .001 level.

***Significant at the .005 level.

**Significant at the .025 level.

*Significant at the .05 level.

Farmer Scale

The analysis of variance for the Farmer Scale scores yielded statistical significance beyond the .001 level of confidence. The summary of the analysis of

variance for this scale is given in Table 9 and the Scheffé t ratios appear in Table 10. The mean scores of the SSC and SPW groups were almost identical, 23.31 and 23.77 respectively, while the mean score for the VRC group was much higher (32.28). Thus, when the difference between means for pairs of groups were tested, statistical significance was found for the SSC/VRC, $p < .001$, and SPW/VRC, $p < .005$, comparisons.

Carpenter Scale

Analysis of variance on the Carpenter Scale scores is presented in Table 9. The F ratio for the analysis of variance on this scale was statistically significant beyond the .05 level of confidence. Scheffé t tests of differences between the means for pairs of counselor groups yielded significance for one pair of means (SSC = 13.20, VRC = 18.77, $p < .05$). Thus, the interests of carpenters and VRC would appear to be more alike than carpenters and SSC.

Policeman Scale

The results of the analysis of variance on the

Policeman Scale scores are presented in Table 9. The comparisons of the differences between the means of all three groups yielded an F ratio of 9.13 which was found to be statistically significant beyond the .001 level of confidence. When the means of pairs of counselor groups were compared using the Scheffé t test (see summary in Table 10), significant differences were noted for the SSC/VRC group means at the .001 level of confidence. Vocational rehabilitation counselors had a larger mean score (30.00) than either of the other groups (SPW = 26.71, SSC = 23.21).

Forest Service Man Scale

A summary of the analysis of variance for the Forest Service Man Scale is located in Table 9. The F ratio of 11.52 was found to be well beyond the value required for statistical significance at the .001 level of confidence. A summary of the Scheffé t test is presented in Table 10. On these tests statistical significance was found between SSC/VRC, $p < .001$, and SPW/VRC, $p < .05$.

Once again the VRC group was more like the criterion group in interests than either of the other counselor groups.

Army Officer Scale

Table 9 presents a summary of the analysis of variance for the Army Officer Scale scores. Statistical significance for the F ratio of 8.69 was found to be at the .001 level of confidence. A summary of the results of the Scheffé t tests is located in Table 10. The comparisons of differences between pairs of group means indicated that the SPW and the VRC groups were significantly more like Army Officers in their interests than the SSC group (SSC/SPW, $p < .025$; SSC/VRC, $p < .005$).

Table 11 presents the analyses of variance for scales related to the Social Service or Welfare Occupational Group (Group V) which were found to have statistically significant F ratios ($p \leq .10$). Four out of the 11 scales for this occupational grouping are included in Table 11.

TABLE 11

Strong Vocational Interest Blank--Form M: Analysis
of Variance for the Public Administrator, City
School Superintendent, Minister, and
Man Physical Therapist Scales

Source of Variation	SS	df	MS	F	p
<u>Public Administrator</u>					
Between groups	563.3125	2	281.6562	3.34	.05
Within groups	17109.7500	203	84.2845		
Total	17673.0625	205			
<u>City School Superintendent</u>					
Between groups	853.0625	2	426.5312	4.96	.01
Within groups	17464.3125	203	86.0311		
Total	18317.3750	205			
<u>Minister</u>					
Between groups	1187.5000	2	593.7500	4.95	.01
Within groups	24357.3750	203	119.9871		
Total	25544.8750	205			
<u>Man Physical Therapist</u>					
Between groups	1041.5625	2	520.7812	4.16	.025
Within groups	25394.6875	203	125.0970		
Total	26436.2500	205			

The summary of the comparisons of pairs of means by counselor group is reported in Table 12. These scales are the same ones for which statistically significant F ratios had been noted in Table 11.

TABLE 12

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups for the
Public Administrator, City School
Superintendent, Minister, and
Man Physical Therapist Scales

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Public Administrator	-2.431*	-1.355	0.988
City School Super.	-0.324	3.001***	2.533**
Minister	0.201	3.115****	2.185*
Man Phy. Therapist	-1.641	-2.658**	-0.648

****Significant at the .01 level.

***Significant at the .025 level.

**Significant at the .05 level.

*Significant at the .10 level.

Public Administrator Scale

A summary of the analysis of variance of the Public Administrator Scale scores is presented in Table 11. The F ratio of 3.34 for this scale was statistically significant at the .05 level of confidence. The Scheffé t tests between differences for pairs of group means revealed significance ($p < .10$) for the SSC/SPW comparison. The SPW group achieved the highest mean score of the three groups (45.52) thus indicating that they had many interests in common with public administrators (SSC = 41.07; VRC = 43.33).

City School Superintendent Scale

The F ratio, 4.95, for the analysis of variance on the City Superintendent Scale scores was statistically significant at the .01 level of confidence. The summaries for the analysis of variance and t ratios are presented in Tables 11 and 12 respectively. When the differences in the means of the three groups (SSC--39.34, SPW--39.94, and VRC--34.28) were tested by pairs of groups, statistical differences were found between the SSC/VRC pair, $p < .025$,

and SPW/VRC, $p < .05$. Thus, the VRC group was less like City School Superintendents in their interests than either of the other two groups.

Minister Scale

Table 11 presents the analysis of variance summary for differences in the means obtained by the three groups on the Minister Scale. The .01 level of confidence was determined from the F ratio of 4.95. When the differences between the means of pairs of counselor groups were compared statistically significant Scheffé t ratios were noted between the SSC/VRC ($p < .01$) and SPW/VRC ($p < .10$) group means. The means for the SSC (35.89) and SPW (35.45) groups were very similar while the VRC group mean of 29.69 indicated fewer interests in common with Ministers. A summary of the t ratios is reported in Table 12.

Man Physical Therapist Scale

When the differences in mean scores of the three counselor groups were submitted to analysis of variance the resulting F ratio of 4.16 was found to be statistically significant at the .025 level of confidence. A summary is

presented in Table 11. The comparison of differences between means for pairs of groups yielded significant differences for SSC/VRC with a $p < .05$. Table 12 presents the summary for the t ratios. The VRC group achieved scores more like those achieved by physical therapists and the SSC group achieved scores least like physical therapists.

TABLE 13

Strong Vocational Interest Blank--Form M: Analysis of Variance for the Music Performer and the Music Teacher Scales

Source of Variation	SS	df	MS	F	p
<u>Music Performer</u>					
Between groups	1228.6875	2	614.3438	5.85	.005
Within groups	21311.5625	203	104.9845		
Total	22540.2500	205			
<u>Music Teacher</u>					
Between groups	2198.0000	2	1099.0000	8.47	.001
Within groups	26343.2500	203	129.7697		
Total	28541.2500	205			

Table 13 presents the analyses of variance summary for the occupational scales related to musical interests. Both scales were found to be statistically significant. The related t ratios for the two scales are presented in Table 14.

TABLE 14

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups for the Music
Performer and the Music Teacher Scales

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Music Performer	0.741	3.421**	1.970
Music Teacher	0.097	4.048***	2.976*

***Significant at the .001 level.

**Significant at the .005 level.

*Significant at the .025 level.

Music Performer Scale

A summary of the analysis of variance for the Music Performer Scale scores is presented in Table 13. The

differences in the mean scores among the three groups were found to be statistically significant at the .005 level of confidence. Comparisons of differences between the means for pairs of groups yielded statistical significance at the .005 level for the SSC/VRC group means. The SSC group was found to be more like music performers in their interests than were the SPW group. A summary of the \underline{t} ratios is presented in Table 14.

Music Teacher Scale

Table 13 presents the summary of the analysis of variance for the Music Teacher Scale scores. Differences between the means of the three groups were statistically significant beyond the .001 level of confidence. A summary of the \underline{t} ratios is reported in Table 14. The SSC and SPW were very much alike in interests related to this scale but the VRC group was less inclined to have interests common to the area. The Scheffé \underline{t} 's were statistically significant at the .001 level for SSC/VRC and at the .025 level for the SPW/VRC comparisons of differences between pairs of group means.

TABLE 15

Strong Vocational Interest Blank--Form M: Analysis
of Variance for the CPA, Senior CPA, Credit
Manager, and Association and Chamber of
Commerce Executive Scales

Source of Variation	SS	df	MS	F	p
<u>CPA</u>					
Between groups	879.6875	2	439.8438	4.91	.01
Within groups	18170.0000	203	89.5074		
Total	19049.6875	205			
<u>Senior CPA</u>					
Between groups	745.6250	2	372.8125	3.23	.05
Within groups	23414.6250	203	115.3430		
Total	24160.2500	205			
<u>Credit Manager</u>					
Between groups	736.8125	2	368.4062	3.43	.05
Within groups	21774.2500	203	107.2623		
Total	22511.0625	205			
<u>Association and Chamber of Commerce Executive</u>					
Between groups	505.6875	2	252.8438	2.66	.10
Within groups	19287.0625	203	95.0102		
Total	19792.7500	205			

Table 15 presents the analyses of variance for the occupational scales related to accounting and business

detail. These scales appear in Groups VII and VIII of the SVIB-M. The summary of the t ratios for the same scales is given in Table 16.

TABLE 16

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups for the CPA,
Senior CPA, Credit Manager, and Association
and Chamber of Commerce Executive Scales

Scale	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
CPA	-0.635	2.877***	2.697**
Senior CPA	-1.761	-2.154	-0.169
Credit Manager	-2.337*	-1.636	0.698
Assn. & C. of C. Executive	-2.218*	0.173	1.965

***Significant at the .025 level.

**Significant at the .05 level.

*Significant at the .10 level.

CPA Scale

The results of the analysis of variance on the CPA Scale scores are summarized in Table 15. The obtained

F ratio of 4.91 was found to be statistically significant ($p < .01$). When the differences in means between groups were compared by pairs using the Scheffé t tests statistical differences were noted for SSC/VRC, $p < .025$, and SPW/VRC, $p < .05$. The VRC group obtained the lowest mean score on this scale while the SPW obtained the highest mean score. A summary of the Scheffé t ratios is presented in Table 16.

Senior CPA Scale

The differences in mean scores for the three counselor groups on the Senior CPA Scale were tested using analysis of variance and a summary of the results is presented in Table 15. The F ratio of 3.23 was found to be statistically significant at the .05 level of confidence. Differences between pairs of means were then tested using the Scheffé t tests but none of the pairs obtained a $p < .10$ level of confidence.

Credit Manager Scale

Table 15 presents the summary of the analysis of variance for the Credit Manager Scale scores. The F ratio

of 3.43 was found to be statistically significant at the .05 level of confidence. The Scheffé \underline{t} tests (summarized in Table 16) resulted in statistical significance, at the .10 level of confidence, for differences between the SSC/SPW group means of 35.54 and 40.35 respectively. The SPW tended to have interests more like Credit Managers than either of the other two groups of counselors.

Association and Chamber of
Commerce Executive Scale

The analysis of variance for the Association and Chamber of Commerce Executive Scale scores is presented in Table 15. Statistical significance between means of the three counselor groups was found to be at the .10 level of confidence. Statistical significance at the .10 level was also found for the Scheffé \underline{t} tests for differences between the means of the SSC group (39.54) and the SPW group (43.84). A summary of the \underline{t} ratios is reported in Table 16.

TABLE 17

Strong Vocational Interest Blank--Form M: Analysis
of Variance for the Advertiser, Author-
Journalist, and Group X Scales

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Advertiser</u>					
Between groups	1262.4375	2	631.2188	7.24	.005
Within groups	17699.0625	203	87.1875		
Total	18961.5000	205			
<u>Author-Journalist</u>					
Between groups	943.8125	2	471.9062	6.87	.005
Within groups	13952.3125	203	68.7306		
Total	14896.1250	205			
<u>Group X</u>					
Between groups	871.0000	2	435.5000	6.40	.005
Within groups	13818.8750	203	68.0733		
Total	14689.8750	205			

The occupational scales related to the verbal-linguistic area of the SVIB-M are presented together in Table 17 which summarizes the three scales found to be statistically significant when submitted to analyses of variance. The related t ratios are reported in Table 18.

TABLE 18

Strong Vocational Interest Blank--Form M:
t Ratios Between Pairs of Counselor
 Groups for the Advertiser, Author-
 Journalist, and Group X Scales

Scale	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Advertiser	0.767	3.805**	2.238*
Author-Journalist	1.552	3.610**	1.442
Group X	1.321	3.534**	1.567

**Significant at the .005 level.

*Significant at the .10 level.

Advertiser Scale

A summary of the analysis of variance for the Advertiser Scale scores is presented in Table 17. The F ratio of 7.24 was found to be statistically significant beyond the .005 level of confidence. When the differences in means of pairs of counselor groups were compared using the Scheffé t tests, statistical significance was found for SSC/VRC ($p < .005$) and SPW/VRC ($p < .10$). The SSC and

the SPW groups achieved mean scores most like advertisers, 39.94 and 38.52 respectively, whereas the VRC group was least like advertisers with a mean score of 33.49. A summary of the t ratios is reported in Table 18.

Author-Journalist Scale

Table 17 reports the analysis of variance summary for the Author-Journalist Scale scores. The differences in the means between the three groups were found to be statistically significant beyond the .005 level of confidence. Comparison of differences in means by pairs of counselor groups revealed statistical differences between the SSC group mean of 37.20 and the VRC group mean of 31.77 ($p < .005$). The SSC group was more like the Author-Journalist criterion group than were the VRC group. Table 18 presents the t ratios for this scale.

Group X Scale

When the differences in means of all three groups on the Group X Scale were tested using analysis of variance statistical significance was found at the .005 level of confidence. The analysis of variance summary for this

scale is reported in Table 17 and the Scheffé t test summary is presented in Table 18. Comparisons of differences between pairs of group means revealed statistical significance between the SSC group (44.59) and the VRC group (39.23) at the .005 level of confidence.

TABLE 19

Strong Vocational Interest Blank--Form M: Analysis of Variance for the Librarian and the Rehabilitation Counselor Scales

Source of Variation	SS	df	MS	F	p
<u>Librarian</u>					
Between groups	3105.6250	2	1552.8750	11.07	.001
Within groups	28484.8750	203	140.3196		
Total	31590.6350	205			
<u>Rehabilitation Counselor</u>					
Between groups	519.6875	2	259.8438	2.98	.10
Within groups	17687.3125	203	87.1296		
Total	18207.0000	205			

The Librarian and the Rehabilitation Counselor Scales are two of the three Supplementary Scales which have

not been assigned to one of the broad group of occupational interests. The analyses of variance summaries for these two supplementary scales are presented in Table 19. The t ratios related to the two scales are reported in Table 20. The summary for the analysis of variance of the third supplementary scale, Y. M. C. A. Secretary, appears in the Appendices since the F ratio was not found to be statistically significant at, or beyond, the .10 level of confidence.

TABLE 20

Strong Vocational Interest Blank--Form M:
 t Ratios Between Pairs of Counselor
 Groups for the Librarian and the
 Rehabilitation Counselor Scales

Scale	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Librarian	0.720	4.698***	2.951**
Rehabilitation Counselor	-0.899	2.041	2.284*

***Significant at the .001 level.

**Significant at the .025 level.

*Significant at the .10 level.

Librarian Scale

The summary of the analysis of variance for the Librarian Scale scores is presented in Table 19. When the differences in the means of the three counselor groups were compared statistical significance at the .001 level of confidence was found. Comparisons of differences in the mean scores by pairs of counselor groups revealed that statistical significance existed for the SSC/VRC ($p < .001$) and SPW/VRC ($p < .025$) group means. A summary of the t ratios is presented in Table 20. The means of the SSC and SPW groups were very similar, 39.96 and 38.28 respectively, but the VRC mean of 29.85 was the lowest of the three.

Rehabilitation Counselor Scale

Table 19 presents a summary of the analysis of variance for the Rehabilitation Counselor Scale scores. The F ratio of 2.98 was found to be statistically significant at the .10 level of confidence. When the differences between means of pairs of groups were tested using the Scheffé t tests statistical significance was revealed for the SPW/VRC comparisons ($p < .10$). Ironically the VRC

group obtained the lowest mean, 42.13, of the three groups on the Rehabilitation Counselor Scale. The SSC group mean was 45.59 and the SPW group achieved the highest mean, 47.26. A summary of the t ratios is presented in Table 20.

Questionnaire

Question 3

Do counselors employed in three sub-specialties of counseling differ in the relative importance they place on several reasons for entering their current area of employment?

Discussion

As a part of the investigation each participant was asked to rank seven reasons in order of their influence on the individual's selection of one of three sub-areas within the field of counseling. The seven reasons included on the questionnaire were:

1. Prestige of the position.
2. Primary duties of the job.
3. Types of counseling problems.
4. Age group of clients.

5. Salary scale.
6. Amount of personal responsibility involved in the job.
7. Request, or suggestion, of another person that you enter the field in which you are currently employed.

No hypotheses were formulated with respect to these data. This information was not subjected to statistical analysis of differences between the three counselor groups.

The information received from participants was tallied and a mean rank determined by counselor group for each reason. The number "1" was considered to be most important in the decision to enter one of the three fields; "2" was considered second most important; and so forth, with "7" given as least important of the seven reasons listed. Table 21 presents the results obtained once the mean rank was calculated.

From an inspection of Table 21 it is readily apparent that secondary school counselors and student personnel workers in higher education were more concerned about the age level of the counselees with which they would

work than were the vocational rehabilitation counselors.

TABLE 21

Mean Rank for Seven Reasons for Entering a
Special Field of Counseling

Reason	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Primary Duties of the Job	1.9	2.4	2.2
Type of Counseling Problem	3.2	3.3	2.9
Amount of Personal Responsibility	3.4	3.3	3.2
Age Group of Clients	3.5	3.2	5.6
Request of Another . . .	4.3	5.0	4.0
Salary Level	5.5	5.0	3.9
Prestige of the Position	5.7	5.9	5.2

This may be related to the homogeneity of the clientele for the SPW and the SSC groups and the heterogeneity of the VRC clientele. There seems to be a tendency on the part of the VRC group to be more concerned about salary level than either of the other groups. Since the VRC group was

predominantly men (M, 33; F, 6) and since no male-female comparisons were attempted, the difference may be reflecting male concern about a salary level adequate to support a family. The differences on salary level are more clearly indicated in Table 22 which presents the rank order, as determined by the mean rank, for the seven reasons for entering one of the three special areas of counseling.

TABLE 22

Rank of Seven Reasons for Entering a
Special Field of Counseling

Reason	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Primary Duties of the Job	1	1	1
Type of Counseling Problem	2	3.5	2
Amount of Personal Responsibility	3	3.5	3
Age Group of Clients	4	2	7
Request of Another . . .	5	5	5
Salary Level	6	6	4
Prestige of the Position	7	7	6

A review of both Table 21 and Table 22 reveals the high degree of similarity for all three groups on five of the seven items.

No provision was made for listing reasons other than the seven presented in the questionnaire. Thus, other reasons which may have been of importance to participants were not considered due to the limitations of the list. Nevertheless, rank differences did appear on two of the seven items which were listed. Some differences therefore may exist among counselors which motivate them to seek employment in various specialty areas of counseling.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Counseling and guidance services are offered in an increasingly wide variety of work settings. Because of the demand for counselors to provide services in many settings and at different levels, counselor educators need some means for identifying appropriate candidates for training for these positions. Counselor candidates need assistance in selecting an area of concentration, and graduates need help in the selection of the most appropriate type of work setting for their employment. In addition, employers need more objective methods for determining which of the counselors available are best suited for employment in their work setting.

The professional literature reflects much concern about the personal characteristics of counselors and of counselor candidates. Researchers have reported findings of similarity among counselors but variety has also been

noted. This variability should be of concern to counselor educators and efforts should be made to determine if the differences are randomly or systematically related to some other variable such as sub-specialty groups of counselors. Continued employment in a particular work setting may be related to the personal characteristics of the individuals in the job, the duties of the job, or more likely, the interaction of the two. Studies investigating the reasons counselors give for entering the field and the reasons they give for selecting a particular work setting might also be beneficial in determining if the variability discovered in previous studies is related to perceived attractions of diverse types of employment. Most of the previous research related to characteristics of counselors has been concentrated on counselor candidates. Obtaining a sample from an intact group of counselors-in-training is quicker, easier, and less expensive than obtaining a sample from an experienced population in the field. Without some knowledge of the characteristics of the experienced counselor, however, the applicability of studies of counselors-in-training cannot be established.

The purpose of this investigation was to seek information regarding the interest and attitude patterns of experienced Alabama counselors who were employed in the special areas of secondary school counseling, student personnel work in higher education, and vocational rehabilitation counseling. More specifically, the purpose was to determine whether there were significant differences among the attitude and interest patterns of the three counselor groups. In addition, the relative importance of seven reasons for entering an area of counseling was considered in relation to each of the three areas of employment.

The subjects for this investigation included 136 secondary school counselors (SSC), 31 student personnel workers in higher education (SPW), and 39 vocational rehabilitation counselors (VRC). All 206 subjects were employed as full-time counselors in one of the three special areas studied. They had also completed a minimum of two years full-time work experience in their areas of employment prior to September, 1968. A master's degree in counseling and guidance, or its equivalent, had been earned by most counselors included in the study. The eleven

exceptions were in the rehabilitation group and were counselors who had received intensive in-service training and/or were working toward a master's degree in counseling.

The attitudes of the counselors were measured using the Helping Relationship Inventory (HRI) which indicates the individual's preference for types of counseling responses. The Strong Vocational Interest Blank--Form M (SVIB-M) was selected as the interest measure and was administered to all participants. Seven reasons for entering an occupational specialty were ranked according to their importance in the counselor's decision to enter his present area of specialization. The two inventories and the questionnaire were completed by all 206 counselors during the Fall Semester, 1968.

Because the study was of an exploratory nature no attempt was made to generate directional hypotheses of differences among the three counselor groups. Instead, an attempt was made to answer three questions:

1. Do counselors employed in three sub-specialties of counseling differ in their attitude patterns

as measured by the Helping Relationship Inventory?

2. Do counselors employed in three sub-specialties of counseling differ in their interest patterns as measured by the Strong Vocational Interest Blank--Form M?
3. Do counselors employed in three sub-specialties of counseling differ in the relative importance they place on several reasons for entering their current area of employment?

Multiple discriminant analysis was selected as the over-all statistical test because it could best answer the question--Do intergroup differences exist on the HRI and the SVIB-M? This technique is a multivariate statistic which considers, simultaneously: (a) all dependent variables for each individual in several groups, (b) the interaction for all variables, and (c) any overlapping of the variables. The scores of the groups are combined statistically to obtain the largest separation of the groups that the values of the variables will allow. A measure of the distances between the groups is then given as the

Generalized Mahalanobis D-Square by which the significance of the differences between groups can be tested. In this study the .10 level of confidence was the criterion for statistical significance.

Discriminant analysis also provides a comparison of the scores of each individual in the several groups with a derived discriminant function. This comparison gives an indication of which group an individual's set of scores is most like and provides information about the predicted classification of all the subjects in the study.

In addition to the basic statistical test, the multiple discriminant analysis, analyses of variance and Scheffé t tests were also computed to find which, if any, of the individual scales of the HRI and the SVIB-M discriminated among the groups. The .10 level of confidence was required for statistical significance for the F and the t ratios. Correlation ratios were also computed for each scale of the two instruments to obtain an indication of the relationship between the scale and group membership.

In this study, the dependent variables were the individual scales of the HRI (five) and the SVIB-M (sixty).

The independent variables were group membership (SSC, SPW, and VRC).

Conclusions

The Helping Relationship Inventory

The results of the discriminant analysis indicated no statistically significant differences ($p > .10$) in the attitude patterns of the three counselor groups on the HRI. On the basis of predicted group membership, which was given as a part of the discriminant analysis (Table 2, Chapter IV), only 35.9 percent of the counselors were correctly classified in the group of their employment. Attitudes as measured by the HRI, therefore, were found to be more similar than different among the three counselor groups studied. In addition, the profile of mean scores was noted to be very much like the profile of median scores found by Jones (1965) for counselors-in-general.

The findings on this sample of counselors would imply that the attitude of counselors may be fairly general regardless of the type of work setting in which the counselor is employed. This, however, is not the only possible

explanation. Several factors might have influenced the results of the study. The instrument which was sensitive enough to discriminate counselors from non-counselors may not have been sensitive enough to pick up minor or subtle differences among groups of counselors. The ipsative nature of the instrument could have masked differences which really existed among the counselor groups. It may also be that counseling attitudes tend to vary depending upon the personal characteristics of the counselee, the problem presented, and the urgency for action related to the problem.

The attitude of the counselor has been a popular area of investigation but previous emphasis has been on the identification of effective counselors, the counselor in relation to the client, change of attitude during an educational program, or differentiating counselors from non-counselors. Until more studies have been conducted using the work setting of the counselor as a variable the reasons for the results found in this study will remain a matter of speculation.

The Strong Vocational Interest
Blank--Form M

The Generalized Mahalanobis D-Square for the SVIB-M was found to be statistically significant well beyond the .001 level of confidence. Thus, when all sixty scales of the SVIB-M were considered at one time it was possible to differentiate the profiles of the mean scores of the three counselor groups.

The prediction of group membership for each individual, as determined by his own set of scores on the SVIB-M, revealed that 78.6 percent of the counselors were correctly classified in the groups of their employment (Table 4, Chapter IV). Accuracy of the classification function varied (secondary school counselors, 74.3 percent; student personnel workers in higher education, 80.6 percent; and vocational rehabilitation counselors, 92.3 percent) with the best prediction being for the vocational rehabilitation counselors.

The reason for the variability may have been the variations in the job duties of the groups. The rehabilitation counselor often deals with medical problems and

disabilities of clients, and he requires background information in order to provide the greatest assistance to the rehabilitation clientele. On the other hand, the school counselor and the college personnel worker deal predominantly with school related problems and the needs of students for information.

The fact that the SVIB-M was selected as the instrument for use in this study may have influenced the predictability of group membership. The SVIB-M form of the Strong Vocational Interest Blank was designed for use with men. The items, therefore, may be less appropriate for use with women. Since the highest concentration of women was in the school counselor group (two women for each man) and the lowest in the rehabilitation counselor group (one woman for each 6.5 men) this factor could have affected the accuracy of the prediction of group membership.

Another possibility might also be considered--that the group membership of men can be predicted with more accuracy than the group membership of women. Most of the successful studies related to discrimination of occupational

group membership have been conducted on samples of men. The present study may add support to the idea that most women's occupational interests are more diverse and difficult to study.

Because intergroup differences were found using all sixty scales of the SVIB-M, simultaneously, the investigator wished to determine which of the individual occupational scales effectively differentiated the groups. Thus, analyses of variance were performed for all sixty scales. Scheffé \underline{t} tests were employed for testing the differences in the means between pairs of counselor groups for each scale yielding a statistically significant \underline{F} ratio ($p < .10$). In addition, correlation ratios were computed to find the strength of the relationship between each scale and group membership. Statistically significant \underline{F} ratios were found for 27 occupational scales. When Scheffé \underline{t} ratios were computed, 36 comparisons of differences between the means of the pairs of groups were found to be statistically significant at the .10 level of confidence. More than one-half of the significant \underline{t} 's, twenty-two, were for comparisons between the means of the secondary school

counselor-vocational rehabilitation counselor groups. For secondary school counselor-student personnel worker in higher education comparisons of differences in the pairs of means, statistical significance was revealed for four scales. The student personnel workers in higher education-vocational rehabilitation counselor group comparisons of differences between the pairs of means revealed that the groups were significantly different on ten scales. The importance of the findings in the study of intergroup differences by scales was diminished by the results of the correlation ratios which revealed very poor ability to predict group membership on the basis of any single scale regardless of the level of statistical difference found between the means of the counselor groups on the scale. For this reason prediction of group membership on the basis of any single scale is not feasible.

Questionnaire

As an adjunct to the investigation, each subject was asked to rank seven reasons in the order of their influence on his selection of one of the three

sub-specialties of counseling. The information was tallied and a mean rank determined by counselor group for each reason. School counselors and college personnel workers reported that they were more concerned about the age level of the counselee with whom they would work than were the rehabilitation counselors. This may be related to the relative homogeneity of the clientele of the school and college counselors and the heterogeneity of the rehabilitation clientele.

Salary level seemed to be of more concern to the rehabilitation group than either of the other two groups. This became even more evident when the reasons were reranked on the basis of the means obtained from each group. The difference could reflect typical male concern about a salary level adequate to support a family since 33 of the 39 subjects in this group were men. A high degree of similarity for all three groups was found on the other five items. The slight variations on these five items did not follow a consistent pattern for pairs of groups.

Reasons not listed on the questionnaire may have

been even more influential in the subject's choice of a sub-specialty. However, the fact that rank differences were noted for two of the seven reasons listed indicates that describable differences may exist in the attractiveness of various specialty areas of counseling.

The results of this investigation have provided evidence of both similarities and differences for experienced counselors employed in the state of Alabama. These differences, or lack of differences, may have been a result of the personal characteristics of the counselors, characteristics of the instruments, or interaction of the two. Regardless of the reasons for the findings, counselor similarity was noted for the three groups of counselors on attitudes as measured by the Helping Relationship Inventory and also on five of the seven reasons which they reported as having influenced their decisions to enter an area of specialization. On the other hand, counselor differences by group membership were noted for two of the reasons for entering an area of specialization, age level of client and salary level. Interest patterns as measured by the SVIB-M were also found to be significantly related

to counselor group membership. On the basis of multiple discriminant analysis, when all scale scores were considered together, the prediction of group membership was highly accurate.

Recommendations

The findings of this study suggest that further investigation of differences among counselors employed in various sub-specialties of counseling may be fruitful. Additional research might identify sub-specialty groups which are very similar to one another as well as the sub-specialty groups which are quite different. The nature of the similarities and differences might then be subjected to further investigation. Such studies could ultimately produce data for more rational decisions by counselor candidates as well as selection criteria for counselor educators and employers. More specifically, the following suggestions for further research have become apparent.

1. Although the use of multiple discriminant analysis revealed differences among the interest patterns of the three counselor groups

when all scales of the SVIB-M were considered simultaneously, cross validation studies are needed to determine whether similar results can be obtained using the SVIB-M on another independent sample. This might be accomplished by studying the Alabama counselors who did not participate in this study even though they were qualified on the basis of education, experience, and current area of employment.

2. A study of a nationwide sample which investigated the differences in interest patterns of counselors employed in many work settings would be beneficial since the results would not be geographically limited in interpretation.
3. The number of groups studied might be expanded to include: elementary school counselors, employment service counselors, counselor educators, VISTA, Job Corps Counselors, industrial personnel workers, and others.
4. Longitudinal studies of the patterns of selected variables could be initiated at the time

counselor candidates enter a graduate program in counseling and guidance, and continued until the persons included in the study had completed their training and had been employed for three to five years. Intermediate checks could be made to indicate how early in a candidate's program the variable could adequately predict which of the counselor groups the individual was most like.

5. The results of this study indicate that reports of relative importance of some reasons for entering counseling varied according to group membership. More information regarding reasons for entering the field of counseling, reasons for selecting a given area of specialization for graduate study, and reasons for retaining employment in a particular type of work setting might reveal much about the differences among the counselors in various sub-specialties of counseling.

6. Variables related to personality, self-concept, undergraduate background, previous employment, and others might be studied to see if sub-specialties in counseling can be differentiated using variables other than the ones investigated in this study.

Other important and related concerns are those dealing with whether counselor candidates are receiving the kind of preparation needed for work in sub-specialty fields. Are several different preparation programs needed, or is a general program for all counselors regardless of potential work setting more appropriate? These questions may be partially answered by additional research on the commonalties and differences among counselors working in the various settings.

APPENDIX A

LETTER TO SECONDARY SCHOOL EMPLOYERS

Box 2474
University, Alabama 35486
September 20, 1968

Dear Sir:

Past research has shown that a person's interests and attitudes are associated with their vocational choice. Certain personal characteristics have been found to be more common among counselors in general than among persons entering other vocational areas. So far research has not attempted to differentiate among counselors selecting various areas of specialization. With the increasing demand for counselors in a variety of work settings and at many different levels, counselor educators stand in need of some appropriate means of identifying and guiding counselor candidates in the earlier and more appropriate selection of an area of specialization.

One method of research related to the problem would be to study counselors working in the various settings and to try to determine if differences do exist in their expressed interests and attitudes. As a doctoral student in the Department of Counseling and Guidance, College of Education, University of Alabama, my dissertation research will involve a comparison of secondary school counselors, student personnel workers in higher education, and vocational rehabilitation counselors who are employed in the state of Alabama. It is hoped that the findings of this study will eventually prove helpful in the selection, guidance, and placement of counselor candidates.

The successful completion of the study will require the assistance of administrators in identifying counselors in their schools who meet the criteria for the sample, and also the cooperation of the counselors themselves. The study is designed to take into account the busy schedule of school staff members by requiring the least amount of time and effort possible from the participants and yet providing meaningful results. The study is being conducted under the supervision of Dr. Leeman C. Joslin, Associate Professor of Counseling and Guidance.

The criteria for the secondary school counselors include: 1) a CLASS A or AA certificate with an endorsement in the area of Guidance and Counseling; 2) the completion of a minimum of two years of FULL-TIME employment as a secondary school counselor prior to the 1968-69 school year; and, 3) FULL-TIME employment as a secondary school counselor for the 1968-69 school year. No counselor, school, or school system will be identified in the results of the study and all information received from participants will be treated as confidential. The time required of each participant will be approximately one and one-half to two hours and will involve the completion of two inventories: 1) the Helping Relationship Inventory, and 2) the Strong Vocational Interest Blank.

Currently I am attempting to obtain a list of counselors who meet the criteria so that they may be included in the study. Will you cooperate in this endeavor by supplying me with a list of the secondary school counselors employed in your system this year who will meet the criteria stated above? Enclosed is a stamped, self-addressed envelope and a form for listing the information requested. If none of your counselors meet the criteria please indicate "none" on the form and return it anyway. Your assistance in this matter will be greatly appreciated.

Sincerely,

(Miss) K. Machree Agee
NDEA Fellow in Educational
Psychology and Guidance

Enclosures: 2

APPENDIX B

LETTER TO STUDENT PERSONNEL WORKER
IN HIGHER EDUCATION EMPLOYER

Box 2474
University, Alabama 35486
September 20, 1968

Dear Sir:

Past research has shown that a person's interests and attitudes are associated with their vocational choice. Certain personal characteristics have been found to be more common among counselors in general than among persons entering other vocational areas. So far research has not attempted to differentiate among counselors selecting various areas of specialization. With the increasing demand for counselors in a variety of work settings and at many different levels, counselor educators stand in need of some appropriate means of identifying and guiding counselor candidates in the earlier and more appropriate selection of an area of specialization.

One method of research related to the problem would be to study counselors working in the various settings and to try to determine if differences do exist in their expressed interests and attitudes. As a doctoral student in the Department of Counseling and Guidance, College of Education, University of Alabama, my dissertation research will involve a comparison of secondary school counselors, student personnel workers in higher education, and vocational rehabilitation counselors who are employed in the state of Alabama. It is hoped that the findings of this study will eventually prove helpful in the selection, guidance, and placement of counselor candidates.

The successful completion of the study will require the assistance of administrators in identifying counselors in their colleges who meet the criteria for the sample, and also the cooperation of the counselors themselves. The study is designed to take into account the busy schedule of college staff members by requiring the least amount of time and effort possible from the participants and yet providing meaningful results. The study is being conducted under the supervision of Dr. Leeman C. Joslin, Associate Professor of Counseling and Guidance.

The criteria for student personnel workers in higher education include: 1) a MASTER'S DEGREE in Counseling and Guidance; 2) the completion of at least two years of FULL-TIME employment in some area of student personnel work in higher education prior to the 1968-69 school year; and, 3) the FULL-TIME employment in some area of student personnel work in higher education for the school year 1968-69. No participant or institution will be identified in the results of the study and all information received from the participants will be treated as confidential. The time required of each participant will be approximately one and one-half to two hours and will involve the completion of two inventories: 1) the Helping Relationship Inventory, and 2) the Strong Vocational Interest Blank.

Currently I am attempting to obtain a list of student personnel workers in higher education who meet the criteria for the study. Will you cooperate in this endeavor by supplying me with a list of the personnel employed in your institution this year who will meet the criteria stated above? Enclosed is a stamped, self-addressed envelope and a form for listing the information requested. If none of your employees meet the criteria please indicate "none" on the form and return it anyway. Your assistance in this matter will be greatly appreciated.

Sincerely,

(Miss) K. Machree Agee
NDEA Fellow in Educational
Psychology and Guidance

Enclosures: 2

APPENDIX C

LETTER TO STATE VOCATIONAL REHABILITATION OFFICE

Box 2474
University, Alabama 35486
October 7, 1968

Mr. George Hudson, Assistant Director
Vocational Rehabilitation Services
State Department of Education
2129 E. South Boulevard
Montgomery, Alabama 36104

Dear Mr. Hudson:

Past research has shown that a person's interests and attitudes are associated with his vocational choice. Certain personal characteristics have been found to be more common among counselors in general than among persons entering other vocational areas. So far research has not attempted to differentiate among counselors selecting various areas of specialization. With the increasing demand for counselors in a variety of work settings and at many different levels, counselor educators stand in need of some appropriate means of identifying and guiding counselor candidates in the earlier and more appropriate selection of an area of specialization. Employers would also profit from a better method of differentiation among counselor graduates.

One method of research related to the problem would be to study counselors working in the various settings and to try to determine if differences do exist in their expressed interests and attitudes. As a doctoral student in the Department of Counseling and Guidance, College of Education, University of Alabama, my dissertation research will involve a comparison of secondary school counselors, student personnel workers in higher education, and vocational rehabilitation counselors who are employed in the State of Alabama. It is hoped that the findings of this

study will eventually prove helpful in the selection, guidance, and placement of counselor candidates.

The successful completion of the study will require the assistance of administrators in identifying counselors in their agencies who meet the criteria of the sample, and the cooperation of the counselors themselves. The study is designed to take into account the busy schedules of agency staff members by requiring the least amount of time and effort possible from participants and yet providing meaningful results. The study is being conducted under the supervision of Dr. Leeman C. Joslin, Associate Professor of Counseling and Guidance.

The criteria for the vocational rehabilitation counselors include: (1) a minimum of a MASTER'S DEGREE in Vocational Rehabilitation Counseling or in some other area of counseling and guidance; (2) completion of a minimum of two years of FULL-TIME employment as a vocational rehabilitation counselor prior to September, 1968; and (3) FULL-TIME employment as a vocational rehabilitation counselor for the coming year. Supervisors will be included if they spend one-half of their time in counseling contacts. No counselor will be identified in the results of the study and all information received from participants will be treated as confidential. The time required of each participant will be approximately one and one-half to two hours and will involve the completion of two inventories: (1) the Helping Relationship Inventory, and (2) the Strong Vocational Interest Blank--Form M.

Will you be willing to cooperate in this endeavor in the following ways:

1. First by granting permission for the vocational rehabilitation counselors and supervisors who meet the criteria stated above to be included in the study.
2. Second by supplying me with a list of the vocational rehabilitation counselors and supervisors

employed in the State of Alabama who are currently carrying case loads. These persons can then be contacted for the purpose of identifying those who meet the criteria for the study.

3. Third by making the participants-to-be aware of your approval either through a letter of endorsement which I could enclose with the materials for the study or through direct communication, from your office, to the persons whose names appear on the list sent to me.

Enclosed is a stamped, self-addressed envelope and a form for listing the names and addresses of the counselors. Your assistance in this matter will be greatly appreciated.

Sincerely,

(Miss) K. Machree Agee
NDEA Fellow in Educational
Psychology and Guidance

Enclosures: 2

APPENDIX D

IDENTIFICATION OF POPULATION BY EMPLOYERS

IDENTIFICATION OF POPULATION BY EMPLOYERS

Source	Reply Pattern of Employers			Identification Pattern	
	Number of Employers Contacted	Number No Reply	Number Replies	Number without counselors qualified for the study	Number of Counselors Identified
PUBLIC SCHOOL SYSTEMS	118	10 ^a	108	27	253
COLLEGES & UNIVERSITIES	47	6	41	14	64
STATE VOCATIONAL REHABILITATION OFFICE	1	0	1	0	42
Total	166	16 ^a	150	41	359

^aIncludes one response which was received too late to contact the 19 counselors identified.

APPENDIX E

LETTER TO COUNSELORS

Box 2474
University, Alabama 35486
October 15, 1968

Dear Counselor:

Past research has provided substantial evidence that certain personal characteristics tend to be more common among counselors in general than among persons entering other vocations. So far research has not attempted to differentiate among counselors employed in a variety of work settings.

As a doctoral student in the Department of Counseling and Guidance, College of Education, University of Alabama, my dissertation research will involve a comparison of secondary school counselors, student personnel workers in higher education, and vocational rehabilitation counselors who are employed in the State of Alabama. It is hoped that the findings of the study will prove helpful in future selection, guidance, and placement of counselor candidates. The study is being conducted under the supervision of Dr. Leeman C. Joslin, Associate Professor of Counseling and Guidance.

Your employer has already indicated his interest in the study by providing me with the names of experienced and educationally qualified counselors. Will you please cooperate by completing the enclosed Confidential Questionnaire, the Strong Vocational Interest Blank for Men, and the Helping Relationship Inventory. The time required for completion of all three of these should not be more than one hour and thirty minutes. All information will be treated as confidential and no individual will be identified. The results will be reported in terms of the three work settings.

After you have completed the questionnaire and both inventories please return ALL of the materials, except this letter, in the stamped, self-addressed envelop which is enclosed. Your prompt assistance in this matter will be greatly appreciated.

Sincerely,



(Miss) K. Machree Agee
NDEA Fellow in Educational
Psychology and Guidance

APPENDIX F

CONFIDENTIAL QUESTIONNAIRE

CONFIDENTIAL QUESTIONNAIRE

SEX: (Circle one) Male Female CODE NUMBER: _____

CURRENT AREA OF EMPLOYMENT: (Check one)

- _____ Secondary School Counselor
 _____ College Personnel Worker
 _____ Vocational Rehabilitation

Number of years employed FULL-TIME in the above type position
 PRIOR to this year: _____ 2 years _____ 5-9 years
 _____ 0 years _____ 3 years _____ 10-14 years
 _____ 1 year _____ 4 years _____ 15 & over

EDUCATIONAL LEVEL:

Do you have a Master's degree in counseling and guidance?

_____ YES _____ NO

If not, what was your major area of study for your Master's?

If you do not have a Master's in counseling and guidance do
 you have the equivalent of a Master's in Counseling and Guidance?

_____ YES _____ NO

CURRENT LEVEL OF CERTIFICATION - For School Counselors only: (Check one)

_____ Class B _____ Class A _____ Class AA

Does your certification include an endorsement in the area of
 counseling and guidance? _____ YES _____ NO

RANK the following seven (7) reasons in the order of their importance
 to you in your decision to enter Secondary School Counseling, College
 Personnel Work, OR Vocational Rehabilitation Counseling.

Let "1" = most important; "2" = second most important; and
 so forth, with "7" = least important in your decision.

_____ Prestige of the position.

_____ Primary duties of the job.

_____ Type of counseling problems.

_____ Age group of clients.

_____ Salary level.

_____ Amount of personal responsibility involved in
 the job.

_____ Request, or suggestion, of another person that
 you enter the field in which you are
 currently employed.

APPENDIX G

RESPONSE PATTERN OF POPULATION IDENTIFIED

RESPONSE PATTERN OF POPULATION IDENTIFIED

	Secondary School Counselors	Student Personnel Workers in Higher Education	Vocational Rehabilitation Counselors	Total
Unqualified	56	14	0	70
Non-participants	25	10	1	36
Incomplete	5	0	0	5
Received late	1	0	0	1
No Reply	29	8	1	38
No Materials Received	1	1	1	3
Usable Returns	136 ^a	31 ^b	39 ^c	206
Total	253	64	42	359

^a 39 males and 97 females.

^b 12 males and 19 females.

^c 33 males and 6 females.

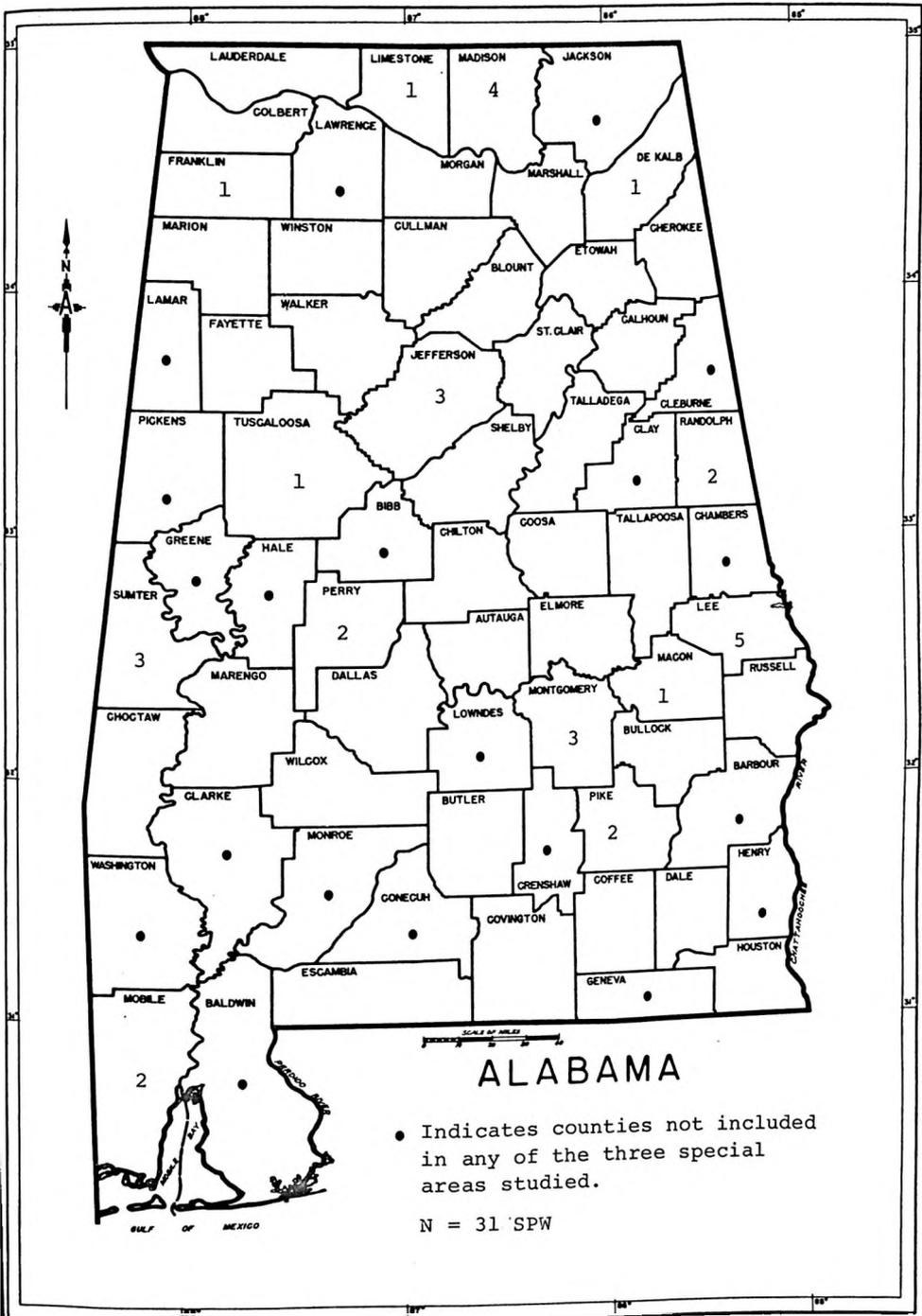
APPENDIX H

GEOGRAPHICAL DISTRIBUTION OF SECONDARY SCHOOL
COUNSELORS STUDIED



APPENDIX I

GEOGRAPHICAL DISTRIBUTION OF STUDENT PERSONNEL
WORKERS IN HIGHER EDUCATION STUDIED



- Indicates counties not included in any of the three special areas studied.

N = 31 SPW

APPENDIX J

GEOGRAPHICAL DISTRIBUTION OF VOCATIONAL
REHABILITATION COUNSELORS STUDIED



APPENDIX K

HELPING RELATIONSHIP INVENTORY

PLEASE NOTE:

Page 159 "Helping Relationship
Inventory, Form R", © 1965, not
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University of Alabama Library.

UNIVERSITY MICROFILMS

HELPING RELATIONSHIP INVENTORY

FORM R

(Confidential)

Miss K. Ma-hree Agee
Box 2474
University, Alabama 35486

Name

Occupation

Date

Adapted for research purposes from the Counseling Procedures Pre-Test by
E. H. Porter. By permission. John E. Jones, University of Alabama, 1965

HELPING RELATIONSHIP INVENTORY

INSTRUCTIONS--PLEASE READ CAREFULLY

This is not a test in the sense that your answers can be right or wrong. It is a survey of your feelings concerning the relationship between two persons when one is attempting to help the other. Imagine yourself as a person to whom another person has come for personal assistance. Each of the items represents possible interchanges between you and your "client," who seeks your help. The "client" begins the conversation by talking about an aspect of the situation he faces. No further information is available on the case. You will not know at what point in the conversation the interchange takes place. In short, you are presented with an isolated statement. This is followed by five possible responses that you may make. Arrange these responses in the order of your preference, using the following code:

- 1 beside the response you would be most apt to favor
- 2 beside the response next most desirable to you
- 3 beside the next
- 4 beside the next, and
- 5 beside the response that least represents your preference.

Example:

1. Woman--Age 26

"I'm planning the menu now. What kinds of foods do you like?"

- 3 a. Pizza and other Italian foods.
- 1 b. Steaks and hamburgers.
- 5 c. Salads and vegetables.
- 2 d. Desserts.
- 4 e. Spanish cooking.

The person who responded to this item showed the highest preference for steaks and hamburgers and the least preference for salads and vegetables.

The wording used may not strike you as being the best, but disregard this factor as long as the response is the same type you would favor. You may think of responses which would be more preferable from your point of view. It is necessary, however, that you make your selection from the alternatives presented and that you arrange all five in the order of their desirability.

1. Woman, age 47. Quite tense.

"I really don't know what to do. Ah,-- I really don't know whether to go back to teaching school. It gets on my nerves so-- I can't hardly stand it. I've got a good salary. Or else make a clean break and really do the thing I'm interested in. (Slight pause.) But that would mean starting in at the bottom with a very small salary and I wouldn't know whether I could do that or not."

- ___ a. Could you tell me a little more about your new field of interest? It is quite important that we think about this clearly.
- ___ b. Well, before you jump into something new you should be very sure that it is really worthwhile and will provide at least the security and feeling of contribution that teaching brings you.
- ___ c. Well, now, possibly I can help you with that decision. Probably you could take some tests which will furnish you with some idea as to whether you might expect to be successful in the line of your new interests. And maybe we could explore some of the things which give you dissatisfaction in your teaching work.
- ___ d. This indecision of yours is an understandable thing and stems from the conflict between your uncertainty over the new line of interest and your mixed feelings of dissatisfaction with the teaching job yet hesitance to leave the security which it affords.
- ___ e. It's really a tough decision, isn't it? Whether to take the risks of starting out in a new field or to stick by the security of the irritating teaching job.

2. Girl, Age 19.

"I tell you I hate my father. I hate him! I hate him! I hate him! And there's no reason for it. He is a minister--a good and righteous man. He has never laid a hand on me, but I have this terrific feeling against him. And it makes me feel so terrible because-- There's no reason for it. It's a sin to hate your father, especially if you don't have any reason for it. I-- It worries me."

- ___ a. Of course you feel guilty about hating him so, especially since you can't put your finger on what he has done to make you hate him. And then, too, even though you see only your hatred of him you'll find that underneath it all you have some love for him and this plays a part in your feelings of guilt.
- ___ b. I guess everyone at some time or another goes through a period when they hate one or both of their parents. It's really not at all uncommon. Most people find that they can work out some way of getting along until things settle down.
- ___ c. This is certainly something which you will want to get cleared up. Happy relationships with parents are too constructive a thing to a person, not only now at your age, but in the future as well; you won't want to jeopardize what it can mean to you.
- ___ d. It worries you that you should hate your father without reason and yet feel sinful for hating him.
- ___ e. I think we ought to get to the root of that worry. Tell me about your father--all about him. You say he's never laid a hand on you, but maybe he has not let you do a number of things you wanted to do. Can you think of anything along that line?

3. Man, age 30.

"I have the queerest feeling. Whenever anything good happens to me, I just can't believe it. I act as though it never happened. And it worries me. I wanted a date with Myrtle, and I stood around for weeks before I got up enough courage to ask her for a date and she said yes, and I couldn't believe it! I couldn't believe it so much that I didn't keep the date!"

- a. You've got to grow up, fellow, and get a little more realistic about women. They're human, too, you know, and want dates just as much as you do.
- b. It just doesn't seem real when something good happens.
- c. You have probably denied to yourself so strongly that anything good could happen to you that when it does it seems unreal.
- d. I am wondering whether or not these feelings of unreality are associated with any particular area of your life. Would you like to tell me more about what you mean when you said, "Whenever anything good happens to me?"
- e. Well, I'm not too sure that you should be so worried about it. It doesn't mean anything in itself, really. I think we'll be able to get to the bottom of it all right.

4. Man, age 59.

"I couldn't let my son help me now that I'm down and out. I've got that shred of pride left. Because you see I remember when he was a kid I didn't turn my hand to help him. I traipsed around the country. His mother died when the kid was born-- And I let the relatives push him around and stuck him in foster homes, and now-- It certainly was like a knife stuck in me when we met the other day and he said, 'We can make a go of it together, Dad, I've got a little money saved up.' No. No, I won't let him do it. I will clear out of here. It'll be hard, but-- I haven't done one thing for him-- Or anyone else, for that matter."

- a. Have you investigated the possibility of an old age pension? Possibly something could be worked out there that wouldn't make it necessary for you to impose on your son or accept help from him.
- b. What was your married life like? Had you and your wife planned for a child?
- c. Your behavior in the past makes you unworthy of the help your son wants to give you now; is that what you mean?
- d. Have you thought about what it will mean to your son if you don't let him do this thing which he wants to do for you?
- e. I see what you mean. You feel that you don't deserve the help he wants to give because in the past you did nothing to earn it. And your statement that you never have done anything for anyone else makes it look as if it might be a real problem to you to accept responsibility for helping others, and to accept help from others.

5. Man, age 35.

"I'm determined to get ahead. I am not afraid of hard work. I am not afraid to take a few hard knocks, if I can see my goal out there in front. And I don't mind climbing over a few people who get in my way, because this means a lot to me. I can't be satisfied with just a mediocre job. No, I want to be somebody."

- a. You see yourself as a deeply ambitious person; is that it?
- b. This driving ambition may stem from a need to attack other people.
- c. What do you suppose is behind this strong determination of yours to get ahead?
- d. It is possible with your drive that you could be successful in a number of fields.
- e. Strong ambition can be a real asset to any man. You say you don't mind climbing over those who get in your way? Couldn't that turn out to do you more harm than good?

6. Man, age 21.

"Shall I marry her? Or shall I think of my future? If a fellow is going to think of his future--if he's got ambition and drive to get ahead--he's got to be hard--and forget all about sentiment. But I do love Marie. I really do. And she's been my inspiration. If we broke off, I don't know what I'd do. I don't know whether I should be able to do a thing, I don't know. On the other hand, I can't afford advanced study and marriage too. And Marie says if we can't get married now she isn't willing to wait--I don't know what to do. I love her, but if she loved me, would she say, 'Now or never.'? That's the thing I can't answer."

- a. That is, you can't decide whether to marry and risk your future or whether to plan for your future and risk losing out on the marriage. They seem so dependent on each other.
- b. It is not really so much of a problem of indecision between marriage and vocational plans as it is the deeper problem of whether you should be dependent upon your own self approval or dependent upon her approval of what you do.
- c. I am wondering if you can't have both the career and marriage. Have you two discussed ways and means of increasing your income by extra work or by her working? Most universities or schools would cooperate with you. And besides, there just isn't time for expensive entertainment among married students working their own way. There would not be the demand for social activities that you might expect to find out in a community.
- d. I think you have got to take into account how Marie will feel if you go ahead and decide to follow your studies and not get married now. What will it do to her? The decision you make ought to take into account what is best for both of you.
- e. I think you may have hit on something significant there: how much she loves you. Could you tell me a little more about that? How she acts toward you and your ideas?

7. Girl, age 29.

"I'm afraid to be alone. I really am. I'm afraid I'll kill myself and I don't want to, but I get so depressed. I get caught in a terrific clutch of fear. It's unreal, but it's there. And I get so worked up I could scream. I want to get outside and I'm afraid to go out in case I run in front of a car-- and I'm afraid to stay in. I'm afraid of myself. I'm afraid to go to the doctor and get an examination. I'm afraid he'll tell me it's cancer. My mother had it. My grandmother, my aunt. I've lived with it all my life, and it's hell. And when this first came up-- See, I break out in a sweat just talking about it. Is there any help?"

- ___ a. Aside from your fear, have you experienced any symptoms which lead you to think you really might have cancer?
- ___ b. This terrific fear just never lets you alone.
- ___ c. If you have any reason at all to think that you might have cancer, you really should try to control your fear enough to have a medical examination.
- ___ d. Would you like to try this: Whenever you experience one of these fears call me on the telephone, either here at the office or at home, and talk it over with me? Talking it over oftentimes helps a person to get a grip on himself.
- ___ e. My guess is that if we trace these fears a bit we'll find that they are not as real as you feel them to be. I think you are punishing yourself for something about which you feel pretty guilty.

8. Woman, age 30.

"I've lived in this town for ten years now, and in the same apartment for seven years, but I don't know anybody. At the office I just can't seem to make friends. I just freeze up. I try to be nice to the other workers, but I feel all stiff and uncomfortable inside. And then I tell myself that I don't care. People aren't dependable. Everyone is out for himself. I don't want any friends. And sometimes I think I really mean that."

- ___ a. Well, I'll tell you what you can do. You can join a small social group at the "Y." Quite a few people go there who have difficulty in making friends. Most want to start out by taking ceramics, leather tooling or some other handicraft. This gives them something to do as a basis and permits them to make friends slowly and at their own pace. How does that sound to you?
- ___ b. Possibly if you could tell me a little more about how you go about trying to make friends we could get a clearer idea of what is involved.
- ___ c. It's gone on so long it almost has you convinced--is that what you mean?
- ___ d. Maybe your not wanting friends is just to protect you from something else.
- ___ e. There are a number of things that you might do to learn how to make friends, and the sooner you start the better.

9. Man, age 42.

"But can't you tell me what to do? Can't you make a few suggestions? I'm willing to do anything but I just don't know which way to turn. I'll work hard to help myself, if you'll just tell me whether you think it will help me or not. And whether you think I can get over this personality problem. If you'll just tell me what to do, I'll be so grateful to you."

- a. Maybe one of the important parts of your situation is that you don't have real confidence in yourself. Do you see?
- b. Really, it's not so important what you do so long as what you do is a product of your own self-dependence. You've got to learn to do the things which are good and right because you feel they are, not me.
- c. I gather you just don't feel capable of working this out yourself?
- d. Before it would be possible to answer any of your questions satisfactorily I'd have to have quite a bit of information about you, about your family, your childhood, your work, your relationship with your wife and so forth.
- e. Well, you've really asked for a lot there, all right. I think I can best answer you in this way: We'll work together talking over these things that bother you. You'll think of some things and I'll think of some things that maybe you've missed. And maybe between the two of us, we'll get to the bottom of all this and figure out a path for you to follow that will solve most if not all the problem. I wouldn't worry too much about it. I think we can be fairly sure of making headway.

10. Man, age 35.

"I expect that if I took this job, with the understanding that I'd be given the opportunity to prove my value to the firm-- And had a chance for promotions-- Yes, I believe that's the soundest way to go about it. It's not as spectacular as I would like to have it. No, I don't really want a spectacular job anymore--just a good solid job with a future. Yes. I'll take this job and discuss my plans with the boss quite frankly and honestly. Then my wife and I can get some feeling of permanence and we can buy a home and really think about the future here in this city. The kids need an anchor, too. They haven't had that--but from now on we are all going to have our feet down on solid earth."

- a. That's fine. The long way around can be the short way home. I think you've really got your feet on the ground now for sure. The kind of thinking you're doing is certainly the most constructive.
- b. That sounds good to me. I hope you can sell the boss on it.
- c. I'm wondering if you've investigated the promotional policy of the company to see if the path you want to follow is the one most likely to lead to promotion?
- d. Of course! As you get older you react more to the pressure for security.
- e. It may not be spectacular but I gather the soundness of it is what really appeals to you.

11. Man, veteran, age 30.

"What's the use of anything? No one plays fair and square with a guy. The fellows who stayed at home got all the plums. They all took advantage of us while we sweat it out at the front. I hate their guts--every one of them. They are all double-crossers. And my wife--"

- a. You started to say something about your wife?
- b. You feel they took advantage of you and it really makes you boil.
- c. You get angry when you see people trying to take advantage of you.
- d. I understand how you feel about that, but it's going to block you from getting ahead if you don't try to get away from it.
- e. You've got lots of company with your anger. It's justifiable in so many cases.

12. Man, age 33.

"I tell you I am in one hell of a fix! I'm in love with the swellest girl on the face of the earth, and she loves me. I'm sure of that. But I'm not worthy of her. I can't ask her to marry. I've got a criminal record. She doesn't know about that. But I know it'll come out some day. No. I couldn't marry and have children. I've got a record that proves to the world that I'm a first class s. o. b."

- a. Well, it would certainly be unfair to her to marry and to discover about your past later. Don't you almost have to tell her about it now?
- b. You feel afraid to face her with your record because she might turn you down and you just couldn't stand that.
- c. Could you tell me a little as to why you're so sure that she wouldn't be able to accept you if she knew about your past?
- d. Possibly if you were to have her come in to see me I could talk with her and lead her to see that your past is your past and does not necessarily mean that you couldn't have a happy future together.
- e. You see yourself as unworthy of her beyond all shadow of a doubt.

13. Man, age 27.

"I've come to the conclusion that if I'm not happy in the work I'm doing, then I'll get another job. And that's what it adds up to. I've hung on because I spent four years in college getting ready to do it. Now I think I'd be a lot happier if I chucked the whole thing and entered this other field-- even if it does mean starting at the bottom and working my way up--"

- a. You feel that you'd be a lot happier if you could just escape your work and start out in a field where you are more adequate; is that it?
- b. Whether this is the field in which you'll end up no one can say, but it seems to me quite sound that you are counting more on yourself.
- c. Have you thought of the possibility of working out a combination line? It seems a shame to just toss out all you've lined up so far.
- d. You've decided that you'd do better to change.
- e. How much study have you given this new field?

14. Girl, age 23 (physical handicap).

"I can't do any of the things my sister does. I can't dance or go riding or date the boys. I'm a-- I look at Charlene, and I wish I was her. You can't know the feeling I get deep inside me. I want to be able to have pretty clothes like hers and to go out and have a good time. It makes me sick inside me. But she can't help it. She was born that way. And I can't help it because I was born this way-- And I get this feeling. I love my sister. Really I do-- But I just cried and cried--until I was sick. I want the things other girls have. I can't help it. I'm only human. I know it's a sin to feel as I do. But she has everything and I have nothing."

- a. I'm wondering, since you aren't going to be able to engage in physical activities as your sister does, I'm wondering if there aren't some other sources of activities which might be satisfying.
- b. I can appreciate why you'd envy her so, but since you can't compete with her it's not much use in using up your energies with envy. You've got to buckle down and build a world that satisfies you.
- c. In other words, you feel envious of your sister because you can't compete with her and you feel guilty about your envy because you love your sister too.
- d. I'd like to get a better idea of just how you react to her directly and how she reacts to you in some of these situations.
- e. You say in one breath that you envy your sister. You say next that you love her. Now couldn't your feelings of guilt be due to these conflicting feelings?

15. Man, age 27.

"I got out of the Navy last month and I thought, 'Now what?' I looked for a job, and right there I ran into a snag. I couldn't make up my mind what to do. I thought I ought to go back to school and finish up and I thought I'd be happier if I signed up for more Navy, and then I looked for a job and nothing stood out as a clear choice. Everything looked good and everything looked bad, and I felt-- Well, what the hell? Am I going nuts? Am I always going to be so messed up inside of me that I won't be able to move in any direction?"

- ___ a. You're wondering just what's at the bottom of it all.
- ___ b. Let's go ahead and discuss some of the things--why don't you want them and why do you want them--maybe we can find a clue that will point out the answer.
- ___ c. I think your criticism of yourself is a little harsh. Thousands of G. I.'s have felt the way you do.
- ___ d. No, I don't think you need to remain messed up or really that you're messed up now. You're confused, yes, but if you set your mind to it, you'll overcome your confusion and move ahead in a more natural manner.
- ___ e. You're confused, and alarmed with your confusion. This is to be expected when you suddenly find yourself facing the necessity for making decisions after a long period of having even minor decisions made for you.

16. Man, age 35.

"I know I could make a success of that business. All a person needs is a little overall vision, some common sense, and the courage to try it. I've got that. So-- If I could just get ahold of the cash-- I'd sure take the plunge."

- ___ a. If you'd think it wise I could give you the name of an investment counselor who'd be glad to go over the proposition with you and possibly give you some good leads on how to seek financial support.
- ___ b. That's fine! One must feel sure of himself if he expects to make a go of something. To go into something hesitantly can really make it get all mixed up. You're on the right track and I wish you success.
- ___ c. If you could get the cash to start, you feel sure you could make a go of it.
- ___ d. You feel sure you could be successful because you now see what is involved in making the thing go. When you see things clearly assurance follows.
- ___ e. Have you figured out what the risks are as yet?

17. Girl, age 18.

"Oh, I couldn't work through my problem without help. You ask me questions and tell me-- Because I wouldn't be able to-- Honestly-- I haven't got any idea how to go about it. I don't want to-- It's like down at the office, I can't go ahead on my own. I just can't. I want to be told. Then it's not my fault if things go wrong-- And they could go wrong-- Because I don't know how things should be done, I feel so helpless."

- ___ a. You say it's not your fault if things go wrong even after you've been told what to do. Can you tell me what you mean there?
- ___ b. You feel that you just aren't capable of doing things unaided.
- ___ c. We'll need to work on building up your self-confidence.
- ___ d. Well, I could suggest some of the things you might talk about here in our interview and some of the things you might think about between interviews. I might also suggest some things for you to do about your office work that ought to make it a little easier for you.
- ___ e. You feel dependent upon someone else for nearly everything you do, don't you? And it probably makes you panicky when people throw you on your own, too. But when people tell you what to do you don't have to assume the real responsibility and hence it's not your fault if things go wrong. They just didn't tell you enough.

18. Man, age 46.

"Well, this new man came into the company. He's a big shot. Has all the answers. Thinks he's going places. But, by God, he doesn't know George P. Quipenque! I'll get ahead of him if I have a stroke trying!"

- ___ a. You feel that you must be out in front. That it is really important to you to be the better man.
- ___ b. It's a fine thing to try to get ahead but do you think that by starting out with such an attitude toward him you're going at it right?
- ___ c. And that will probably take a lot of careful planning and thinking. You'll want to go carefully.
- ___ d. You feel like this man is trying to get ahead of you.
- ___ e. Why is it so important to you to want to get ahead of this man?

19. Woman, age 30.

"It's not that I don't want to do something about it, I just-- Well-- I know what I ought to do, but for some reason or other I just--can't do a thing."

- a. Maybe if we talked over what you've thought of doing we could figure out what is best to do. It's possible that the answer is something new.
- b. Let's try to get at what's behind this blocking. Tell me more about it.
- c. Behind this blocked feeling you're experiencing is a conflict in your desires: you want to and you don't want to.
- d. You're blocked by something and you don't know what it is, is that what you're saying?
- e. Are you sure you know what you ought to do? It seems to me that if you really had a clear idea of what you ought to do you'd be able to go ahead.

20. Man, age 60.

"I've got it all figured out. There's nothing for me to live for any more. My wife's dead. My kids don't need me. I'm too old to get a job. Just the fifth wheel on a wagon. And I'm tired of it all. I'm going to end it all, put a bullet through my brain. And rest in peace."

- a. You feel there's nothing left in life for you.
- b. When things add up for a person like they've added up for you it really does make it tough to face. And sometimes there doesn't seem to be a way out. Yet-- I think that we may be able to find a way out.
- c. How long have you felt this way, may I ask?
- d. Escaping is one way, all right. But have you thought of what it would mean to your children to have you commit suicide?
- e. It seems to me that you are looking for a way to escape an otherwise intolerable situation.

21. Woman, age 43.

"I've decided that this is not going to help me. All it does is make me realize what I have to do, and I'm sick of taking responsibility. I don't think I'll come back any more."

- a. Of course it has to be your decision. I can't force you to come. But you certainly aren't going to settle anything by backing away from it.
- b. This has been too painful to you and now you want to escape the situation which produces the pain.
- c. It just doesn't seem to fill the bill for you.
- d. I'd like to know what your thinking has been in coming to this decision.
- e. Sometimes taking responsibility can be a pretty demanding thing. Possibly if you decided to continue coming we could reach a point where you enjoyed responsibility.

22. Man, age 41.

"I've been married four times and each time I've thought, 'Boy, this is the real thing!' But none of them has ever been like this girl. She's the most beautiful girl you ever saw, and dance! And she dresses like a million dollars. She's out of this world!"

- a. You're really enthusiastic about her.
- b. How does she compare with your other wives? How did you feel about them before you married?
- c. If she's anything like you seem to feel she is, she must be quite a catch. Maybe this time you'll stick.
- d. You may be making the same mistake again.
- e. You're looking for some sort of ideal woman, and the only way you can identify her is through her physical appearance.

23. Man, age 29.

"I keep remembering how I walked out on Mary and the two kids. Five years ago-- The law never caught up with me. I thought I was pretty smart. But now-- God, was I a heel! I don't see how I could do it. And I'm so ashamed I can't look people in the eye. Now I can't find her--not a trace. Her relatives won't tell me where she is. I tell you, I'll never have any self respect. Never! And I-- I don't know what to do--or how I can even try to rectify my big mistake. I don't know--!"

- ___ a. There are a number of things you might do to try to find her. You could list her as a missing person and get police help. You could get a private detective agency to handle it for you. You might even be able to get a court order that would force the relatives to give her address.
- ___ b. When did you decide that you wanted her back? Tell me about the circumstances.
- ___ c. The hopelessness there seems pretty clearly connected with the feeling of guilt.
- ___ d. Are you at all sure that you should try to go back to her? If you left her once maybe you'd do it again. Possibly you just didn't get along at all well and you were forced to leave her.
- ___ e. As you see it then, your behavior is just plain unforgivable.

24. Man, age 39.

"There is no other way to handle this than to destroy them completely. Remember this man was supposed to be my best friend, and he took my wife away from me. And after the divorce he married her. And then he pushed me out of the business. But I've got the evidence to ruin him. I could clean him out, and put him behind bars for the rest of his life. (Laughs bitterly.) Wouldn't that be something? My ex-wife married to something kept behind bars and not a dime left to live on?"

- ___ a. Your desire to destroy them seems to me to be largely a desire for revenge. It may have grown out of the rejection and denial you experienced from both of them.
- ___ b. Wanting to get even is understandable but don't you think that is going pretty far? I certainly wouldn't do anything I'd regret later.
- ___ c. You want them to suffer at your hand just as they made you suffer at theirs.
- ___ d. After all that I can see where it would be really satisfying to see them suffer.
- ___ e. Has anyone else ever crossed you like that: in business, among your friends, when you were a kid in school?

25. Girl, age 28.

"I just looked at her. She isn't so attractive as I am. She isn't smart. And she has no style. And I asked myself, 'How does she fool so many people?' Why can't they see through that sticky-sweetness? She can always do a job in a hurry. Everyone is always admiring the way she does things, and I can't stand it. It just makes me sick. She has everything I want. She got my job. She got Bill--took him right away from me. And then denied it. When I put it to her, I just told her what I thought and she said, 'I'm sorry.' But, well, I'll show her!"

- a. Is she pretty much like the other girls with whom you've been thrown in contact?
- b. You feel that she always gets what you really should have.
- c. It sounds to me as if you're taking a pretty strong attitude against her. We all have prejudices against people but they seldom, if ever, do us any good.
- d. You've got a case of plain, old-fashioned jealousy brought on by being thrown into contact with someone possibly a little more capable and slicker than yourself.
- e. It sounds like you've had some rough treatment from her. She might see it differently, though.

APPENDIX L

STRONG VOCATIONAL INTEREST BLANK--FORM M

PLEASE NOTE:

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UNIVERSITY MICROFILMS

STRONG
VOCATIONAL INTEREST BLANK
FOR MEN
(Revised)

BY
EDWARD K. STRONG, JR.
STANFORD UNIVERSITY

IT IS POSSIBLE with a fair degree of accuracy to determine by this test whether or not you would like certain occupations. The test is not one of intelligence or school work. It measures the extent to which **your** interests agree or disagree with those of successful men in a given occupation.

In addition to this question booklet, you should have a **special answer sheet or cards** on which to record your responses. **MAKE NO MARKS AT ALL ON THIS BOOKLET.** Please read the following directions carefully:

1. Do **not** use a ball point or any other kind of pen. If you have been given a special pencil, use it. If not, mark with any soft, black lead pencil.
2. If you make a mistake, erase carefully. If you accidentally make stray marks on the answer sheets, erase them also. Do not fold or crease your answer sheet in any way.
3. You must make one mark for each of the 400 questions. If you omit items, or make more than one mark, the machine cannot score your test. If you are not familiar with a particular item, guess how you might feel about it and mark accordingly.
4. Listen carefully to any instructions given orally. In some parts of the test, the directions change; read the instructions at the beginning of each part.
5. Be sure to fill in your name and other information requested on your answer sheet or card. In some cases, it is necessary to code your name by marking spots representing each letter.



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Part I. Occupations. Indicate for each occupation listed below whether you would like that kind of work or not. Don't worry about whether you would be good at the job or about your possible lack of training in it. Forget about how much money you can make in it, or whether you can get ahead in it. Think only about whether you would like the work that has to be done in the job.

Mark on the answer sheet in the column labeled "L" if you like that kind of work

Mark in the column labeled "I" if you are indifferent (that is, don't care one way or another)

Mark in the column labeled "D" if you don't like that kind of work

Work fast. Put down the first thing that comes to mind. Answer every one.

- | | | |
|--------------------------------|----------------------------|--|
| 1 Actor (not movie) | 36 Factory Worker | 71 Poet |
| 2 Advertiser | 37 Farmer | 72 Politician |
| 3 Architect | 38 Floorwalker | 73 Printer |
| 4 Army Officer | 39 Florist | 74 Private Secretary |
| 5 Artist | 40 Foreign Correspondent | 75 Railway Conductor |
| 6 Astronomer | 41 Governor of a State | 76 Rancher |
| 7 Athletic Director | 42 Hotel Keeper or Manager | 77 Real Estate Salesman |
| 8 Auctioneer | 43 Interior Decorator | 78 Reporter, general |
| 9 Author of novel | 44 Interpreter | 79 Reporter, sporting page |
| 10 Author of technical book | 45 Inventor | 80 Retailer |
| 11 Auto Salesman | 46 Jeweler | 81 Sales Manager |
| 12 Auto Racer | 47 Judge | 82 School Teacher |
| 13 Auto Repairman | 48 Labor Arbitrator | 83 Scientific Research Worker |
| 14 Aviator | 49 Laboratory Technician | 84 Sculptor |
| 15 Bank Teller | 50 Landscape Gardener | 85 Secretary, Chamber of Commerce |
| 16 Bookkeeper | 51 Lawyer, Criminal | 86 Secret Service Man |
| 17 Building Contractor | 52 Lawyer, Corporation | 87 Ship Officer |
| 18 Buyer of merchandise | 53 Librarian | 88 Shop Foreman |
| 19 Carpenter | 54 Life Insurance Salesman | 89 Social Worker |
| 20 Cartoonist | 55 Locomotive Engineer | 90 Specialty Salesman |
| 21 Cashier in bank | 56 Machinist | 91 Statistician |
| 22 Certified Public Accountant | 57 Magazine Writer | 92 Stock Broker |
| 23 Chemist | 58 Manufacturer | 93 Surgeon |
| 24 Civil Engineer | 59 Marine Engineer | 94 Toolmaker |
| 25 Civil Service Employee | 60 Mechanical Engineer | 95 Traveling Salesman |
| 26 Clergyman | 61 Mining Superintendent | 96 Typist |
| 27 College Professor | 62 Musician | 97 Undertaker |
| 28 Consul | 63 Music Teacher | 98 Watchmaker |
| 29 Dentist | 64 Office Clerk | 99 Wholesaler |
| 30 Draftsman | 65 Office Manager | 100 Worker in Y.M.C.A., K. of C., etc. |
| 31 Editor | 66 Orchestra Conductor | |
| 32 Electrical Engineer | 67 Pharmacist | |
| 33 Employment Manager | 68 Photo Engraver | |
| 34 Explorer | 69 Physician | |
| 35 Factory Manager | 70 Playground Director | |

Part II. School Subjects. Show as you did in Part I your interest in these school subjects, even though you may not have studied them.

- | | | |
|-------------------------|------------------------|---------------------|
| 101 Algebra | 116 History | 131 Public Speaking |
| 102 Agriculture | 117 Languages, ancient | 132 Shop work |
| 103 Arithmetic | 118 Languages, modern | 133 Sociology |
| 104 Art | 119 Literature | 134 Spelling |
| 105 Bookkeeping | 120 Mathematics | 135 Typewriting |
| 106 Botany | 121 Manual Training | 136 Zoölogy |
| 107 Calculus | 122 Mechanical Drawing | |
| 108 Chemistry | 123 Military Drill | |
| 109 Civics | 124 Music | |
| 110 Dramatics | 125 Nature Study | |
| 111 Economics | 126 Philosophy | |
| 112 English Composition | 127 Physical Training | |
| 113 Geography | 128 Physics | |
| 114 Geology | 129 Psychology | |
| 115 Geometry | 130 Physiology | |

Part III. Amusements. Show in the same way as you did before in Parts I and II whether or not you like these ways of having fun. Work rapidly. Do not think over various possibilities. Record your first feeling of liking, indifference or disliking.

- | | | |
|---------------------------------------|-------------------------------|------------------------------------|
| 137 Golf | 156 Smokers | 171 Sporting pages |
| 138 Fishing | 157 "Rough house" initiations | 172 Poetry |
| 139 Hunting | 158 Conventions | 173 Detective stories |
| 140 Tennis | 159 Full-dress affairs | 174 "Time" |
| 141 Driving an automobile | 160 Auctions | 175 "Judge" |
| 142 Taking long walks | 161 Fortune tellers | 176 "New Republic" |
| 143 Boxing | 162 Animal zoos | 177 "System" |
| 144 Chess | 163 Art galleries | 178 "National Geographic Magazine" |
| 145 Poker | 164 Museums | 179 "American Magazine" |
| 146 Bridge | 165 Vaudeville | 180 "Popular Mechanics" |
| 147 Observing birds (nature study) | 166 Musical comedy | 181 "Atlantic Monthly" |
| 148 Solving mechanical puzzles | 167 Symphony concerts | 182 Educational movies |
| 149 Performing sleight-of-hand tricks | 168 Pet canaries | 183 Travel movies |
| 150 Collecting postage stamps | 169 Pet monkeys | 184 Social problem movies |
| 151 Drilling in a company | 170 Snakes | 185 Making a radio set |
| 152 Chopping wood | | |
| 153 Amusement parks | | |
| 154 Picnics | | |
| 155 Excursions | | |

Part IV. Activities. Show in the same way as you did before how you feel about these activities.

- | | | |
|--|---|---|
| 186 Repairing a clock | 206 Meeting and directing people | 221 Expressing judgments publicly regardless of criticism |
| 187 Adjusting a carburetor | 207 Taking responsibility | 222 Being pitted against another as in a political or athletic race |
| 188 Repairing electrical wiring | 208 Meeting new situations | 223 Methodical work |
| 189 Cabinetmaking | 209 Adjusting difficulties of others | 224 Regular hours for work |
| 190 Operating machinery | 210 Drilling soldiers | 225 Continually changing activities |
| 191 Handling horses | 211 Pursuing bandits in sheriff's posse | 226 Developing business systems |
| 192 Giving "first aid" assistance | 212 Doing research work | 227 Saving money |
| 193 Raising flowers and vegetables | 213 Acting as yell-leader | 228 Contributing to charities |
| 194 Decorating a room with flowers | 214 Writing personal letters | 229 Raising money for a charity |
| 195 Arguments | 215 Writing reports | 230 Living in the city |
| 196 Interviewing men for a job | 216 Entertaining others | 231 Climbing along edge of precipice |
| 197 Interviewing prospects in selling | 217 Bargaining ("swapping") | 232 Looking at a collection of rare laces |
| 198 Interviewing clients | 218 Looking at shop windows | 233 Looking at a collection of antique furniture |
| 199 Making a speech | 219 Buying merchandise for a store | |
| 200 Organizing a play | 220 Displaying merchandise in a store | |
| 201 Opening conversation with a stranger | | |
| 202 Teaching children | | |
| 203 Teaching adults | | |
| 204 Calling friends by nicknames | | |
| 205 Being called by a nickname | | |

Part V. Peculiarities of People. Show your feeling about these different kinds of people. Do not think of various possibilities or of exceptional cases. "Let yourself go" and record the feeling that comes to mind as you read each item.

- | | | |
|---|-------------------------------------|---|
| 234 Progressive people | 251 Irreligious people | 266 Self-conscious people |
| 235 Conservative people | 252 People who have done you favors | 267 People who always agree with you |
| 236 Energetic people | 253 People who get rattled easily | 268 People who talk very loudly |
| 237 Absent-minded people | 254 Gruff men | 269 People who talk very slowly |
| 238 People who borrow things | 255 Foreigners | 270 People who talk about themselves |
| 239 Quick-tempered people | 256 Sick people | 271 Fashionably dressed people |
| 240 Optimists | 257 Nervous people | 272 Carelessly dressed people |
| 241 Pessimists | 258 Very old people | 273 People who don't believe in evolution |
| 242 People who are natural leaders | 259 Cripples | 274 Socialists |
| 243 People who assume leadership | 260 Side-show freaks | 275 Bolsheviks |
| 244 People easily led | 261 People with gold teeth | 276 Independents in politics |
| 245 People who have made fortunes in business | 262 People with protruding jaws | 277 Men who chew tobacco |
| 246 Emotional people | 263 People with hooked noses | 278 Men who use perfume |
| 247 Thrifty people | 264 Blind people | 279 People who chew gum |
| 248 Spendthrifts | 265 Deaf mutes | 280 Athletic men |
| 249 Talkative people | | |
| 250 Religious people | | |

THE INSTRUCTIONS FOR THIS PART ARE DIFFERENT

Part VI. Order of Preference of Activities. Here are ten things you could do. **First read all ten.** Then pick out **three** of them, the 3 things you think you would like **best** to do. Mark opposite these 3 numbers in column (or row) 1. Then select the three things you would like **least** to do, and show which they are by marking in column (or row) 3. Then **mark the remaining 4 items in the middle column (or row)**, where no marks have been made so far.

- 281 Develop the theory of operation of a new machine, e.g., auto
- 282 Operate [manipulate] the new machine
- 283 Discover an improvement in the design of the machine
- 284 Determine the cost of operation of the machine
- 285 Supervise the manufacture of the machine

- 286 Create a new artistic effect, i.e., improve the beauty of the auto
- 287 Sell the machine
- 288 Prepare the advertising for the machine
- 289 Teach others the use of the machine
- 290 Interest the public in the machine through public addresses

Show in the same way as above what you think are the three things that mean the most to you in a job; then the three least important things. Mark the 4 items left over in the middle column. Be sure you have marked the **three most important in column 1, the three least important in column 3, the remaining four in column 2.**

- 291 Salary received for work
- 292 Steadiness and performance of work
- 293 Opportunity for promotion
- 294 Courteous treatment from superiors
- 295 Opportunity to make use of all one's knowledge and experience

- 296 Opportunity to ask questions and to consult about difficulties
- 297 Opportunity to understand just how one's superior expects work to be done
- 298 Certainty one's work will be judged by fair standards
- 299 Freedom in working out one's own methods of doing the work
- 300 Co-workers—congenial, competent, and adequate in number

Show in the same way the three men you would most like to have been; then the three you would least like to have been. Mark the remaining four in the middle column. If you don't recognize the names, respond to the occupation.

- | | |
|------------------------------------|------------------------------|
| 301 Luther Burbank, "plant wizard" | 306 J. P. Morgan, financier |
| 302 Enrico Caruso, singer | 307 J. J. Pershing soldier |
| 303 Thomas A. Edison, inventor | 308 William H. Taft, jurist |
| 304 Henry Ford, manufacturer | 309 Booth Tarkington, author |
| 305 Charles Dana Gibson, artist | 310 John Wanamaker, merchant |

Show in the same way the three offices you would like most to hold in a club or society; also mark the three you would least like to hold. Mark the 4 offices left over in column 2.

- | | |
|-------------------------------------|---------------------------------------|
| 311 President of a Society or Club | 316 Chairman, Educational Committee |
| 312 Secretary of a Society or Club | 317 Chairman, Entertainment Committee |
| 313 Treasurer of a Society or Club | 318 Chairman, Membership Committee |
| 314 Member of a Society or Club | 319 Chairman, Program Committee |
| 315 Chairman, Arrangement Committee | 320 Chairman, Publicity Committee |

Please check and see that in each of the four parts you have 3 check marks in both columns 1 and 3, and 4 marks in column 2.

Part VII. Comparison between Two Items. Show here which of two different kinds of work, ways of doing things., etc., you like better. If you prefer the items on the left mark in the first column; if you prefer the items on the right mark in the third column. If you like both the same or if you can't decide which one you like better, mark in the second column. Work rapidly. Make one mark for each pair.

Street-car motorman	321	Street-car conductor
Policeman	322	Fireman (fights fire)
Chauffeur	323	Chef
Head waiter	324	Lighthouse tender
House-to-house canvassing	325	Retail selling
House-to-house canvassing	326	Gardening
Repair auto	327	Drive auto
Develop plans	328	Execute plans
Do a job yourself	329	Delegate job to another
Persuade others	330	Order others
Deal with things	331	Deal with people
Plan for immediate future	332	Plan for 5 years ahead
Activity which produces tangible returns	333	Activity which is enjoyed for its own sake
Taking a chance	334	Playing safe
Definite salary	335	Commission on what is done
Work for yourself	336	Carry out program of superior who is respected
Work which interests you with modest income	337	Work which does not interest you with large income
Work in a large corporation with little chance of becoming president until age of 55	338	Work for self in small business
Selling article, quoted 10% below competitor	339	Selling article, quoted 10% above competitor
Small pay, large opportunities to learn during next 5 years	340	Good pay, little opportunity to learn during next 5 years
Work involving few details	341	Work involving many details
Outside work	342	Inside work
Change from place to place	343	Working in one location
Great variety of work	344	Similarity in work
Physical activity	345	Mental activity
Emphasis upon quality of work	346	Emphasis upon quantity of work
Technical responsibility (head of a department of 25 people engaged in technical, research work)	347	Supervisory responsibility (head of a department of 300 people engaged in typical business operation)
Present a report in writing	348	Present a report verbally
Listening to a story	349	Telling a story
Playing baseball	350	Watching baseball
Amusement where there is a crowd	351	Amusement alone or with one or two others
Nights spent at home	352	Nights away from home
Reading a book	353	Going to movies
Belonging to many societies	354	Belonging to few societies
Few intimate friends	355	Many acquaintances
Many women friends	356	Few women friends
Fat men	357	Thin men
Tall men	358	Short men
Jealous people	359	Conceited people
Jealous people	360	Spendthrifts

Part VIII. Rating Your Abilities and Personality. Show here what kind of person you are right now and the kinds of things you do. If the item really describes you, mark in the first column ("Yes"); if the item does **not** describe you mark in the third column ("No"); and if you are not sure mark in the second column ("?"). (Be frank in pointing out your weak points, because these are as important as your strong points in choosing a career.)

- | | |
|---|---|
| 361 Usually start activities of my group | 376 Able to meet emergencies quickly and effectively |
| 362 Usually drive myself steadily (do not work by fits and starts) | 377 Get "rattled" easily |
| 363 Win friends easily | 378 Can write a concise, well-organized report |
| 364 Usually get other people to do what I want done | 379 Have good judgment in appraising values |
| 365 Usually liven up the group on a dull day | 380 Plan my work in detail |
| 366 Am quite sure of myself | 381 Follow up subordinates effectively |
| 367 Accept just criticism without getting sore | 382 Put drive into the organization |
| 368 Have mechanical ingenuity (inventiveness) | 383 Stimulate the ambition of my associates |
| 369 Have more than my share of novel ideas | 384 Show firmness without being easy |
| 370 Can carry out plans assigned by other people | 385 Win confidence and loyalty |
| 371 Can discriminate between more or less important matters | 386 Smooth out tangles and disagreements between people |
| 372 Am inclined to keep silent (reticent) in confidential and semi-confidential affairs | 387 Am approachable |
| 373 Am always on time with my work | 388 Discuss my ideals with others |
| 374 Remember faces, names, and incidents better than the average person | |
| 375 Can correct others without giving offense | |

Mark in the first, second, or third column for whichever one of the three statements **best** describes you. Choose one of the three for each numbered item.

- | | | |
|--|--|---|
| 389 (1) Feelings easily hurt | (2) Feelings hurt sometimes | (3) Feelings rarely hurt |
| 390 (1) Usually ignore the feelings of others | (2) Consider them sometimes | (3) Carefully consider them |
| 391 (1) Loan money to acquaintances | (2) Loan only to certain people | (3) Rarely loan money |
| 392 (1) Rebel inwardly at orders from another, obey when necessary | (2) Carry out instructions with little or no feeling | (3) Enter into situation and enthusiastically carry out program |
| 393 (1) When caught in a mistake usually make excuses | (2) Seldom make excuses | (3) Practically never make excuses |
| 394 (1) Best-liked friends are superior to me in ability | (2) Equal in ability | (3) Inferior in ability |
| 395 (1) Handle complaints without getting irritated | (2) Become annoyed at times | (3) Lose my temper at times |
| 396 (1) Borrow frequently (for personal use) | (2) Borrow occasionally | (3) Practically never borrow |
| 397 (1) Tell jokes well | (2) Seldom tell jokes | (3) Practically never tell jokes |
| 398 (1) My advice sought by many | (2) Sought by few | (3) Practically never asked |
| 399 (1) Frequently make wagers | (2) Occasionally make wagers | (3) Never make wagers |
| 400 (1) Worry considerably about mistakes | (2) Worry very little | (3) Do not worry |

Check your answer sheet or cards carefully to make sure you have not omitted any items or made more than one mark opposite any question number. Erase any stray marks. Be sure your name is on your answer sheet.

APPENDIX M

HELPING RELATIONSHIP INVENTORY: COEFFICIENTS FOR
EACH OF THREE COUNSELOR GROUPS ON FIVE SCALES
COMPUTED AS A PART OF THE MULTIPLE
DISCRIMINANT ANALYSIS PROGRAM

Helping Relationship Inventory: Coefficients for
Each of Three Counselor Groups on Five Scales
Computed as a Part of the Multiple
Discriminant Analysis Program

Scale	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Understanding	85.88213	85.76224	85.89833
Probing	89.88156	89.75032	89.90277
Interpretive	92.18480	92.06375	92.21156
Supportive	93.84509	93.73308	93.83400
Evaluative	90.28966	90.14961	90.30409

Constant	-16937.22656	-16890.65234	-16941.94141

APPENDIX N

HELPING RELATIONSHIP INVENTORY: ANALYSIS OF VARIANCE

Helping Relationship Inventory: Analysis of Variance

Source of Variation	SS	<u>df</u>	MS	<u>F</u>
<u>Understanding</u>				
Between groups	648.3125	2	324.15625	0.6459
Within groups	101874.5625	203	501.84510	
Total	102522.8750	205		
<u>Probing</u>				
Between groups	184.0000	2	92.00000	0.4353
Within groups	42901.7500	203	211.33867	
Total	43085.7500	205		
<u>Interpretive</u>				
Between groups	122.0000	2	61.00000	0.5883
Within groups	21050.0000	203	103.69458	
Total	21172.0000	205		
<u>Supportive</u>				
Between groups	615.0000	2	307.50000	2.5230*
Within groups	24741.0000	203	121.87680	
Total	25356.0000	205		
<u>Evaluative</u>				
Between groups	242.0000	2	121.00000	0.7021
Within groups	34986.0000	203	172.34480	
Total	35228.0000	205		

*Significant at the .10 level (df = 2, 203).

APPENDIX O

HELPING RELATIONSHIP INVENTORY: t RATIOS BETWEEN
PAIRS OF COUNSELOR GROUPS

Helping Relationship Inventory: \underline{t} Ratios
Between Pairs of Counselor Groups

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136-31	SSC/VRC N = 136-39	SPW/VRC N = 31-39
Understanding	-0.3804	-1.1260	-0.5354
Probing	0.8324	-0.2438	-0.8725
Interpretive	-0.4017	-1.0666	-0.4729
Supportive	-0.4592	2.0604	1.9352
Evaluative	0.6170	1.1187	0.3341

Note.--Scheffé \underline{t} value required for the .10 level
with \underline{df} 2, 203 = 2.17025.

APPENDIX P

HELPING RELATIONSHIP INVENTORY: STANDARD DEVIATIONS

Helping Relationship Inventory: Standard Deviations

Scales	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Understanding	21.3987	23.8403	24.6055
Probing	14.5458	13.3110	15.4092
Interpretive	10.2354	9.0727	10.8060
Supportive	10.1142	10.5513	14.1332
Evaluative	13.1109	12.3385	13.7759

APPENDIX Q

HELPING RELATIONSHIP INVENTORY: CORRELATION RATIOS

Helping Relationship Inventory: Correlation Ratios

Scales	eta	eta-square
Understanding	0.0795	0.0063
Probing	0.0653	0.0043
Interpretive	0.0759	0.0058
Supportive	0.1557	0.0243
Evaluative	0.0829	0.0069

APPENDIX R

STRONG VOCATIONAL INTEREST BLANK--FORM M: COEFFICIENTS

FOR EACH OF THREE COUNSELOR GROUPS ON SIXTY SCALES

COMPUTED AS A PART OF THE MULTIPLE DISCRIMINANT

ANALYSIS PROGRAM

APPENDIX R

Strong Vocational Interest Blank--Form M: Coefficients
for Each of Three Counselor Groups on Sixty Scales
Computed as a Part of the Multiple Discriminant
Analysis Program

Scales	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Artist	-10.12955	-9.77081	-10.12447
Psychologist, Rev.	-1.80872	-1.79765	-1.58731
Architect	1.93224	1.75287	2.25366
Physician, Revised	1.28467	1.38797	1.29475
Dentist	0.28636	0.21876	0.34797
Veterinarian	-3.24064	-3.40118	-3.41207
Osteopath	-0.48012	-0.44915	-0.59143
Psychiatrist	1.88617	2.07630	2.28256
Group I	20.70943	20.78032	20.44035
Mathematician	0.31287	-0.12595	0.10692
Engineer	13.54012	13.71045	13.18883
Chemist	-6.62354	-6.66907	-6.86854
Physicist	-4.11485	-3.49037	-3.83916
Group II	1.27167	1.30407	1.85914
Production Manager	9.00820	8.98158	9.17631
Aviator	-7.06969	-7.44554	-7.57183
Farmer	16.83334	17.09651	17.26833
Carpenter	-4.00174	-4.19699	-4.21996

APPENDIX R--Continued

Scales	Group Membership		
	SSC	SPW	VRC
	N = 136	N = 31	N = 39
Printer	-0.29308	-0.16527	0.06921
Math-Science Teacher	7.63555	7.56980	7.55064
Policeman	16.63892	16.84996	16.78841
Forest Service Man	-2.56258	-2.56839	-2.71214
Army Officer	-2.66147	-2.41790	-2.56294
Y.M.C.A. Phys. Dir.	-8.69272	-8.95330	-8.55285
Personnel Manager	-7.35613	-7.78764	-7.58981
Pub. Administrator	0.71944	0.91368	1.12489
Y.M.C.A. Secretary	10.73744	11.14244	10.99059
Soc. Sc. HS Teacher	0.38978	0.29830	0.42712
City School Super.	1.17804	1.33375	1.25847
Minister	-4.78758	-5.35346	-4.86466
Vocational Counselor	-0.66871	-0.57383	-1.31313
Man Phy. Therapist	-3.28384	-3.07277	-3.06679
Social Worker	-0.89992	-0.65841	-0.84489
Group V	16.05380	16.31052	15.92415
Music Performer	-1.59200	-1.35124	-1.51560
Music Teacher	0.90649	0.85269	0.79322
CPA	-0.49117	-0.38702	-0.48090
Junior Accountant	-4.25669	-4.47123	-4.77593
Office Worker	1.46218	1.67857	1.27512
Purchasing Agent	-0.49377	-0.62972	-0.69166
Banker	0.19132	0.18349	0.02443
Senior CPA	8.81466	8.67664	9.11149

APPENDIX R--Continued

Scales	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Pharmacist	-1.86460	-1.94069	-1.89317
Mortician	1.15357	1.27607	1.28644
Credit Manager	5.16231	5.07439	5.10152
Group VIII	0.15410	0.35929	0.73188
Sales Manager	-1.85913	-1.57574	-1.76175
Real Estate Salesman	7.59689	7.62839	7.91842
Life Ins. Salesman	-3.05558	-2.78160	-3.08973
Group IX	18.59720	18.00516	19.00833
Advertiser	0.58117	0.74309	-0.07961
Lawyer	-0.25333	0.03410	-0.09592
Author-Journalist	4.29854	4.54323	4.44676
Group X	21.53760	20.69885	21.65556
Pres., Mfg. Concern	8.77011	8.83994	8.83414
Assn. C. of C. Exec.	0.08531	0.16806	-0.01550
Biologist	5.47542	5.10390	5.27745
Librarian	0.33808	0.25012	0.16302
Rehab. Counselor	-6.84219	-7.08500	-7.02137
Bus. Educ. Teacher	3.62552	3.69053	3.85917
Constant	-2314.67187	-2332.18164	-2351.22852

APPENDIX S

STRONG VOCATIONAL INTEREST BLANK--FORM M:

ANALYSIS OF VARIANCE

APPENDIX S

Strong Vocational Interest Blank--Form M:
Analysis of Variance

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Artist</u>					
Between groups	1300.0625	2	650.0312	6.6627	.005
Within groups	19805.1875	203	97.5625		
Total	21105.2500	205			
<u>Psychologist, Revised</u>					
Between groups	390.7500	2	195.3750	2.0086	--
Within groups	19745.7500	203	97.2707		
Total	20136.5000	205			
<u>Architect</u>					
Between groups	1273.7500	2	636.8750	6.0475	.005
Within groups	21378.3750	203	105.3122		
Total	22652.1250	205			
<u>Physician, Revised</u>					
Between groups	6.8125	2	3.4062	0.0274	--
Within groups	25238.3750	203	124.3270		
Total	25245.1875	205			
<u>Dentist</u>					
Between groups	245.8750	2	122.9375	1.2066	--
Within groups	20683.1250	203	101.8873		
Total	20929.0000	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Veterinarian</u>					
Between groups	2899.3750	2	1449.6875	11.9714	.001
Within groups	24582.5000	203	121.0961		
Total	27481.8750	205			
<u>Osteopath</u>					
Between groups	464.8125	2	232.4062	2.0230	--
Within groups	23320.9375	203	114.8815		
Total	23785.7500	205			
<u>Psychiatrist</u>					
Between groups	240.3750	2	120.1875	1.3105	--
Within groups	18616.8750	203	91.7087		
Total	18857.2500	205			
<u>Group I</u>					
Between groups	717.8125	2	358.9062	4.9752	.01
Within groups	14644.1250	203	72.1385		
Total	15361.9375	205			
<u>Mathematician</u>					
Between groups	930.4375	2	465.2188	5.1752	.01
Within groups	18248.3750	203	89.8934		
Total	19178.8125	205			
<u>Engineer</u>					
Between groups	213.4375	2	106.7188	0.8422	--
Within groups	25724.4375	203	126.7214		
Total	25937.8750	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Chemist</u>					
Between groups	24.3125	2	12.1562	0.0985	--
Within groups	25042.8750	203	123.3639		
Total	25067.1875	205			
<u>Physicist</u>					
Between groups	208.0586	2	104.0293	0.8207	--
Within groups	25730.4922	203	126.7512		
Total	25938.5508	205			
<u>Group II</u>					
Between groups	111.1875	2	55.5938	0.5065	--
Within groups	22279.6875	203	109.7522		
Total	22390.8750	205			
<u>Production Manager</u>					
Between groups	990.6250	2	495.3125	6.4476	.005
Within groups	15594.8125	203	76.8217		
Total	16585.4375	205			
<u>Aviator</u>					
Between groups	2871.8437	2	1435.9219	10.0251	.001
Within groups	29076.2734	203	143.2329		
Total	31948.1172	205			
<u>Farmer</u>					
Between groups	2502.3750	2	1251.1875	12.0911	.001
Within groups	21006.4375	203	103.4800		
Total	23508.8125	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Carpenter</u>					
Between groups	1002.7500	2	501.3750	3.6211	.05
Within groups	28107.2773	203	138.4595		
Total	29110.0273	205			
<u>Printer</u>					
Between groups	169.2500	2	84.6250	1.2170	--
Within groups	14115.4375	203	69.5342		
Total	14284.6875	205			
<u>Math-Science Teacher</u>					
Between groups	207.8750	2	103.9375	1.0854	--
Within groups	19439.5000	203	95.7611		
Total	19647.3750	205			
<u>Policeman</u>					
Between groups	1503.3125	2	751.6562	9.1300	.001
Within groups	16712.6875	203	82.3285		
Total	18216.0000	205			
<u>Forest Service Man</u>					
Between groups	3280.9414	2	1640.4707	11.5213	.001
Within groups	28904.2500	203	142.3855		
Total	32185.1914	205			
<u>Army Officer</u>					
Between groups	3141.1758	2	1570.5879	8.6876	.001
Within groups	36699.3516	203	180.7850		
Total	39840.5273	205			

APPENDIX S--Continued

Source of Variation	SS	df	MS	F	p
<u>Y.M.C.A. Physical Director</u>					
Between groups	203.0625	2	101.5312	1.1047	--
Within groups	18657.9375	203	91.9110		
Total	18861.0000	205			
<u>Personnel Manager</u>					
Between groups	514.8125	2	257.4062	2.2388	--
Within groups	23340.0625	203	114.9772		
Total	23854.8750	205			
<u>Public Administrator</u>					
Between groups	563.3125	2	281.6562	3.3417	.05
Within groups	17109.7500	203	84.2845		
Total	17673.0625	205			
<u>Y.M.C.A. Secretary</u>					
Between groups	243.1875	2	121.5938	1.2279	--
Within groups	20101.7500	203	99.0234		
Total	20344.9375	205			
<u>Social Science High School Teacher</u>					
Between groups	128.1875	2	64.0938	0.7141	--
Within groups	18220.8125	203	89.7577		
Total	18349.0000	205			
<u>City School Superintendent</u>					
Between groups	853.0625	2	426.5312	4.9579	.01
Within groups	17464.3125	203	86.0311		
Total	18317.3750	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Minister</u>					
Between groups	1187.5000	2	593.7500	4.9485	.01
Within groups	24357.3750	203	119.9871		
Total	25544.8750	205			
<u>Vocational Counselor</u>					
Between groups	244.9375	2	122.4688	1.5879	--
Within groups	15656.5000	203	77.1256		
Total	15901.4375	205			
<u>Man Physical Therapist</u>					
Between groups	1041.5625	2	520.7812	4.1630	.025
Within groups	25394.6875	203	125.0970		
Total	26436.2500	205			
<u>Social Worker</u>					
Between groups	473.8125	2	236.9062	2.1295	--
Within groups	22584.1875	203	111.2522		
Total	23058.0000	205			
<u>Group V</u>					
Between groups	301.8125	2	150.9062	2.2578	--
Within groups	13568.1250	203	66.8331		
Total	13869.9375	205			
<u>Music Performer</u>					
Between groups	1228.6875	2	614.3438	5.8518	.005
Within groups	21311.5625	203	104.9845		
Total	22540.2500	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Music Teacher</u>					
Between groups	2198.0000	2	1099.0000	8.4688	.001
Within groups	26343.2500	203	129.7697		
Total	28541.2500	205			
<u>CPA</u>					
Between groups	879.6875	2	439.8438	4.9140	.01
Within groups	18170.0000	203	89.5074		
Total	19049.6875	205			
<u>Junior Accountant</u>					
Between groups	440.5625	2	220.2812	1.7735	--
Within groups	25214.1875	203	124.2078		
Total	25654.7500	205			
<u>Office Worker</u>					
Between groups	348.3125	2	174.1562	1.7092	--
Within groups	20684.1250	203	101.8922		
Total	21032.4375	205			
<u>Purchasing Agent</u>					
Between groups	311.0000	2	155.5000	2.2143	--
Within groups	14256.0625	203	70.2269		
Total	14567.0625	205			
<u>Banker</u>					
Between groups	24.0000	2	12.0000	0.1541	--
Within groups	15808.8750	203	77.8762		
Total	15832.8750	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Senior CPA</u>					
Between groups	745.6250	2	372.8125	3.2322	.05
Within groups	23414.6250	203	115.3430		
Total	24160.2500	205			
<u>Pharmacist</u>					
Between groups	11.5625	2	5.7812	0.1047	--
Within groups	11205.5625	203	55.1998		
Total	11217.1250	205			
<u>Mortician</u>					
Between groups	53.4375	2	26.7188	0.3608	--
Within groups	15034.8125	203	78.9892		
Total	15088.2500	205			
<u>Credit Manager</u>					
Between groups	736.8125	2	368.4062	3.4346	.05
Within groups	21774.2500	203	107.2623		
Total	22511.0625	205			
<u>Group VIII</u>					
Between groups	190.3125	2	95.1562	0.8404	--
Within groups	22984.5625	203	113.2244		
Total	23174.8750	205			
<u>Sales Manager</u>					
Between groups	110.3750	2	55.1875	0.8275	--
Within groups	13538.6250	203	66.6927		
Total	13649.0000	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Real Estate Salesman</u>					
Between groups	40.4375	2	20.2188	0.4162	--
Within groups	9861.3750	203	48.5782		
Total	9901.8125	205			
<u>Life Insurance Salesman</u>					
Between groups	80.6250	2	40.3125	0.5220	--
Within groups	15677.8125	203	77.2306		
Total	15758.4375	205			
<u>Group IX</u>					
Between groups	4.5625	2	2.2812	0.0368	--
Within groups	12568.9375	203	61.9159		
Total	12573.5000	205			
<u>Advertiser</u>					
Between groups	1262.4375	2	631.2188	7.2398	.005
Within groups	17699.0625	203	87.1875		
Total	18961.5000	205			
<u>Lawyer</u>					
Between groups	267.3750	2	133.6875	1.6879	--
Within groups	16078.0000	203	79.2020		
Total	16345.3750	205			
<u>Author-Journalist</u>					
Between groups	943.8125	2	471.9062	6.8660	.005
Within groups	13952.3125	203	68.7306		
Total	14896.1250	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Group X</u>					
Between groups	871.0000	2	435.5000	6.3975	.005
Within groups	13818.8750	203	68.0733		
Total	14689.8750	205			
<u>President, Manufacturing Concern</u>					
Between groups	105.1250	2	52.5625	0.9089	--
Within groups	11739.8125	203	57.8316		
Total	11844.9375	205			
<u>Association and Chamber of Commerce Executive</u>					
Between groups	505.6875	2	252.8438	2.6612	.10
Within groups	19287.0625	203	95.0102		
Total	19792.7500	205			
<u>Biologist</u>					
Between groups	199.5625	2	99.7812	0.9363	--
Within groups	21633.7500	203	106.5702		
Total	21833.3125	205			
<u>Librarian</u>					
Between groups	3105.6250	2	1552.8750	11.0667	.001
Within groups	28484.8750	203	140.3196		
Total	31590.6350	205			
<u>Rehabilitation Counselor</u>					
Between groups	519.6875	2	259.8438	2.9823	.10
Within groups	17687.3125	203	87.1296		
Total	18207.0000	205			

APPENDIX S--Continued

Source of Variation	SS	<u>df</u>	MS	<u>F</u>	<u>p</u>
<u>Business Education Teacher</u>					
Between groups	312.0625	2	156.0312	1.0948	--
Within groups	28932.6250	203	142.5252		
Total	29244.6875	205			

APPENDIX T

STRONG VOCATIONAL INTEREST BLANK--FORM M: t RATIOS

BETWEEN PAIRS OF COUNSELOR GROUPS

APPENDIX T

Strong Vocational Interest Blank--Form M: t Ratios
Between Pairs of Counselor Groups

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136/31	SSC/VRC N = 136/39	SPW/VRC N = 31/39
Artist	2.0074	3.3935*****	0.9014
Psychologist, Revised	0.2411	1.9974	1.3084
Architect	2.2873*	3.0303***	0.3956
Physician, Revised	0.1751	0.1890	-0.0022
Dentist	1.3192	-0.5350	-1.4950
Veterinarian	-0.1923	-4.8263*****	-3.4842*****
Osteopath	-0.7673	-1.9768	-0.8576
Psychiatrist	-0.5209	1.3949	1.4839
Group I	1.8724	2.8665***	0.6152
Mathematician	2.0222	2.8612***	0.4873
Engineer	-0.0203	-1.2746	-0.9454
Chemist	0.3155	-0.2419	-0.4435
Physicist	0.8766	1.0931	0.1001
Group II	0.0730	-0.9684	-0.7914

APPENDIX T--Continued

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136/31	SSC/VRC N = 136/39	SPW/VRC N = 31/39
Production Manager	-2.1422	-3.2575****	-0.6871
Aviator	-1.5330	-4.4310*****	-2.0769
Farmer	-0.2299	-4.8563*****	-3.4758*****
Carpenter	0.1261	-2.6063**	-2.0718
Printer	-0.2820	-1.5600	-0.9444
Math-Science Teacher	-0.8127	-1.3688	-0.3611
Policeman	-1.9402	-4.1223*****	-1.5071
Forest Service Man	-1.0674	-4.7994*****	-2.7402**
Army Officer	-2.9501***	-3.4833*****	-0.1894
Y.M.C.A. Physical Director	-1.2245	-1.0742	0.2019
Personnel Manager	-1.9433	0.4248	1.9280
Public Administrator	-2.4314*	-1.3551	0.9881
Y.M.C.A. Secretary	-1.2344	0.6948	1.5455
Social Science High School Teacher	-0.9808	0.4701	1.1661

APPENDIX T--Continued

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136/31	SSC/VRC N = 136/39	SPW/VRC N = 31/39
City School Superintendent	-0.3235	3.0011***	2.5331**
Minister	0.2010	3.1148****	2.1851*
Vocational Counselor	-1.1897	1.0572	1.7821
Man Physical Therapist	-1.6414	-2.6575**	-0.6485
Social Worker	-0.9760	1.5818	2.0013
Group V	-0.8693	1.7222	2.0191
Music Performer	0.7407	3.4208*****	1.9697
Music Teacher	0.0967	4.0481*****	2.9759***
CPA	-0.6353	2.8767***	2.6970**
Junior Accountant	-1.6834	0.4845	1.7581
Office Worker	-1.6762	0.4240	1.7064
Purchasing Agent	-0.5895	-2.0978	-1.0960
Banker	-0.3999	-0.4593	-0.0160
Senior CPA	-1.7609	-2.1538	-0.1693
Pharmacist	-0.3078	-0.3955	-0.0440

APPENDIX T--Continued

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136/31	SSC/VRC N = 136/39	SPW/VRC N = 31/39
Mortician	-0.8464	-0.2422	0.5173
Credit Manager	-2.3374*	-1.6365	0.6980
Group VIII	-1.2855	-0.4290	0.7395
Sales Manager	-1.2838	-0.3433	0.8027
Real Estate Salesman	0.0094	-0.8913	-0.6806
Life Insurance Salesman	-0.1926	0.9435	0.8715
Group IX	-0.2710	-0.0133	0.2141
Advertiser	0.7668	3.8053*****	2.2383*
Lawyer	0.4888	1.8337	0.9799
Author-Journalist	1.5520	3.6103*****	1.4417
Group X	1.3208	3.5235*****	1.5674
President, Manufacturing Concern	-0.3352	1.2105	1.1911
Association and Chamber of Commerce Executive	-2.2175*	0.1728	1.9647

APPENDIX T--Continued

Scales	Group Membership by Pairs of Groups		
	SSC/SPW N = 136/31	SSC/VRC N = 136/39	SPW/VRC N = 31/39
Biologist	0.9046	1.1892	0.1495
Librarian	0.7202	4.6985*****	2.9512***
Rehabilitation Counselor	-0.8988	2.0407	2.2839*
Business Education Teacher	-1.4775	-0.3778	0.9369

*****Significant at the .001 level.

*****Significant at the .005 level.

****Significant at the .01 level.

***Significant at the .025 level.

**Significant at the .05 level.

*Significant at the .10 level.

APPENDIX U

STRONG VOCATIONAL INTEREST BLANK--FORM M:

STANDARD DEVIATIONS

APPENDIX U

Strong Vocational Interest Blank--Form M:
Standard Deviations

Variables	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Artist	9.7260	11.1308	9.3441
Psychologist, Revised	9.9467	8.6936	10.4149
Architect	9.9998	10.6354	10.8645
Physician, Revised	11.3418	9.7000	11.5275
Dentist	9.8069	10.6265	10.6521
Veterinarian	10.8235	11.4651	11.2671
Osteopath	10.9755	9.9949	10.3387
Psychiatrist	9.6897	8.3737	10.0499
Group I	8.3392	8.5508	8.9771
Mathematician	9.4855	8.0074	10.4860
Engineer	10.6270	12.0634	12.6832
Chemist	11.0159	11.2616	11.3043
Physicist	11.1128	10.8394	12.0677
Group II	10.0581	10.8496	11.5746
Production Manager	8.1494	9.5042	10.1557
Aviator	11.7918	14.2021	10.5804
Farmer	9.6352	10.8003	11.4408
Carpenter	11.7346	11.2052	12.3020

APPENDIX U--Continued

Variables	Group Membership		
	SSC N = 136	SPW N = 31	VRC N = 39
Printer	7.5523	8.8569	10.3389
Math-Science Teacher	9.3634	11.3183	9.9477
Policeman	8.4793	11.0520	9.3780
Forest Service Man	11.3285	14.2865	11.9822
Army Officer	12.5928	17.4922	12.6824
Y.M.C.A. Physical Director	9.1454	10.6381	10.2235
Personnel Manager	10.2158	12.0083	11.3844
Public Administrator	8.8491	10.5574	9.1690
Y.M.C.A. Secretary	10.0103	9.3281	10.2128
Social Science High School Teacher	8.8319	10.9307	10.3948
City School Superintendent	9.4706	9.0220	8.7568
Minister	11.3233	8.1806	11.5169
Vocational Counselor Man Physical Therapist	8.4111	10.5447	8.5377
Social Worker	10.7975	13.2388	10.7578
	10.5291	10.5346	10.6231
Group V	8.1011	8.0444	8.5332
Music Performer	10.3514	9.2802	10.5908
Music Teacher	11.5593	10.3662	11.5633
CPA	9.5143	9.1812	9.4878
Junior Accountant	11.0150	13.1076	9.9352
Office Worker	10.1343	10.4428	9.6622

APPENDIX U--Continued

Variables	Group Membership		
	SSC	SPW	VRC
	N = 136	N = 31	N = 39
Purchasing Agent	8.7800	7.1959	7.7724
Banker	8.7733	8.5057	9.2444
Senior CPA	10.2006	13.6357	9.9865
Pharmacist	7.7258	6.6331	6.9353
Mortician	8.8305	8.1214	8.1579
Credit Manager	9.8092	13.1112	9.7700
Group VIII	11.0613	10.5025	9.1158
Sales Manager	7.3550	8.7633	10.1719
Real Estate Salesman	6.4948	7.1037	8.3552
Life Insurance Salesman	8.4218	9.0402	9.8020
Group IX	7.3493	8.3135	9.1820
Advertiser	8.9117	10.9205	9.4587
Lawyer	8.6399	9.0464	9.6592
Author-Journalist	8.0656	9.1526	8.3618
Group X	7.9317	9.1752	8.5844
President, Manufacturing Concern	6.9995	8.2865	8.9821
Association and Chamber of Commerce Executive	9.5537	10.8077	9.5434
Biologist	10.4379	8.6600	11.0924
Librarian	11.7372	11.3636	12.5793
Rehabilitation Counselor	9.2260	9.2843	9.7473
Business Education Teacher	11.1970	13.9373	12.7524

APPENDIX V

STRONG VOCATIONAL INTEREST BLANK--FORM M:

CORRELATION RATIOS

APPENDIX V

Strong Vocational Interest Blank--Form M:
Correlation Ratios

Scales	eta	eta-square
Artist	0.2482	0.0616
Psychologist, Revised	0.1393	0.0194
Architect	0.2371	0.0562
Physician, Revised	0.0164	0.0003
Dentist	0.1084	0.0117
Veterinarian	0.3248	0.1055
Osteopath	0.1398	0.0195
Psychiatrist	0.1129	0.0127
Group I	0.2162	0.0467
Mathematician	0.2203	0.0485
Engineer	0.0907	0.0082
Chemist	0.0311	0.0010
Physicist	0.0896	0.0080
Group II	0.0705	0.0050
Production Manager	0.2444	0.0597
Aviator	0.2998	0.0899
Farmer	0.3263	0.1064
Carpenter	0.1856	0.0344
Printer	0.1089	0.0118
Math-Science Teacher	0.1029	0.0106
Policeman	0.2873	0.0825

APPENDIX V--Continued

Scales	eta	eta-square
Forest Service Man	0.3193	0.1019
Army Officer	0.2808	0.0788
Y.M.C.A. Physical Director	0.1038	0.0108
Personnel Manager	0.1469	0.0216
Public Administrator	0.1785	0.0319
Y.M.C.A. Secretary	0.1093	0.0120
Social Science High School Teacher	0.0836	0.0070
City School Superintendent	0.2158	0.0466
Minister	0.2156	0.0465
Vocational Counselor	0.1241	0.0154
Man Physical Therapist	0.1985	0.0394
Social Worker	0.1433	0.0205
Group V	0.1475	0.0218
Music Performer	0.2335	0.0545
Music Teacher	0.2775	0.0770
CPA	0.2149	0.0462
Junior Accountant	0.1310	0.0172
Office Worker	0.1287	0.0166
Purchasing Agent	0.1461	0.0213
Banker	0.0389	0.0015
Senior CPA	0.1757	0.0309
Pharmacist	0.0321	0.0010
Mortician	0.0595	0.0035
Credit Manager	0.1809	0.0327

APPENDIX V--Continued

Scales	eta	eta-square
Group VIII	0.0906	0.0082
Sales Manager	0.0899	0.0081
Real Estate Salesman	0.0639	0.0041
Life Insurance Salesman	0.0715	0.0051
Group IX	0.0190	0.0004
Advertiser	0.2580	0.0666
Lawyer	0.1279	0.0164
Author-Journalist	0.2517	0.0634
Group X	0.2435	0.0593
President, Manufacturing Concern Association and Chamber of Commerce Executive	0.0942	0.0089
Biologist	0.1598	0.0255
	0.0956	0.0091
Librarian	0.3135	0.0983
Rehabilitation Counselor	0.1689	0.0285
Business Education Teacher	0.1033	0.0107

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