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AN ANALYSIS OF SELECTED PERSONALITY CHARACTERISTICS
OF GUIDANCE ASSOCIATES AT
NORTH TEXAS STATE
UNIVERSITY

DISSERTATION

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By

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The problem under investigation was a description and analysis of change in selected personality characteristics of guidance associate students during the first and second year of training in the undergraduate curriculum designed for the Guidance Associate Degree at North Texas State University.

The first chapter includes the introduction, background and significance, statement of the problem, purposes of the study, definition of terms, statement of the hypotheses, limitations, basic assumptions, and procedures for collecting data.

The second chapter is a review of the literature, examining general personality characteristics of college students and the changes of these characteristics while attending college; some personality characteristics of ideal counselors; counselor training; and the training and use of support personnel in guidance-related work.

The third chapter describes the population being studied, the instruments employed in measuring the personality characteristics of the guidance associates, and the procedure for the treatment of the data.

The fourth chapter includes the analysis of the data gathered for this study and a discussion of the findings.

The fifth chapter presents a summary of the study, the findings, conclusions, and recommendations for future research in the area of training guidance associates.

The subjects in this study consisted of two groups of students enrolled at North Texas State University: twenty-six junior-level students who participated in the first year of the guidance associate training program and thirty-three senior-level students who participated in the first and second year of the guidance associate training program. The California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale were administered to each group of students in pretest and posttest settings. The analysis of variance and the analysis of variance with repeated measures were used to analyze the data statistically.

Significant changes in personality characteristics were discovered for both groups of guidance associate trainees. The test instruments revealed that the trainees became more responsible, planful, resourceful, tolerant, trusting, ethical, and open minded.

Although there were predicted movements in personality characteristics exhibited by both groups of guidance associates, no attempt was made to correlate the method of teaching with these significant changes in personality characteristics. As a result, the following recommendations are made:

(1) It is recommended that experimental studies utilizing control groups be conducted with programs for the preparation of guidance support personnel.

(2) It is recommended that instruments be designed which allow a constant monitoring of personality changes and that these changes in personality characteristics then be compared with subject matter covered in the classroom.

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CHAPTER I

INTRODUCTION

The increased demands placed upon the professional counselor have generated much research for the preparation of future guidance workers. The discovery and measurement of personality characteristics leading to successful counselors are essential if counseling is to survive the test of application. The Counselor Education Department of North Texas State University fulfills the responsibility of this challenge by having created an integrated undergraduate program for the preparation of support personnel in a guidance setting. The Guidance Staff at North Texas State University has also produced A Monograph for the Preparation of Guidance Associates and Professional Counselors within the Framework of a Competency-Based Program (3). This monograph delineates specific personality characteristics deemed necessary for future guidance workers. A hierarchical development of counselors through the concept of a career ladder in the guidance program is introduced.

The continuation of a pilot project at North Texas State University which utilizes the principles stated in the monograph has led to an undergraduate curriculum for a Guidance Associate Degree in the School of Education.

Background and Significance

The personality characteristics of counselors have been a much-researched subject in the literature, but the empirical validation of changes in personality characteristics of counselors while engaged in an academic curriculum in higher education is most illusive.

The educational strategy with which this study is concerned is that of a competency-based program. The basic strategies which proponents of the competency-based educational program support are listed by Weber, Cooper and Houston (21). They are (1) precise learning objectives-- CBE operates on the assumption that desired learning is more apt to occur when both the instructor and learners know in advance what is expected of the learner; (2) personalization--CBE programs are individualized and self paced; (3) systems approaches--CBE program is a system designed to produce individuals who can help bring about desired outcomes; (4) multi-institutional consortia--relevance and accountability in education are enhanced when those who are affected in a major way participate in the development and governance of their programs; (5) field settings--with emphasis on performance and consequence competencies; the assumption is that those competencies that are demonstrated in conditions that are as real as possible are most likely to be internalized and actually used. North Texas State University's faculty in the undergraduate program for the preparation of support personnel in a guidance setting utilize these concepts

for competency-based education in their attempts to prepare future guidance workers.

The literature speculating what a counselor should be like is extensive if one is to focus on the total personality of the counselor. Tooker (19), Wren (23), and Hobbs (8) describe the general personality pattern of the counselor. They recognize that the counseling process is too varied and the work for the counselor is too encompassing to expect any singular clear cut personality definitions for effective workers. Hoffman (9) determined that a standardized personality pattern is not realistic because of the number of skills required by counselors.

Kemp (12), Whetstone (22), Foley (5), Stefflre and Leafgreen (17) have compared personality differences between counselors and other professional groups. Their findings indicate that counselors are more empathetic, understanding, tolerant and accepting than are individuals in other professions.

The literature of the counseling profession has given considerable attention to certain personality variables that have been identified by Polymantier (15). These personality variables are tolerance for ambiguity, reduction of dogmatism, ability to perceive self and others realistically, empathy, emotional stability and expression of self. Changes of personality variables of counselors have also been studied by Jones (11), Demos and Zuwaylif (4), Munger, Myers and Brown (13), Webb and Harris (20), and Wrightman, Richard and Noble (24).

Research on the use of support personnel in a guidance related setting is increasing in volume. The American Personnel and Guidance Association in 1967 published a statement of policy on the role and preparation of support counseling personnel (1). Wren (23), Gust (6), Patterson (14), Strowig (18) and Hansen (7) discuss issues pertinent to the training and the use of support personnel.

In order to integrate support personnel into counseling services, Jones and Cox (10) point out that proper training of support personnel should become an integral part of counselor education programs, thus avoiding role confusion between support personnel and counselors. The same problem had also been considered by Hansen (7), Salim and Vogan (16).

This study combined findings related to the personality characteristics of counselors, and research related to the utilization of support personnel in a guidance setting. It is an attempt to combine elements of both in order to describe and analyze the changes in selected personality characteristics deemed necessary for effective guidance associates. It is assumed that changes in selected personality characteristics of guidance associates were the result of the curriculum to which the guidance associates were exposed.

Statement of the Problem

The problem of this study was a description and analysis of change in selected personality characteristics of guidance associate students during the first and second year of training

in the undergraduate curriculum designed for the Guidance Associate Degree at North Texas State University.

Purposes of the Study

The purposes of this study were to determine the effect of the curriculum for the undergraduate guidance associate degree on selected personality characteristics of North Texas State University Guidance Associate Degree students over a one and a two academic year period.

Definition of Terms

A competency-based program is a program which specifies the competencies to be demonstrated by the student, makes explicit the criteria to be applied in assessing the student's competencies, and holds the student accountable for meeting these criteria (21).

A guidance associate is one who has completed the community college two-year academic transfer program or at least two years of a college or university curriculum and who has been admitted to the guidance associate program.

A group 1 guidance associate (E-1) is one who has completed the curriculum for the Degree of Guidance Associate and is graduated.

A group 2 guidance associate (E-2) is one who has completed the first year of a junior-senior level training program designed to meet the requirements for the Degree of Guidance Associate.

Hypotheses

To carry out the purposes of this study, the following hypotheses were formulated:

1. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Self-Acceptance Scale of the California Psychological Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Self-Acceptance Scale of the California Psychological Inventory over a one academic year period.

2. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Responsibility Scale of the California Psychological Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Responsibility Scale of the California Psychological Inventory over a one academic year period.

3. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Tolerance Scale of the California Psychological Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Tolerance Scale

of the California Psychological Inventory over a one academic year period.

4. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Autonomy Scale of the Omnibus Personality Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Autonomy Scale of the Omnibus Personality Inventory over a one academic year period.

5. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Altruism Scale of the Omnibus Personality Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Altruism Scale of the Omnibus Personality Inventory over a one academic year period.

6. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Complexity Scale of the Omnibus Personality Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Complexity Scale of the Omnibus Personality Inventory over a one academic year period.

7. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Rokeach Dogmatism Scale over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Rokeach Dogmatism Scale over a one year period.

Limitations

This study was limited by the fact that the students involved in this study numbered only thirty-four in the E-1 guidance associate group and only thirty-one in the E-2 guidance associate group. The students did not constitute a random sample of North Texas State University students but rather a selected number of students who had been invited to participate in the guidance associate program.

Basic Assumptions

It was assumed that all subjects would respond honestly to the instruments utilized in this study. It was further assumed that the subjects' responses would be made from their own knowledge and perception and not to some hypothetical construct involving ideal responses to the instruments administered.

Procedures for Collecting Data

The California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale were

administered to two groups of students in the Guidance Associate Program at the beginning and at the conclusion of each academic year. These test results were designated as the pretest and the posttest data.

In order to insure confidentiality, the student identification numbers were the only form of personal identification used in preparing the data for statistical analysis.

Organization of the Study

The second chapter, "Review of the Literature," is a review examining general personality characteristics of college students and the changes of these characteristics while attending college; some personality characteristics of ideal counselors; counselor training; and the training and use of support personnel in guidance related work.

The third chapter is a description of the population studied, the instruments used, and the procedures used in the treatment of the data.

The fourth chapter deals with the analysis of the data generated from the study, and a discussion of the findings.

The fifth and final chapter deals with a summary of the findings, and recommendations for future training of guidance associates.

CHAPTER BIBLIOGRAPHY

1. American Personnel and Guidance Association, "Support Personnel for the Counselor: Their Technical and Non-Technical Roles and Preparation," Personnel and Guidance Journal, XLV (1967).
2. Cooper, James M. and Wilford A. Weber, "A Competency Based Systems Approach to Education," Competency Based Teacher Education: A Systems Approach to Program Design. Edited by James M. Cooper, Wilford A. Weber, and Charles E. Johnson. Berkeley, California, McCutcheon Publishing Corporation, 1973, 7-18.
3. Dameron, Joseph D., editor, A Monograph for the Preparation of Guidance Associates and Professional Counselors within the Framework of a Competency-Based Program. American Personnel and Guidance Association, 1973.
4. Demos, G.D. and F. W. Zuwaylif, "Counselor Movement as a Result of an Intensive Six-week Training Program in Counseling," Personnel and Guidance Journal, XLII (October, 1963), 125-128.
5. Foley, W.J. and F.C. Proff, "NDEA Institute Trainees and Vocational Rehabilitation Counselors: A Comparison of Characteristics," Counselor Education and Supervision, IV (Spring, 1965), 154-159.
6. Gust, T., "Support Personnel vs. the Counselor," Counselor Education and Supervision, VII (1968), 81-82.
7. Hansen, D.A., "Functions and Effects of 'Subprofessional' Personnel in Counseling," Counselor Development in American Society, edited by J. McGowan, Washington, D.C., U.S. Department of Labor and U.S. Office of Education, 1957.
8. Hobbs, Nicholas, "The Compleat Counselor," Personnel and Guidance Journal, XXXVI (May, 1958), 594-602.
9. Hoffman, A. Edward, "An Analysis of Counselor Sub-Roles," Journal of Counseling Psychology, VI (Spring, 1959), 61-67.

10. Jones, Lawrence K. and Wray K. Cox, "Support Personnel: Attitudes Toward Functions and Training Responsibility," Counselor Education and Supervision, X (February, 1970), 51-55.
11. Jones, V., "Attitude Changes in an N.D.E.A. Institute," Personnel and Guidance Journal, XLII (December, 1963), 387-392.
12. Kemp, C.G., "Comparative Study of the Need Structures of Administrators, Teachers and Counselors," Journal of Education Research, LVII (1964), 425-427.
13. Munger, P.F., R.A. Myers and D.F. Brown, "Guidance Institutes and the Persistence of Attitudes: A Progress Report," Personnel and Guidance Journal, XLI (January, 1963), 260-263.
14. Patterson, C.H., "Subprofessional Functions and Short-Term Training," Counselor Education and Supervision, IV (1965), 144-146.
15. Polymontier, P.C., "The Personality of the Counselor," Vocational Guidance Quarterly, XV (December, 1966), 95-100.
16. Salim, M. and H.J. Vogan, "Selection, Training, and Functions of Support Personnel in Guidance: The Counselor Assistant Project," Counselor Education and Supervision, VII (1968), 227-228.
17. Stefflre, B. and F. Leafgreen, "Value Differences Between Counselors and Administrators," Vocational Guidance Journal, X (1962), 226-228.
18. Strowig, R.W., "Prospects for Use of Support Personnel in Counseling," Guidepost, XL (1968), 5-6.
19. Tooker, Ellis D., "Counselor Role: Counselor Training," Personnel and Guidance Journal, XXXVI (December, 1957), 263-267.
20. Webb, A.P. and J.T. Harris, "A Semantic Differential Study of Counselors in an NDEA Institute," Personnel and Guidance Journal, XLII (November, 1963), 260-263.
21. Weber, W.A., J.M. Cooper and W.R. Houston, A Guide To Competency Based Teacher Education, Westfield, Texas, Competency Based Instructional Systems, 1973.

22. Whetstone, B.D., "Personality Differences Between Selected Counselors and Effective Teachers," Personnel and Guidance Journal, XLII (November, 1963), 260-263.
23. Wrenn, C.G., "Crisis in Counseling: A Commentary and a Contribution," Counselor Development in American Society, edited by J. McGowan, Washington, D.C., U.S. Department of Labor and U.S. Office of Education, 1965.
24. Wrightsman, L.S., W.C. Richard and F.C. Noble, "Attitude Changes of Guidance Institute Participants," Counselor Education and Supervision, V (Summer, 1966), 212-220.

CHAPTER II

REVIEW OF THE LITERATURE

A comprehensive review of the literature pertinent to this study has been organized into the following categories: (a) general personality characteristics of college students and the changes of these personality characteristics while attending a college or university; (b) general personality characteristics of ideal counselors; (c) traditional counselor training; (d) the training and use of support personnel in guidance related work.

General Personality Characteristics of College Students and the Changes of These Personality Characteristics While Attending a College or University

For years colleges were primarily rated by the degree of intellectual competence which was exhibited by its students and alumni. As a direct result, intellectual competence has been studied more than any other aspect of the students' college experience Chickering (5), Nichols (40), Silvey (50), and Lehmann and Inkenberry (32). Now there is the growing awareness that for many college students from the age of seventeen or eighteen into the middle or late twenties, college is the last opportunity for major change before the stability generated by more fixed social, interpersonal, and occupational roles and responsibilities Chickering (5).

As a result, one of the aims of college is to help students become more mature and consequently better adjusted Resnick and Heller (46). Since maturity and college success have been correlated (46), a person is defined as mature when he has a number of the following characteristics: (1) independence; (2) autonomy; (3) responsibility; (4) emotional control; (5) security; (6) benefiting from experience; (7) participation; (8) tolerance; (9) marriage and goals Resnick and Heller (46).

Heath (22) in his study of mature and immature college men, determined that the mature college student was seen by others as well organized, energetic and purposeful, responsible, emotionally stable, and oriented to reality. The immature college student was seen by others as poorly organized, erratic, involved in his own problems, less oriented to reality, and emotionally unstable. The mature college student sees himself as stable, consistent, enthusiastic, respectful of parents and family, and independent. The immature college student sees himself as erratic, bottled up, unable to express himself, ambivalent toward parents and family, and independent.

While the change from immaturity to maturity in college is contingent on how mature the student is when he first enters college, Webster, Freedman and Heist (60) reported that once college students become aware of their behavior and the behavior of others, there is an increase in the latitude of verbal expressions and actions. On the contrary, when the

management of emotion is impaired, then learning is hampered and achievement falls short of potential Heath (22).

Research conducted by Trent and Medsker (57) cite evidence that college can cause changes in personality characteristics. They found that students attending colleges exhibited changes in attitudes, interests, values, aspirations, intellectual abilities, and openness to impulses and emotions. Although these changes also occurred in individuals who did not attend college, these changes were not as pronounced or as flexible as were those of college students.

Dressel and Lehman (14) studied the intellectual changes that occurred between the freshman and senior years. They reported that in nearly all instances, significant improvement in critical think ability was developed. It was noted that most changes took place during the first two years of college. Dressel and Lehman believed that as the acquisition of information by the student is increased, so is his performance on mental ability tests.

A similar relation holds true for the mastery of emotions. The more exposure a student has to a given situation, the more appropriate his responses will be White (61). Oppression, sex, fear, love, hate, and other basic emotions only appear to be surfacing at the time a student enters his freshman year at college Sanford (49).

Skills such as the recognition of having to listen, as well as to talk; to follow, as well as to lead; and to

participate, as well as to observe, all lead to hierarchies upon which interpersonal competencies are developed White (61). Newcomb and Feldman (39) state that the transition from freshman to senior year is a complex process which requires a conformity to social situations and a necessity for dealing effectively within these situations. Consequently, students generally are changed toward the peer norm so that seniors are more alike in attitudes and values than freshmen. A student's exposure to given situations generate the appropriate responses, namely those accepted by their peers White (61).

We know that the time a student spends at college is a time of transition, conflicts, anxieties, love, achievements, successes and disappointments. Perhaps Chickering (5) expresses what it is that is expected of the college student when he states:

We do not suppose that college students manage their emotions as sixty-year olds do. On the contrary, the task is to develop increasing capacity to implement passion and commitment through intelligent behavior. Increasing ugliness, conflict, and exploitation must be met with increasing love, respect, and courage, as well as with science, technology, and the best fruits of reason. Increased awareness of emotions and increased ability to manage them effectively are, therefore, developmental tasks central to social concerns as well as to full and rich individual development.

Summary

For years colleges were primarily interested in intellectual development. Now there is a recognition of the importance of emotional growth in relation to success.

Colleges do change student personality characteristics with the greatest amount of change taking place during the first two years of college. The longer a person stays in college the more alike in attitudes and values he is with his peers.

General Personality Characteristics of Ideal Counselors

Research indicates that counselor educators can predict academic success in professional education better than they can predict success in counseling. One of the major problems has been lack of adequate criteria for assessing counseling success Ohlsen (41,p.8).

Most research performed before 1950 tended to use words or characteristics to describe counselors but did not produce data that could be used effectively to screen candidates because poor, as well as good counselors exhibit these same characteristics (41,p.9).

Some of the studies that identified general characteristics of counselors are reviewed here. The Association for Counselor Education and Supervision (3) published a report which stated that a counselor should have six basic qualities: (1) belief in each individual; (2) commitment to individual human values; (3) alertness to the world; (4) open mindedness; (5) understanding of self; and (6) professional commitment. Brammer and Shostrom (21) in their research found that superior intellectual ability and judgment, originality, resourcefulness, versatility, insight into own personality characteristics,

tolerance, acceptance of responsibility, integrity, self control, stability, and interest in psychology were thought as desirable traits in counselors. Similar lists have been compiled by Cox (8) and Fiedler (15).

The balance between personal relationship skills and technical qualifications have been identified by Strupp (54), Truax and Lester (59), Carkhuff (4), and Rogers (49). They found that counselor characteristics such as warmth, understanding, caring, openness and enthusiasm often create situations for greater client self exploration. This in turn generates conditions which are helpful to the counseling progress.

The importance of acceptance and caring has long been recognized as a therapeutic vehicle of client attitudinal change. Fromm (19), Montague (36), May (34), and Powell (45) express the therapeutic value of philanthropic love. Acceptance attitudes which are non-judgmental aid the counselor in establishing a format of client change Rogers (48). As defined by Rogers, acceptance is a positive attitude toward an individual which promotes views of that individual as a person of worth and dignity with the right to make his own decision. Acceptance can also be generated from the personality variables that have been identified by Polymontier (43). They are tolerance for ambiguity, reduction of dogmatism, ability to perceive self and others realistically, empathy, emotional stability, and expression of self.

Johnson, Shertzer, Linden, and Stone (29) made an extensive study of counselor candidate characteristics but found that male and female candidates were described differently. Effective male counselors were characterized as confident, friendly, affable, accepting, and likeable. Effective female counselor candidates were seen as outgoing, efficient, assertive, and person-rather-than-object oriented. They all appeared to like people but tended to relate to them from a persuasive rather than a helping orientation.

In many studies counselor characteristics were compared with other professional groups in an attempt to isolate unique traits Holt (24), Cody and Knock (6). These efforts generally produced no significant results. Forgy and Black (16) confirm the assumption that the counselor's personality and counseling style are important variables in a counseling situation. Warmth, interest, and understanding facilitated more successful counseling sessions than did a given method of counseling void of counselor personality.

Summary

Counseling is an accepting, trusting, encouraging relationship between a counselor and one or more clients. The counselor's personality and counseling style are more important than a given method of counseling void of counselor personality. Although there are many studies indicating

personality characteristics of counselors, there is no certain way of predicting who will make a good counselor.

Traditional Counselor Training

In establishing a program for the preparation of counselors, usually a professional committee develops guidelines for professional preparation and defines criteria that can be used by a faculty for self study and by accreditation teams to evaluate the caliber of students and faculty, the intellectual climate, laboratories, library, and teaching materials Hill (23).

There are numerous counselor training models from which to choose. Most programs include the following: developmental and educational psychology; counseling theory and techniques; group dynamics; group counseling; supervised practicum in counseling; career development and vocational guidance; research methods and statistics; tests and measurements; use of tests in counseling; legal status and professional ethics of counseling; development and administration of guidance services; curriculum development; and improvement of conditions for learning within the classroom (51), (52).

There is also a strong trend to approve an institution's counselor education program and to make the members of the staff responsible for screening candidates, for practicing selective retention, and for endorsing those whom they prepare who qualify for certification. Merely preparing

counselors to do what they are currently doing is not sufficient; they must be qualified to do what can and should be done, and must be sufficiently sure of themselves to do it (7).

Carkhuff (4), Danish and Hower (12), and Ivey (28) indicate that counselor training programs should be based on human interaction qualities. Truax and Carkhuff (58) identified a series of verbal qualities which they estimated to be essential in establishing helping relationships. Empathy, genuineness, and unconditional concern for the client are the foundations of Rogerian based counselor training (47). Carkhuff's training program is based on the facilitation of specific responses. Ivey expresses a skill learning approach utilizing equipment such as video and audio equipment. North Texas State University's Monograph (10) outlines specific behavioral objectives found in counseling situations which reduce the approach of a rather complex analysis to only a specific set of behavior. The qualities of counselors, their acquisition of skills and the demonstration of these skills is outlined in a format for behavioral analysis. A supplementary rating scale which identifies behavioral objectives and the means for measuring these objectives has been developed by Dameron and Carrier (11). The inclusion of the necessary skills for the maintenance of a viable paraprofessional program includes the understanding and ability to systematically screen and select applicants for the paraprofessional positions,

the ability to secure and sustain funding for paraprofessionals selected and trained, the capacity to supervise and train paraprofessionals, and the understanding and ability to develop, implement, and evaluate mental health programs. The inclusion of the paraprofessional counselor is a new and integral part of any counselor training program Moore (37).

The past decade has seen a dramatic growth in the community colleges throughout the nation. There is little agreement on the training of counselors for community colleges. French (18) reported that most counselor trainers noted little difference between the functions of the secondary school counselor and those of the community counselor. Others such as Hoyt and Raines (25), Hoyt and Rhatigan (26), and Matson (33) concluded as a result of their studies that special training for the community college counselor is required. The philosophy of the community college and its place in American education, as well as the provision for a practicum in a community college were deemed an essential part of the preparation of counselors for junior colleges.

Thoreson (57) conducted a study with the approval of the American Psychological Association. He collected information on the training, professional identification, and activities of a large sample of recent graduates of programs in counseling psychology. The sample was asked to provide data on educational experiences, professional identity, reading and

research habits, areas of competence, and occupational functions and preferences.

Thoreson found that the counseling psychologist performs a variety of tasks, very few of which appear in the descriptions of counseling. It seems that many counselors have been well educated, only to move away from their direct application of knowledge into administration and teaching. McGowan (35) reported a number of similar characteristics and patterns. The general trend reveals that the preparation for counselors does not consider the administrative and non-counseling functions which become a part of most counselors' responsibilities.

Summary

Counselor training programs are determined by professional educational experts who maintain the standards for the profession. A variety of counselor training programs are available ranging from microcounseling to university involvement. The trend to include paraprofessionals in a counseling program is increasing in popularity, as is the recognition of preparing counselors for junior college expertise.

The Training and Use of Support Personnel in Guidance Related Work

Until recently, the use of support personnel in counseling situations received little attention or support. With the increasing demands placed upon the professional counselor, there now appears a need to examine ways in which the

counselor can utilize support personnel Munger (38). The emphasis is that the professional counselor should be freed of non-counseling duties so that he can function as a counselor Patterson (42).

Jones and Cox recently pointed out that proper use, supervision, and training of support personnel, if they are to be used in substantial numbers, should become an integral part of counselor education programs (30).

Danish and Hower (12) contend that paraprofessional training must first teach a basic set of skills which include relationship building skills and their applicability across a broad range of paraprofessional and professional roles. Various training programs which embrace relationship building skills have been developed by Carkhuff (4) and May (28). Carkhuff's paraprofessional training program is built around a process of teaching the trainees to make responses of empathy, unconditional positive regard and genuineness. Danish and Hower's program is a design for the implementation of teaching basic helping skills. Ivey proposed microcounseling as a technique of implementing counseling skills. Gage (20) advocates a skill learning model consisting of seven steps. North Texas State University (9) employs a comprehensive training program preparing the guidance associate student to function from a receptionist to a counselor. Emphasis is given areas in individual, group, educational, occupational, social, and personal counseling.

Delworth, Sherwood, and Casaburri (13) propose programs which include training modules for professional counselors in their training of paraprofessionals. Included in this modular format are: teaching the paraprofessional use of supervision; teaching necessary skills for successful completion of a job; dealing with anxiety over evaluation; and identifying and eliminating overextensions.

As a result of the research on training of paraprofessionals, an intensified effort by the American Personnel and Guidance Association to utilize guidance associates in various counseling operations has increased acceptance of the guidance associate as counselor support personnel. Steenland (53) found 60 percent of the reporting directors of counseling centers were using undergraduates as paraprofessionals in a variety of counseling activities. Carkhuff (4) reported advantages in using lay counselors. He reported that lay counselors and the treatments they offer appear to have distinctive advantages over their professional counterparts. Carkhuff mentions the ability to enter the milieu of the distressed, establish peer-like relationships with the needy, similar life styles, and more variables related to the homogeneity of age between the client and the paraprofessional.

Truax and Lester (59), Zunker and Brown (62) reported that the guidance associate or student helper can be more effective in the delivery of services than professional

personnel. Sue and Sue (55) and Guerney (21) found success in using paraprofessionals as therapeutic agents.

Crane, Anderson, and Kirchner (9) reported that counseling center directors generally agree on which functions are appropriate for paraprofessionals. Although a wide range of functions are acceptable for paraprofessionals, in actual practice directors use them for counseling help on only four student problems: freshmen orientation, study skills, college adjustment, and drug problems.

Summary

The use of support personnel in the counseling profession developed out of the need to free counselors to perform counseling. Although there was initial reluctance to accept the paraprofessional, the counseling profession has implemented training programs and practices for support personnel. It has been determined that certain aspects of counseling are best performed by paraprofessionals. As the ability of the paraprofessional counselor is increased, his application in counseling is not.

CHAPTER BIBLIOGRAPHY

1. Association for Counselor Education and Supervision, "The Counselor: Professional Preparation and Role," Personnel and Guidance Journal, XLII (December, 1964), 536-541.
2. Brammer, L.M. and E.L. Shostrom, Therapeutic Psychology, New Jersey, Prentice-Hall, 1968.
3. Callis, R. and D.J. Prediger, "Predictors of Achievement in Counseling and Guidance," Counselor Education and Supervision, 1964, 3:63-69.
4. Carkhuff, R.R., Helping and Human Relations, Vol. 1 and 2, New York, Holt, Rinehart and Winston, 1969.
5. Chickering, A.W., Education and Identity, San Francisco, Jersey-Bass, 1972.
6. Cody, J.J. and G. Knock, "Student Centeredness: Comparison of Counselor Candidates, Teachers and Administrators," Counselor Education and Supervision, VI (Winter, 1967), 114-119.
7. Counseling as a Growing Profession, a Joint ACESASCA publication, Washington, D.C., American Personnel and Guidance Association, 1964.
8. Cox, Rachel D., Counselors and Their Work, Philadelphia, University of Pennsylvania Press, 1945.
9. Crane, J., W. Anderson and K. Kerchner, "Counseling Center Director's Attitudes Toward Paraprofessionals," Journal of College Student Personnel, 1975, 16(2), 119-122.
10. Dameron, Joseph D., editor, A Monograph for the Preparation of Guidance Associates and Professional Counselors within the Framework of a Competency-Based Program, American Personnel and Guidance Association, 1973.
11. Dameron, J.D. and J.E. Carrier, "A Rating Scale of Preprofessional Competencies of Guidance Associates," published by North Texas State University, 1974.
12. Danish, S.J. and A.L. Hower, Helping Skills: A Basic Training Program, New York, Behavioral Publications, 1973.

13. Delworth, U., G. Sherwood and N. Casaburri, Student Paraprofessionals: A Working Model for Higher Education, Student Personnel Series No. 17, Washington, D.C., America Personnel and Guidance Association, American College Personnel Association, 1974.
14. Dressel, P.L. and I.J. Lehmann, "The Impact of Higher Education on Student Values and Critical Thinking Abilities," Educational Record, Summer, 1965, 45(3), 248-258.
15. Fiedler, F.E., "A Comparison of Psychoanalytic, Nondirective and Adlerian Therapeutic Relationships," Journal of Consulting Psychologists, 1950, 14, 436-45.
16. Forgy, E.W. and J.D. Black, "A Follow-up after Three Years of Clients Counseled by Two Methods," Journal of Counseling Psychologists, 1954, 1, 1-8.
17. Freedman, M.B., The College Experience, San Francisco, Jersey-Bass, 1967.
18. French, W.T., "A Survey of the Guidance and Counseling Needs of the Junior College Level," Newsletter, Illinois Guidance and Personnel Association, 1966, 20, 28-31.
19. Fromm, E., The Art of Loving, New York, Harper, 1956.
20. Gage, N.L. (Ed.), Handbook of Research on Teaching, Chicago, Rand McNelly, 1963.
21. Guerney, B.G., Psychotherapeutic Agents: New Roles for Nonprofessionals, Parents and Teachers, New York, Holt, Rinehart, and Winston, 1969.
22. Heath, Douglas H., Exploration of Maturity - Studies of Mature and Immature College Men, New York, Appleton-Century-Crafts, 1965.
23. Hill, G.E., "How to Define the Functions of the School Counselor," Counselor Education and Supervision, 1964, 3:56-62.
24. Holt, Fred D., "A Study of Change in Certain Personality Variables of Counselors in Training," Dissertation Abstracts, XXIII (March-April, 1963), 3775.

25. Hoyt, D.T. and M.R. Raines, "On Appraisal of Basic Student Personnel Functions Within Junior Colleges," in M.R. Raines (Ed.) Junior College Student Personnel Programs, a report to the Carnegie Corporation of New York, 1965.
26. Hoyt, D.T. and J.J. Rhatigan, "Professional Preparation of Junior and Senior College Student Personnel Administrators," Personnel and Guidance Journal, 1968, 47, 263-270.
27. Huck, Cormier, and Bounds, Reading Statistics and Research, New York, Harper and Row, 1974.
28. Ivey, A.E., Microcounseling: Innovations in Interviewing Training, Springfield, Ill., Charles C. Thomas, 1971.
29. Johnson, Dorothy, Bruce Shertger, J.E. Linden, and S.C. Stone, "Relationship of Counselor Candidate Characteristics and Counseling Effectiveness," Counselor Education and Supervision, VI (Summer, 1967), 297-304.
30. Jones, Lawrence K. and Wray K. Cox, "Support Personnel: Attitudes Toward Functions and Training Responsibility," Counselor Education and Supervision, X (February, 1970), 51-55.
31. King, S.H., Personality Stability: Early Findings of the Harvard Student Study, paper presented at the American College and Personnel Association Conference in Dallas, Texas, March 21, 1967.
32. Lehman, I.J. and S.J. Inkenberry, Critical Thinking, Attitudes, and Values in Higher Education. A Preliminary Report, East Lansing, Michigan State University, 1959.
33. Matson, J.E., "Appraisal of Existing and Potential Resources for the Preparation of Junior College Student Personnel Programs," in M.R. Raines (Ed.) Junior College Student Personnel Programs, a report to the Carnegie Corporation of New York, 1965.
34. May, R., Man's Search for Himself, New York, Norton, 1953.
35. McGowan, J.F. (Chmn.), "Counseling Psychology: Its Quest for Professional Identity," proceedings of the 78th Annual Convention of the American Psychological Association, 1970, 5, 919-920.

36. Montague, A., On Being Human, New York, Harper, 1956.
37. Moore, M., "Training Professionals to Work with Paraprofessionals," The Personnel and Guidance Journal, 1974, 53, 308-312.
38. Munger, Paul, "Support Personnel Vs. the Counselor," Counselor Education and Supervision, VII (Winter, 1968), 81-82.
39. Newcomb, T.M. and K.A. Feldman, The Impacts of Colleges upon Their Students, a report to the Carnegie Foundation for the Advancement of Teaching, January, 1968.
40. Nichols, R.C., "Effects of Various College Characteristics on Student Aptitude Test Scores," Journal of Educational Psychology, 1964, 55(1), 45-54.
41. Ohlsen, Merle M., Group Counseling, New York, Holt, Rinehart and Winston, Inc., 1970.
42. Patterson, C.H., "The Place of Values in Counseling and Psychotherapy," Journal of Counseling Psychology, V (1958), 216-223.
43. Polymontier, P.C., "The Personality of the Counselor," Vocational Guidance Quarterly, XV (December, 1966), 95-100.
44. Porter, E.H., Jr., An Introduction to Therapeutic Counseling, Boston, Houghton, 1950.
45. Powell, John, Why Am I Afraid to Tell You Who I Am? Niles, Ill., ARGUS Communications, 1969.
46. Resnick, W.C. and D.H. Heller, On Your Own in College, Columbus, Ohio, Charles E. Merrill Publishing Company, 1969.
47. Rogers, C.R., Client-Centered Therapy, Boston, Houghton, 1951.
48. Rogers, C.R., "Some Directions and End Points in Therapy," in Mowrer (Ed.) Psychotherapy: Theory and Research, New York, Ronald, 1953.
49. Sanford, N., "The Developmental Status of the Entering Freshman," in N. Sanford (Ed.) The American College, New York, Wiley, 1962, 253-282.

50. Silvey, H.M., "Changes in Test Scores After Two Years in College," Educational and Psychological Measurement, 1951, 11, 494-502.
51. "Standards for Counselor Education in the Preparation of Secondary School Counselors," Personnel and Guidance Journal, 1964, 42:1061-1073.
52. "Standards for the Preparation of Elementary School Counselors," Washington, D.C., ACES Publication, American Personnel and Guidance Association, 1968.
53. Steenland, R., "Paraprofessionals in Counseling Centers," Personnel and Guidance Journal, 1973, 51(6), 417-418.
54. Strupp, H.H., "The Outcome Problem in Psychotherapy Revisited," Psychotherapy: Research and Practice, 1963, 1, 1-13.
55. Sue, D. and D.W. Sue, "Undergraduate Asian Americans: The Neglected Minority," Personnel and Guidance Journal, 1973, 51(6), 387-389.
56. Thoresen, C.E., "On Developing Personally Competent Individuals: A Behavioral Perspective," paper presented to the Annual Meeting of the American Psychologists Association, September, 1970.
57. Trent, J.W. and L.L. Medsker, Beyond High School: A Study of 10,000 High School Graduates, San Francisco, Jossey-Bass, 1968.
58. Truax, C.B. and R.R. Carkhuff, "The Old and the New: Theory and Research in Counseling and Psychotherapy," Personnel and Guidance Journal, 1964, 42, 860-866.
59. Truax, C.B. and J.L. Lester, "Effectiveness of Counselors and Counselor Aids," Journal of Counseling Psychology, 1970, 17(4), 331-334.
60. Webster, H., M.B. Freedman, and P. Heist, "Personality Changes in College Students," in N.Sanford (Ed.) The American College, New York, Wiley, 1962, 811-846.
61. White, R.W., "Sense of Interpersonal Competence: Two Case Studies and Some Reflections on Origins," in R.W. White (Ed.) The Study of Lives, New York, Atherton Press, 1963, 72-73.

62. Zunker, V. and W. Brown, "Comparative Effectiveness of Student and Professional Counselors," Personnel and Guidance Journal, 1966, 44(7), 738-743.

CHAPTER III

PROCEDURES OF THE STUDY

Description of the Population

The population examined in this study consisted of two groups of students at North Texas State University: thirty-one junior level students enrolled in the first phase of an undergraduate curriculum for the training of guidance associates, and thirty-four senior level students who had completed their junior year of training (phase one) of the undergraduate curriculum for the guidance associate degree. Both groups of students had completed a community college program or at least two years of a college or university curriculum. All students were invited into the guidance training program because of their desire to work in the guidance field. There was no randomization involved in the selection of the populations studied. Each group of students was studied independently.

Description of Instruments

The following instruments were utilized in this study: (1) the California Psychological Inventory (CPI), (2) the Omnibus Personality Inventory (OPI), and (3) the Rokeach Dogmatism Scale (RDS).

California Psychological Inventory

The CPI is concerned with the characteristics of personality which have a wide, pervasive applicability to human behavior. Its scales are addressed primarily to personality characteristics important for social interaction and social living. It finds most general use in schools, colleges, clinics and counseling centers. There are eighteen scales that constitute the CPI. Three of these scales were chosen for use in this study. They are: (1) Self Acceptance, (2) Responsibility, (3) Tolerance. The reliability of the three scales range from .57 to .87 and their validity range from .32 to .48 as reported in the CPI manual (6). These specific scales were chosen because they measure the personality characteristics described in A Monograph for the Preparation of Guidance Associates and Professional Counselors within the Framework of a Competency Based Program as objectives for guidance associates to attain and to demonstrate. The author of the CPI does not claim that the norms represent a random sample of the general population. He does state that they include a wide range of ages, socioeconomic groups, and geographical areas (1,p.71).

The Self Acceptance Scale assesses factors such as a sense of personal worth, the capacity for independent thinking and independent action. The Responsibility Scale identifies persons of conscientious, responsible, and dependable disposition and temperament. Persons with permissive, accepting,

and non-judgmental social beliefs and attitudes are identified on the Tolerance Scale (6).

The CPI was used by Dlabal and Hanson to determine if teachers who worked with culturally deprived children have personality characteristics that distinguish them from teachers who work with children who work in better areas. The results showed that teachers who liked working with culturally deprived children scored significantly higher at the 5 percent level of confidence on the Self Acceptance and Tolerance scales of the CPI (4).

Mordock and Patterson (16) used six of the CPI scales (Sociability, Social Presence, Self Acceptance, Tolerance, Intellectual Efficiency, and Flexibility) to detect personality differences of counseling students at various levels of training. It was hypothesized that there would be favorable progression on the scores of these scales with increased training, and that scores on the second administration would be more favorable than those on the first. The hypothesis that scores would increase following a period of training was not confirmed.

Omnibus Personality Inventory

The OPI was developed out of the need for a special instrument to accommodate the research objectives at the Center of the Study of Higher Education, University of California, Berkeley. This set of scales was designed to assess selected

attitudes, values, and interests relevant in the areas of normal ego functioning and intellectual activity (1).

Of the fourteen scales which comprise the OPI, three scales have been chosen because they describe personality characteristics deemed necessary for guidance associates as outlined in the Monograph (3). The three scales are:

(1) Autonomy Scale, (2) Altruism Scale, (3) Complexity Scale. The reliability of the three scales range from .87 to .93 and their validity range from .37 to .42 as reported in the OPI manual (10).

The Autonomy Scale measures liberal, non-authoritarian thinking and a need for independence. High scorers oppose infringements on the rights of individuals and are tolerant of viewpoints other than their own. The Altruism Scale reflects an affiliative, trusting and ethical individual. This person has a strong concern for the feelings and welfare of the people he meets. The Complexity Scale assesses a flexible orientation rather than a fixed way of viewing things. The norms of the OPI are based on 2,390 incoming freshmen at the University of California and San Francisco State College. A reported comparison with separate norms generated at UCLA produced only minor differences Buros (1,p.150).

The OPI was used by Heist and Webster for measuring personality characteristics of students in higher education (10). In studies predicting a relationship between academic achievement to personality characteristics, Holland and Austin (11)

found a significant relationship between the students' characteristics as revealed by the OPI and their academic success.

Personality changes in college students were also assessed by Webster, Freedman and Heist (19). Their use of the OPI yielded information reinforcing the use of the OPI as an instrument for the assessment of personality characteristics in college students.

Arthur W. Chickering in Education and Identity (2) cited research involving six professionals associated with the Project on Student Development (NIMH Grant MH 14780-04). This project was a five-year study of institutional characteristics, student characteristics, attrition, and student development. It involved thirteen small colleges. The researchers found that the scales of the Omnibus Personality Inventory were accurate predictors of student personality changes.

Rokeach Dogmatism Scale

The primary purpose of the Rokeach Dogmatism Scale is to measure differences in openness and closedness of belief systems. The RDS was also designed to measure general authoritarianism and general intolerance.

Rokeach assumed that a basic personality variable is relatively consistent and could be measured in dimensions of a person's cognitive functioning in normal life situations. On the basis of this assumption, diverse viewpoints such as

capitalism and communism, Catholicism and anti-Catholicism, should all score together at one end of a continuum, with antithetical points of views represented at either ends (1,p.17).

The Rokeach Dogmatism Scale went through five editions. The final form was found to have a suitable reliability, ranging from .68 to .93 (17,pp.73-89). The RDS norms are based on groups from American and English colleges. The difference between the two groups is highly significant, yet the American college groups scored remarkably similar to each other.

In 1970 Hanson's analysis (8) of dogmatism scores among authoritarians of both the left and the right supported Rokeach's contention that his scales do allow researchers to determine general authoritarianism.

Kemp's study (14) indicates that counselors with a high dogmatism score respond significantly different than do counselors with open-minded scores. Dogmatic counselors tend to be more probing, evaluative, and diagnostic while open-minded counselors demonstrate more understanding, and supportive responses.

Gruberg's study (7,p.123) of tolerance and ambiguity among counselors demonstrated that counselors having high tolerance of ambiguity were observed as being more effective in their skills of counseling than those counselors having low tolerances of ambiguity. Studies have indicated that general personality characteristics which are representative

of high dogmatic behavior are defensive behaviors, insecurity, and awkwardness in client relationships, as well as low self esteem Tosi, Fagan and Frumlin (18).

In this study the Rokeach Dogmatism Scale will assess the ability to work with persons of varying physical, mental, cultural, ethnic, and religious backgrounds.

Procedures for Collecting Data

The California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale, were administered to two groups of students involved in the Guidance Associate Program. The instruments were administered at the beginning and at the conclusion of each academic year. The data were designated as pretest data and posttest data. This process was repeated for the E-1 (senior level) guidance associate students. The data were designated as pretest₁ and posttest₁.

Procedures for Treatment of Data

The data obtained from the test administrations were compiled and placed on keypunch worksheets for statistical analysis by the North Texas State University Computer Center. Although only three scales of the California Psychological Inventory and three scales of the Omnibus Personality Inventory were utilized in this study, all of the instruments' other scales were also statistically treated.

A quasi-experimental design, the time-series designs which allows repeated observations or measurements before and after treatments, was utilized. By having many observations, the time-series design allows the researcher to focus on the process of change of the dependent variable. The time-series design allows the subjects to serve as their own control because measurements or observations are recorded several periods of time before the introduction of the treatment variable Huck, Cormier, and Bounds (12).

Hypothesis 1A, 2A, 3A, 4A, 5A, 6A, and 7A were tested by analysis of variance with repeated measures. Analysis of variance with repeated measures can be used to test the significance of the differences between the means of the same subject under a number of various conditions Ferguson (5). According to Huck, Cormier, and Bounds (12) a significant F-ratio would indicate that the increase or decrease in mean test performance from one testing period to the next varies according to the amount of training received. For the purposes of this study, a significance level of .05 was required for initial acceptance of the hypotheses.

If a significant mean score change was discovered for hypotheses 1A, 2A, 3A, 4A, 5A, 6A, and 7A, a statistical comparison of the pretest and posttest group mean scores was performed via a correlated t test. A significance level of .01 was required to determine significant differences between group mean scores.

Hypotheses 1B, 2B, 3B, 4B, 5B, 6B, and 7B were treated by a one-way analysis of variance. A one-way analysis of variance is an inferential statistical procedure which has the same general purpose as the t test: to compare groups in terms of mean scores. Both procedures yield identical results in a two-group comparison, but the one-way analysis of variance can also be used to compare three or more groups Huck, Cormier, and Bounds (12).

Summary

Three standardized instruments, the California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale were administered to two groups of guidance associate trainees. One group of trainees consisting of junior level students and one group of trainees consisting of senior level students. Both groups were subjected to pre-test and posttest administrations of the three standardized instruments utilized in this study.

Once the data had been collected and analyzed, statistical treatment by analysis of variance was performed by the North Texas State University Computer Center. A significance level of .05 was required for acceptance of the hypotheses.

CHAPTER BIBLIOGRAPHY

1. Buros, Oscar Krisen, The Sixth Mental Measurements Yearbook, New Jersey, The Gryphon Press, 1965.
2. Chickering, T.M., Education and Identity, San Francisco, Jossey-Bass, 1972.
3. Dameron, Joseph D., editor, A Monograph for the Preparation of Guidance Associates and Professional Counselors within the Framework of a Competency Based Program, American Personnel and Guidance Association, 1973.
4. Dlabal, J.J. and R.L. Hanson, "What Kind of Teacher for the Culturally Deprived?" Elementary School Journal, LXVII (January, 1967), 218-223.
5. Ferguson, George A., Statistical Analysis in Psychology and Education, New York, McGraw and Hill Book Company, 1971.
6. Gough, G.H., California Psychological Inventory, Great Britain, Consulting Psychologists Press, Inc., 1956.
7. Gruberg, Ronald, "A Significant Counselor Personality Characteristic: Tolerance of Ambiguity," Counselor Education and Supervision, VIII (Winter, 1969), 119-124.
8. Hansen, D.A., "Functions and Effects of 'Subprofessional' Personnel in Counseling," Counselor Development in American Society, edited by J. McGowan, Washington, D.C., U.S. Department of Labor and U.S. Office of Education, 1957.
9. Hanson, D.J., "Validity Tests of the Dogmatism Scale," Psychological Reports, XXVI (1970), 585-586.
10. Heist, P. and P. Webster, Manual for the Omnibus Personality Inventory, Berkeley, University of California, Center for the Study of Higher Education, 1957.
11. Holland, John L. and Alexander W. Austin, "The Prediction of Academic, Artistic, Scientific, and Social Achievement of Undergraduates of Superior Scholastic Aptitude," Journal of Educational Psychology, LIII, 1962, 1132-43.

12. Huck, Cormier, and Bounds, Reading Statistics and Research, New York, Harper and Row, 1974.
13. Kemp, C.G., "Comparative Study of the Need Structures of Administrators, Teachers and Counselors," Journal of Educational Research, LVII (1964), 425-427.
14. Kemp, C. Graton, "Influence of Dogmatism on the Training of Counselors," Journal of Counseling Psychology, IX (1962), 155-157.
15. Madison and Studdiford, Education and Identity, San Francisco, Jossey-Bass, 1972.
16. Mordock, John B. and C.H. Patterson, "Personality Characteristics of Counseling Students at Various Levels of Training," Vocational Guidance Quarterly, XIII (1965), 265-269.
17. Rokeach, Milton, The Open and Closed Mind, New York, Basic Books, Inc., 1960.
18. Tosi, D.J., T.K. Fagan, and R.M. Frumkin, "Relation of Levels of Dogmatism and Perceived Threat under Conditions of Group Personality Testing," Perceptual Motor Skills, XXVI (1968), 481-482.
19. Webster, H., M.B. Freedman, and P. Heist, "Personality Changes in College Students," in N. Sanford (Ed.) The American College, New York, Wiley, 1962, 811-846.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this chapter is to present and analyze the statistical findings of this study. The data were analyzed by analysis of variance with repeated measures.

Analysis of the Data

In hypothesis 1A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Self Acceptance Scale of the California Psychological Inventory over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table I.

TABLE I

NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE SELF ACCEPTANCE SCALE OF THE CPI

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	21.878	23.151	23.363	23.575

Inspection of Table I indicates a mean change of 1.272 between the pretest and the posttest scores, and a mean change of 0.2122 between the pretest₁ and posttest₁ scores. A mean

score change of 1.705 was reflected over a two academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table II.

TABLE II
ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
SCORES OF THE SELF ACCEPTANCE SCALE OF THE CPI

Source	Sum of Squares	Mean Square	D.F.	F-ratio	P
Between Subjects	1181.742		32		
Within Subjects	449.250		99		
A (Treatments)	57.537	19.179	3	4.700	0.004
Residual	391.712	4.080	96		
Total			131		

Inspection of Table II reveals that the F-ratio did reach the required level of significance of .05 and the hypothesis is accepted. Significant changes in self acceptance as measured by the Self Acceptance Scale of the California Psychological Inventory were achieved over a two academic year period.

The comparison of treatment means is presented in Table III.

TABLE III
COMPARISON OF TREATMENT MEANS
USING FISHER'S T TEST

Group No.	Pretest	Posttest	Pretest ₁	Posttest ₁
1	0.0	-2.5593	-2.9859	-3.4125
2	2.5593	0.0	-0.4266	-0.8531
3	2.9859	0.4266	0.0	-0.4266
4	3.4125	0.8531	0.4266	0.0

Inspection of Table III reflects that the t value from the pretest to the posttest was significant ($t=2.5593$, $df=32$, $P<.01$). The t value from the posttest to the pretest₁ was significant ($t=2.9859$, $df=32$, $P<.01$). The t value from the pretest to the posttest₁ was significant ($t=3.4125$, $df=32$, $P<.01$). These significant t values indicate increases in self acceptance as measured by the Self Acceptance Scale of the California Psychological Inventory over a two academic year period.

In hypothesis 1B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Self-Acceptance Scale of the California Psychological Inventory over a one academic year period. The

number of observations and the mean scores used to test this hypothesis are presented in Table IV.

TABLE IV
NUMBER OF OBSERVATIONS AND MEAN SCORES ON THE
SELF ACCEPTANCE SCALE OF THE CPI

	Pretest	Posttest
Number of Observations	26	26
Mean Score	22.307	23.615

Inspection of Table IV indicates a mean change of 1.308 between the pretest and the posttest scores on the Self Acceptance Scale of the California Psychological Inventory over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table V.

TABLE V
ANALYSIS OF VARIANCE ON SCORES ON THE
SELF ACCEPTANCE SCALE OF THE CPI

Source	Sum of Squares	D.F.	Variance Estimate	F-Ratio	P
Between	22.230	1	22.230	1.829	0.182
Within	607.692	50	12.1538		
Total	629.923	51			

Inspection of Table V reveals that the F -ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes in self acceptance as measured by the Self Acceptance Scale of the California Psychological Inventory were not evident over a one academic year period.

In hypothesis 2A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Responsibility Scale of the California Psychological Inventory over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table VI.

TABLE VI
NUMBER OF OBSERVATIONS AND MEAN SCORES ON THE
RESPONSIBILITY SCALE OF THE CPI

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	29.484	29.272	29.212	29.969

Inspection of Table VI indicates a mean change of -0.212 between the pretest and the posttest scores, and a mean change of 0.751 between the pretest₁ and posttest₁ scores. A mean score change of 0.485 was reflected over a two academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table VII.

TABLE VII

ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
SCORES OF THE RESPONSIBILITY SCALE OF THE CPI

Source	Sum of Squares	Mean Square	D.F.	<u>F</u> -ratio	P
Between Subjects	1565.969		32		
Within Subjects	371.000		99		
A (Treatments)	11.696	3.898	3	1.041	0.377
Residual	359.303	3.742	96		
Total	1936.969		131		

Inspection of Table VII reveals that the F-ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes in responsibility as measured by the Responsibility Scale of the California Psychological Inventory were not evident over a two academic year period.

In hypothesis 2B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Responsibility Scale of the California Psychological Inventory over a one academic year period. The

number of observations and the mean scores used to test this hypothesis are presented in Table VIII.

TABLE VIII
NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE RESPONSIBILITY SCALE OF THE CPI

	Pretest	Posttest
Number of Observations	26	26
Mean Score	28.884	31.423

Inspection of Table VIII indicates a mean change of 2.539 between the pretest and the posttest scores on the Responsibility Scale of the California Psychological Inventory over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table IX.

TABLE IX
ANALYSIS OF VARIANCE ON SCORES OF THE
RESPONSIBILITY SCALE OF THE CPI

Source	Sum of Squares	D.F.	Variance Estimate	F-Ratio	P
Between	83.769	1	83.769	6.969	0.011
Within	601.000	50	12.020		
Total	684.769	51			

Inspection of Table IX reveals that the F-ratio did reach the required level of significance of .05 and the hypothesis is accepted. Significant changes in responsibility as measured by the Self-Acceptance Scale of the California Psychological Inventory were evident over a one academic year period.

In hypothesis 3A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Tolerance Scale of the California Psychological Inventory over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table X.

TABLE X
NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE TOLERANCE SCALE OF THE CPI

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	22.090	23.424	23.303	23.424

Inspection of Table X indicates a mean change of 1.334 between the pretest and the posttest scores, and a mean change of 0.121 between the pretest₁ and posttest₁ scores. A mean score change of 1.334 was reflected over a two academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XI.

TABLE XI
ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
SCORES OF THE TOLERANCE SCALE OF THE CPI

Source	Sum of Squares	Mean Square	D.F.	F-ratio	P
Between Subjects	1496.515		32		
Within Subjects	615.000		99		
A (Treatments)	41.696	13.898	3	2.327	0.079
Residual	573.303	5.971	96		
Total	2111.515		131		

Inspection of Table XI reveals that the F-ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes in tolerance as measured by the Tolerance Scale of the California Psychological Inventory were not evident over a two academic year period.

In hypothesis 3B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Tolerance Scale of the California Psychological Inventory over a one academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XII.

TABLE XII
 NUMBER OF OBSERVATIONS AND MEAN SCORES
 ON THE TOLERANCE SCALE OF THE CPI

	Pretest	Posttest
Number of Observations	26	26
Mean Score	23.807	25.961

Inspection of Table XII indicates a mean change of 2.154 between the pretest and the posttest scores on the Tolerance Scale of the California Psychological Inventory over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and level of significance used to test this hypothesis are presented in Table XIII.

TABLE XIII
 ANALYSIS OF VARIANCE ON SCORES ON THE
TOLERANCE SCALE OF THE CPI

Source	Sum of Squares	D.F.	Variance Estimate	F-ratio	P
Between	60.307	1	60.307	4.205	0.045
Within	717.000	50	14.340		
Total	777.307	51			

Inspection of Table XIII reveals that the F-ratio did reach the required level of significance of .05 and the hypothesis is accepted. Significant changes in tolerance as

measured by the Tolerance Scale of the California Psychological Inventory were achieved over a one academic year period.

In hypothesis 4A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Autonomy Scale of the Omnibus Personality Inventory over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XIV.

TABLE XIV
NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE AUTONOMY SCALE OF THE OPI

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	29.666	31.515	33.090	32.212

Inspection of Table XIV indicates a mean change of 1.849 between the pretest and the posttest scores, and a mean change of -0.878 between the pretest₁ and posttest₁ scores. A mean score change of 2.546 was reflected over a two academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XV.

TABLE XV

ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
SCORES OF THE AUTONOMY SCALE OF THE OPI

Source	Sum of Squares	Mean Square	D.F.	F-ratio	P
Between Subjects	2694.060		32		
Within Subjects	1869.000		99		
A (Treatments)	209.242	69.747	3	4.034	0.009
Residual	1659.757	17.289	96		
Total	4563.060		131		

Inspection of Table XV reveals that the F-ratio did reach the required level of significance of .05 and the hypothesis is accepted. Significant changes in autonomy as measured by the Autonomy Scale of the Omnibus Personality Inventory were achieved over a two academic year period. The comparison of treatment means is presented in Table XVI.

TABLE XVI

COMPARISON OF TREATMENT MEANS USING FISHER'S T TEST

Group No.	Pretest	Posttest	Pretest ₁	Posttest ₁
1	0.0	-1.805	-3.345	-2.486
2	1.805	0.0	-1.539	-0.680
3	3.345	1.539	0.0	0.858
4	2.486	0.680	-0.858	0.0

Inspection of Table XVI reflects that the t value from the pretest to the pretest₁ was significant ($t=3.345$, $df=32$, $P<.01$). The t value from the pretest to the posttest₁ was significant ($t=2.486$, $df=32$, $P<.01$). These significant t values indicate increases in autonomy as measured by the Autonomy Scale of the Omnibus Personality Inventory over a two academic year period.

In hypothesis 4B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Autonomy Scale of the Omnibus Personality Inventory over a one academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XVII.

TABLE XVII
NUMBER OF OBSERVATIONS AND MEAN SCORES ON THE
AUTONOMY SCALE OF THE OPI

	Pretest	Posttest
Number of Observations	26	26
Mean Score	32.846	33.846

Inspection of Table XVII indicates a mean score change of 1.000 between the pretest and the posttest scores on the Autonomy Scale of the Omnibus Personality Inventory over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XVIII.

TABLE XVIII
ANALYSIS OF VARIANCE ON SCORES ON THE
AUTONOMY SCALE OF THE OPI

Source	Sum of Squares	D.F.	Variance Estimate	F-ratio	P
Between	13.000	1	13.000	0.306	0.582
Within	2122.769	50	42.455		
Total	2135.769	51			

Inspection of Table XVIII reveals that the F-ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes in autonomy as measured by the Autonomy Scale of the Omnibus Personality Inventory were not evident over a one academic year period.

In hypothesis 5A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Altruism Scale of the Omnibus Personality Inventory over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XIX.

TABLE XIX
 NUMBER OF OBSERVATIONS AND MEAN SCORES ON
 THE ALTRUISM SCALE OF THE OPI

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	24.727	24.121	26.424	26.151

Inspection of Table XIX indicates a mean change of $-.606$ between the pretest and the posttest scores, and a mean change of $-.272$ between the pretest₁ and posttest₁ scores. A mean score change of 1.424 was reflected over a two academic year period.

The data for the sum of the squares, mean square, degree of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XX.

TABLE XX
 ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
 SCORES OF THE ALTRUISM SCALE OF THE OPI

Source	Sum of Squares	Mean Square	D.F.	F-ratio	P
Between Subjects	1548.015		32		
Within Subjects	1334.250		99		
A (Treatments)	121.901	40.633	3	3.217	0.026
Residual	1212.348	12.628	96		
Total	2882.265		131		

Inspection of Table XX revealed that the F-ratio did reach the required level of significance of .05 and the hypothesis is accepted. Significant changes in altruism as measured by the Altruism Scale of the Omnibus Personality Inventory were evident over a two academic year period. The comparison of treatment means is presented in Table XXI.

TABLE XXI
COMPARISON OF TREATMENT MEANS USING FISHER'S T TEST

Group No.	Pretest	Posttest	Pretest ₁	Posttest ₁
1	0.0	0.692	-1.939	-1.628
2	-0.692	0.0	-2.632	-2.320
3	1.939	2.632	0.0	0.311
4	1.628	2.320	-0.311	0.0

Inspection of Table XXI reflects that the t value from the posttest to the pretest₁ was significant ($t=2.632$, $df=32$, $P(.01)$). This significant t value indicates an increase in altruism as measured by the Altruism Scale of the Omnibus Personality Inventory over a two academic year period.

In hypothesis 5B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Altruism Scale of the Omnibus Personality Inventory over a one academic year period. The number of

observations and the mean scores used to test this hypothesis are presented in Table XXII.

TABLE XXII
NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE ALTRUISM SCALE OF THE OPI

	Pretest	Posttest
Number of Observations	26	26
Mean Score	26.615	27.846

Inspection of Table XXII indicates a mean score change of 1.231 between the pretest and the posttest scores on the Altruism Scale of the Omnibus Personality Inventory over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XXIII.

TABLE XXIII
ANALYSIS OF VARIANCE ON SCORES ON
THE ALTRUISM SCALE OF THE OPI

Source	Sum of Squares	D.F.	Variance Estimate	F-ratio	P
Between	19.692	1	19.692	1.231	0.272
Within	799.538	50	15.990		
Total	819.230	51			

Inspection of Table XXIII reveals that the F-ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes in altruism as measured by the Altruism Scale of the Omnibus Personality Inventory were not evident over a one academic year period.

In hypothesis 6A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Complexity Scale of the Omnibus Personality Inventory over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XXIV.

TABLE XXIV

NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE COMPLEXITY SCALE OF THE OPI

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	16.121	17.090	16.818	17.000

Inspection of Table XXIV indicates a mean change of .096 between the pretest and the posttest scores, and a mean change of .181 between the pretest₁ and posttest₁ scores. A mean score change of 0.879 was reflected over a two academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XXV.

TABLE XXV

ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
SCORES OF THE COMPLEXITY SCALE OF THE OPI

Source	Sum of Squares	Mean Square	D.F.	F-ratio	P
Between Subjects	2664.742		32		
Within Subjects	973.500		99		
A (Treatments)	19.090	6.363	3	0.640	0.591
Residual	954.409	9.941			
Total	3638.242		131		

Inspection of Table XXV reveals that the F-ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes in complexity as measured by the Complexity Scale of the Omnibus Personality Inventory were not evident over a two academic year period.

In hypothesis 6B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Complexity Scale of the Omnibus Personality Inventory over a one academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XXVI.

TABLE XXVI
 NUMBER OF OBSERVATIONS AND MEAN SCORES ON
 THE COMPLEXITY SCALE OF THE OPI

	Pretest	Posttest
Number of Observations	26	26
Mean Score	16.923	16.423

Inspection of Table XXVI indicates a mean change of $-.050$ between the pretest and the posttest scores on the Complexity Scale of the Omnibus Personality Inventory over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and level of significance used to test this hypothesis are presented in Table XXVII.

TABLE XXVII
 ANALYSIS OF VARIANCE ON SCORES ON
 THE COMPLEXITY SCALE OF THE OPI

Source	Sum of Squares	D.F.	Variance Estimate	F-ratio	P
Between	3.250	1	3.250	0.091	0.763
Within	1780.192	50	35.603		
Total	1783.442	51			

Inspection of Table XXVII reveals that the F-ratio did not reach the required level of significance of $.05$ and the

hypothesis is rejected. Significant changes in complexity as measured by the Complexity Scale of the Omnibus Personality Inventory were not evident over a one academic year period.

In hypothesis 7A, it was predicted that the E-1 guidance associate group would achieve significant changes in the mean scores on the Rokeach Dogmatism Scale over a two academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XXVIII.

TABLE XXVIII
NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE ROKEACH DOGMATISM SCALE

	Pretest	Posttest	Pretest ₁	Posttest ₁
Number of Observations	33	33	33	33
Mean Score	124.697	119.606	110.181	110.090

Inspection of Table XXVIII indicates a mean change of -5.909 between the pretest and the posttest scores, and a mean change of -0.091 between the pretest₁ and posttest₁ scores. A mean score change of -14.607 was reflected over a two academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XXIX.

TABLE XXIX

ANALYSIS OF VARIANCE WITH REPEATED MEASURES ON
SCORES OF THE ROKEACH DOGMATISM SCALE

Source	Sum of Squares	Mean Square	D.F.	F-ratio	P
Between Subjects	39793.015		32		
Within Subjects	24201.250		99		
A (Treatments)	5191.780	1730.593	3	8.739	0.001
Residual	19009.469	198.015	96		
Total	63994.265		131		

Inspection of Table XXIX reveals that the F-ratio did reach the required level of significance of .05 and the hypothesis is accepted. Significant changes in dogmatism as measured by the Rokeach Dogmatism Scale were evident. The comparison of treatment means is presented in Table XXX.

TABLE XXX

COMPARISON OF TREATMENT MEANS USING FISHER'S T TEST

Group No.	Pretest	Posttest	Pretest ₁	Posttest ₁
1	0.0	1.469	4.190	4.216
2	-1.469	0.0	2.720	2.746
3	-4.190	-2.720	0.0	0.026
4	-4.216	-2.746	-0.026	0.0

Table XXX reflects that the t value from the pretest to the pretest₁ was significant ($t=4.190$, $df=32$, $P<.01$). The t value from the pretest to the posttest₁ was significant ($t=4.216$, $df=32$, $P<.01$). The t value from the posttest to the pretest₁ was significant ($t=2.720$, $df=32$, $P<.01$). The t value from the posttest to the posttest₁ was significant ($t=2.746$, $df=32$, $P<.01$). These significant t values indicate decreases in dogmatism as measured by the Rokeach Dogmatism Scale over a two academic year period.

In hypothesis 7B, it was predicted that the E-2 guidance associate group would achieve a significant change in the mean score on the Rokeach Dogmatism Scale over a one academic year period. The number of observations and the mean scores used to test this hypothesis are presented in Table XXXI.

TABLE XXXI

NUMBER OF OBSERVATIONS AND MEAN SCORES ON
THE ROKEACH DOGMATISM SCALE

	Pretest	Posttest
Number of Observations	26	26
Mean Score	105.769	102.384

Inspection of Table XXXI indicates a mean change of -3.385 between the pretest and the posttest scores on the Rokeach Dogmatism Scale over a one academic year period.

The data for the sum of squares, mean square, degrees of freedom, F-ratio, and the level of significance used to test this hypothesis are presented in Table XXXII.

TABLE XXXII
ANALYSIS OF VARIANCE ON SCORES ON
THE ROKEACH DOGMATISM SCALE

Source	Sum of Squares	D.F.	Variance Estimate	F-ratio	P
Between	148.923	1	148.923	0.361	0.550
Within	20610.769	50	412.215		
Total	20759.692	51			

Inspection of Table XXXII reveals that the F-ratio did not reach the required level of significance of .05 and the hypothesis is rejected. Significant changes on the Rokeach Dogmatism Scale were not evident over a one academic year period.

While hypotheses were formed for only three scales of the CPI, data were gathered on all scales and an analysis of variance was performed. Analysis of the E-1 guidance associates data revealed that: (1) The F-ratio on the Communality Scale of the CPI was significant at the .003 level, with a significant t value found between pretest and pretest₁; (2) the F-ratio on the Achievement via Conformity Scale of the CPI was significant at the .01 level, with a significant t value found between pretest and posttest₁; (3) the F-ratio on the

Achievement via Independence Scale of the CPI was significant at the .0001 level with significant t values found between pretest and posttest, pretest and pretest₁, pretest and posttest₁; (4) the F-ratio on the Intellectual Efficiency Scale of the CPI was significant at the .003 level, with significant t values found between the pretest and posttest, pretest and pretest₁, and pretest and posttest₁; (5) the F-ratio on the Psychological Mindedness Scale of the CPI was significant at the .008 level, with significant t values found between the pretest and pretest₁, pretest and posttest₁, posttest and posttest₁. The F-ratios for the remaining scales of the CPI did not reach the required level of significance for the E-1 guidance associate group. Analysis of the E-2 guidance associates data did not reveal additional significant findings on the scales of the CPI.

While hypotheses were formed for only three scales of the OPI, data were gathered and an analysis of variance was performed on all scales. Analysis of the E-1 guidance associates data revealed that: (1) The F-ratio on the Thinking Introversion Scale of the OPI was significant at the .0002 level, with a significant t value found between the pretest and posttest; (2) the F-ratio on the Theoretical Orientation Scale of the OPI was significant at the .0002 level, with significant t values found between pretest and posttest, pretest and posttest₁, and between posttest and pretest₁; (3) the F-ratio on the Social Extroversion Scale of the OPI

was found significant at the .003 level, with significant t values found between pretest and pretest₁, pretest and posttest₁, posttest and pretest₁, and posttest and posttest₁; (4) the F-ratio on the Personal Integration Scale of the OPI was found significant at the .0001 level, with significant t values for the pretest and pretest₁, pretest and posttest₁, and posttest and posttest₁; (5) the F-ratio on the Practical Outlook Scale of the OPI was found significant at the .0006 level, with significant t values found for the pretest and posttest scores, posttest and pretest₁, and posttest and posttest₁; (6) the F-ratio on the Response Bias Scale of the OPI was found significant at the .008 level of significance, with a significant t value for the posttest and posttest₁ scores.

Analysis of the E-2 guidance associate data revealed that: (1) The F-ratio on the Impulse Expression Scale of the OPI was significant at the .03 level; (2) the F-ratio on the Personal Integration Scale of the OPI was significant at the .01 level; (3) the F-ratio on the Response Bias Scale of the OPI was significant at the .02 level. The F-ratios for the remaining scales of the OPI did not reach the required level of significance for the E-2 guidance associate group.

Discussion of the Data

Hypotheses 1A, 1B, 2A, 2B, 3A, and 3B involved scales on the California Psychological Inventory. Although only

hypotheses 1A, 2B, and 3B were accepted for the guidance associates, the mean score for all but one scale exhibited gains at various times during the administrations of the instrument. The Femininity Scale revealed minor reductions in the mean scores. This could be attributed to the definition of the scale, or the combined interaction of all the newly acquired personality changes based on a criterion, which at best, is an implicit descriptor of general personality characteristics.

It is interesting to note that the mean scores did not consistently increase with each test administration, but fluctuated with no specific pattern of increase or decrease. This could be attributed to specific subject matter presented to the guidance associates at various points throughout the program. In this study, no attempt was made to correlate changes in personality characteristics with particular subject matter covered during the times of testing.

Hypotheses 4A, 4B, 5A, 5B, 6A, and 6B involved scales on the Omnibus Personality Inventory. Of these scales, hypotheses 4A and 5A were accepted. The remaining scales of the OPI generally indicated increases of mean scores with minor decreases on the Estheticism Scale and the Impulse Expression Scale. The Masculinity-Femininity Scale indicated a significant gain in the mean score for the E-2 guidance associates and a non-significant gain for the E-1 guidance associate group. By definition of the scale, high scorers tend to be

less esthetically oriented and admit to fewer adjustment problems, feelings of anxiety, or personal inadequacies.

Hypotheses 7A and 7B were based on the Rokeach Dogmatism Scale. Of these two hypotheses, 7A was accepted. This indicates that the E-1 guidance associates reflected a less dogmatic attitude over a two academic year period. While there was a reduction in dogmatism for the E-2 guidance associates, the reduction was not significant at the conclusion of one academic year. These findings suggest that a reduction of dogmatism in guidance associates is evident at the conclusion of the first academic year, but continued exposure to the curriculum for guidance associates is required for any significant differences to occur.

In reviewing the pattern of change during the first academic year, the E-1 and the E-2 guidance associate groups both had similar patterns of personality changes as was indicated by the instruments employed in this study. The pretest mean scores for the E-2 guidance associate group were consistently higher than for the E-1 guidance associate group. The pretest mean score for the Rokeach Dogmatism Scale was lower for the E-2 guidance associate group than was the mean score for the E-1 guidance associate group. The differences in pretest mean scores for the two guidance associate groups may reflect changes in admission criteria for entrance into the guidance associate program at North Texas State University

or the availability of more ideal counseling-oriented students who wish to enter the guidance associate curriculum.

By the result of this analysis, it is indicated that the California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale proved sensitive in discerning changes in personality characteristics.

Summary

The purpose of this chapter was to present, analyze, and discuss the data obtained for this study. The hypotheses were presented, and the data were analyzed to determine acceptance or rejection of the hypotheses. The F -ratio for hypothesis 1A was significant at the .004 level. The F -ratio for hypothesis 2B was significant at the .011 level. The F -ratio for hypothesis 3B was significant at the .045 level. The F -ratio for hypothesis 4A was significant at the .026 level, and the F -ratio for hypothesis 7A was significant at the .001 level. The F -ratios for the data involving hypotheses 1B, 2A, 3A, 4B, 5B, 6B, and 7B did not reach the required level of significance.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purposes of this study were to: (1) measure by pre-test and posttest selected personality characteristics of North Texas State University Guidance Associate Degree students at the beginning and at the conclusion of the 1972-73 academic year, and (2) repeat the same measures in an identical manner at the beginning and at the conclusion of the 1973-74 academic year.

The hypotheses were stated as follows:

1. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Self Acceptance Scale of the California Psychological Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Self Acceptance Scale of the California Psychological Inventory over a one academic year period.

2. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Responsibility Scale

of the California Psychological Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Responsibility Scale of the California Psychological Inventory over a one academic year period.

3. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Tolerance Scale of the California Psychological Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Tolerance Scale of the California Psychological Inventory over a one academic year period.

4. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Autonomy Scale of the Omnibus Personality Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Autonomy Scale of the Omnibus Personality Inventory over a one academic year period.

5. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Altruism Scale of the Omnibus Personality Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Altruism Scale of the Omnibus Personality Inventory over a one academic year period.

6. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Complexity Scale of the Omnibus Personality Inventory over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Complexity Scale of the Omnibus Personality Inventory over a one academic year period.

7. a. The E-1 guidance associate group will achieve significant changes in the mean scores on the Rokeach Dogmatism Scale over a two academic year period.

b. The E-2 guidance associate group will achieve a significant change in the mean score on the Rokeach Dogmatism Scale over a one year period.

The population examined in this study consisted of two groups of students who were being trained to work in a guidance-related setting as support personnel to counselors. Both groups of students were enrolled at North Texas State University in an undergraduate curriculum for the guidance associate degree, and both groups of students had completed a community college program or at least two years of a college or university curriculum. Group E-1 consisted of thirty-three students

who had completed their junior and senior year of training, while group E-2 consisted of twenty-six students who had completed their junior year of study during the course of this study.

The instruments used to measure and describe selected personality characteristics of the guidance associate students were the California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale. Each of these instruments were administered to the E-1 guidance associate group at the beginning and at the conclusion of the 1972-73 academic year, and at the beginning and at the conclusion of the 1973-74 academic year. The same instruments were administered to the E-2 guidance associate group at the beginning and at the conclusion of the 1973-74 academic year.

The data were compiled and placed on keypunch worksheets for statistical analysis by the North Texas State University Computer Center. Hypotheses 1A, 2A, 3A, 4A, 5A, 6A, and 7A were tested by analysis of variance with repeated measures, requiring a significance level of .05 for acceptance of the hypotheses. A statistical comparison via correlated t tests was performed when hypotheses 1A, 2A, 3A, 4A, 5A, 6A, and 7A were accepted. A significance level of .01 was the required level for significance. Hypotheses 1B, 2B, 3B, 4B, 5B, 6B, and 7B were tested by one way analysis of variance. A significance level of .05 was required for acceptance of the hypotheses.

Hypothesis 1A was accepted. The E-1 guidance associate group did achieve significant changes in the mean scores on the Self Acceptance Scale of the California Psychological Inventory over a one academic year period.

Hypothesis 1B was not supported. The E-2 guidance associate group did not achieve a significant change in the mean score on the Self Acceptance Scale of the California Psychological Inventory over a one academic year period.

Hypothesis 2A was not supported. The E-1 guidance associate group did not achieve significant changes in the mean scores on the Responsibility Scale of the California Psychological Inventory over a two academic year period.

Hypothesis 2B was accepted. The E-2 guidance associate group did achieve a significant change in the mean score on the Responsibility Scale of the California Psychological Inventory over a one academic year period.

Hypothesis 3A was not supported. The E-1 guidance associate group did not achieve significant changes in the mean scores on the Tolerance Scale of the California Psychological Inventory over a one academic year period.

Hypothesis 3B was accepted. The E-2 guidance associate group did achieve a significant change in the mean score on the Tolerance Scale of the California Psychological Inventory over a one academic year period.

Hypothesis 4A was accepted. The E-1 guidance associate group did achieve significant changes in the mean scores on

the Autonomy Scale of the Omnibus Personality Inventory over a two academic year period.

Hypothesis 4B was not supported. The E-2 guidance associate group did not achieve a significant change in the mean score on the Autonomy Scale of the Omnibus Personality Inventory over a one academic year period.

Hypothesis 5A was accepted. The E-1 guidance associate group did achieve significant changes in the mean scores on the Altruism Scale of the Omnibus Personality Inventory over a two academic year period.

Hypothesis 5B was not supported. The E-2 guidance associate group did not achieve a significant mean score change on the Altruism Scale of the Omnibus Personality Inventory over a one academic year period.

Hypothesis 6A was not supported. The E-1 guidance associate group did not achieve significant changes in the mean scores on the Complexity Scale of the Omnibus Personality Inventory over a two academic year period.

Hypothesis 6B was not supported. The E-2 guidance associate group did not achieve a significant mean score change on the Complexity Scale of the Omnibus Personality Inventory over a one academic year period.

Hypothesis 7A was accepted. The E-1 guidance associate group did achieve significant changes in the mean score on the Rokeach Dogmatism Scale over a two academic year period.

Hypothesis 7B was not supported. The E-2 guidance associate group did not achieve a significant mean score change on the Rokeach Dogmatism Scale over a one academic year period.

Findings

Hypotheses 1A, 2B, 3B, 4A, 5A, and 7A were supported. Further analysis of the data revealed that the following scales of the California Psychological Inventory reflected significant changes in the mean scores for the E-1 guidance associate group over a two academic year period.

The Communality Scale was found to be significant at the .003 level; the Achievement via Conformity Scale was found to be significant at the .01 level; the Achievement via Independence Scale was found to be significant at the .001 level; the Intellectual Efficiency Scale was found to be significant at the .003 level; and the Psychological Mindedness Scale was found to be significant at the .008 level of confidence. Analysis of the data for the E-2 guidance associate group did not reveal additional significant findings on the scales of the California Psychological Inventory over a one academic year period.

The following scales of the Omnibus Personality Inventory revealed areas of significance for the E-1 guidance associate group.

The Thinking Introversion Scale was found to be significant at the .001 level; the Theoretical Orientation Scale

was found to be significant at the .001 level; the Social Extroversion Scale was found to be significant at the .003 level; the Personal Integration Scale was found to be significant at the .001 level; the Practical Outlook Scale was found to be significant at the .001 level; and the Response Bias Scale was found to be significant at the .008 level of confidence.

Further analysis of the data for the E-2 guidance associate group revealed that the following scales of the Omnibus Personality Inventory exhibited a significant change in the mean score over a one academic year period.

The Impulse Expression Scale was found to be significant at the .03 level, and the Personal Integration Scale was found to be significant at the .02 level of confidence.

It is also noted that the pretest mean scores for the E-2 guidance associate group were consistently higher than were the pretest mean scores of the E-1 guidance associate group. Although the E-2 guidance associate group exhibited higher pretest mean scores, similar mean score changes in a predetermined direction occurred for both groups during their first academic year in the undergraduate curriculum for the guidance associate.

Conclusions

The intent of this section is to specify some representative generalizations which are based on the review of literature in Chapter II.

From the review of the literature, it was discovered that the college experience initiates changes in students. The degree of change and the direction of change is generally limited by the population studied, the instruments employed, and the design of the research.

By keeping these limitations in mind, and on the basis of the acceptance of hypotheses 1A, 2B, 3B, 4A, 5A, and 7A, and on the basis of accepting the California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale as valid indicators of personality changes, the following conclusions and generalizations have been made from this study.

Studies of personality changes in students while attending college have concluded that the college experience has an effect on a student's general personality characteristics. Since the students in this study have exhibited changes in personality characteristics, it can be assumed that the students' personality changes were a result of their college experience. However, the results of this study do not confirm the contention that the curriculum for the guidance associate accounted for the significant changes in mean scores on the instruments administered. For example, significant gains in the mean scores on the Autonomy Scale of the OPI were exhibited by the E-1 guidance associate group between posttest and pretest₁ or the time period between the conclusion of one academic year and the beginning of the next academic year. Similar significant

findings reappeared on the Altruism Scale of the OPI and on the Rokeach Dogmatism Scale. It is therefore concluded that no empirical data exists to confirm the contention that the method of teaching or the curriculum for teaching the guidance associate students at North Texas State University resulted in the significant changes in the mean scores of selected personality characteristics.

The possibility remains, however, that the knowledge of specific personality objectives could be a significant variable in contributing to the changes in mean scores on a student's responses to personality inventories. The design of this research and the findings of this study make this contention speculative rather than empirical.

In consideration of the research performed, it can be concluded that significant changes in the mean scores on selected personality characteristics did occur for both the E-1 and the E-2 guidance associate groups over a one and a two academic year period. It is also evident that these significant changes in mean scores cannot be singularly attributed to any specific set of variables but rather constitute a reflection of a number of variables, some of which may or may not have been identified in this study.

The review of the literature on the general personality characteristics of counselors indicates that an ideal counselor exhibits the ability to be responsible, to be playful, resourceful, tolerant, trusting, ethical, and open minded.

By the significant increases in mean scores on personality characteristics, scales of CPI, OPI, and RDS, and by the definition of these scales, it is concluded that the North Texas State University guidance associate is becoming a more ideal counselor.

Recommendations

It is recommended that the California Psychological Inventory, the Omnibus Personality Inventory, and the Rokeach Dogmatism Scale be utilized in establishing a data base for all future guidance associate students. Through such a data base, general personality characteristics of guidance associates and the changes of these personality characteristics can serve as an aid in the planning of curriculum and in the selection of student applicants to the curriculum for guidance associates.

It is recommended that follow-up studies utilizing A rating scale of preprofessional competencies of guidance associates be conducted with all students who graduate as guidance support personnel. The data collected from such studies with a data base obtained from the testing results of general personality characteristics of guidance associates could prove valuable in assessing strengths and weaknesses of the North Texas State University guidance associate graduate.

It is recommended that the guidance associates be involved in activities which increase self awareness and the awareness

of others. Growth groups experienced on a regular basis and a consistent use of triads for personalized instructions, modeling, and role playing are recommended to be continued.

It is recommended that a study to determine the amount of change generated by a competency-based training format as opposed to a traditional training format be conducted.

It is recommended that experimental studies utilizing control groups be conducted with programs for the preparation of guidance support personnel.

It is recommended that instruments be designed which would allow a constant monitoring of personality changes and then correlate the changes in personality characteristics with subject matter covered in the classroom.

APPENDIX A

OMNIBUS PERSONALITY INVENTORY

1. Thinking Introversions: Persons scoring high on this measure are characterized by a liking of reflective thought and academic activities. They express interests in a broad range of ideas found in a variety of areas, such as literature, art, and philosophy. Their thinking is less dominated by immediate conditions and situations, or by commonly accepted ideas, than that of thinking extroverts (low scorers). Most extroverts show a preference for overt action and tend to evaluate ideas on the basis of their practical immediate application, or to entirely reject or avoid dealing with ideas and abstractions.
2. Theoretical Orientation: This scale measures an interest in, or orientation to, a more restricted range of ideas than is true of the Thinking Introvert. High scorers indicate a preference for dealing with theoretical concerns and problems and for using the scientific method in thinking; many are also exhibiting an interest in science and scientific activities. High scorers are generally logical, analytical, and critical in their approach to problems and situations.

3. **Estheticism:** High scorers endorse statements indicating diverse interests in artistic matters and activities and a high level of sensitivity and response to esthetic situations. The content of the statements in this scale extends beyond painting, sculpture, and music, and includes interests in literature and dramatics.
4. **Complexity:** This measure reflects an experimental and flexible orientation rather than a fixed way of viewing and organizing phenomena. High scorers are tolerant of ambiguities and uncertainties; they are fond of novel situations and ideas. Most persons high on this dimension prefer to deal with complexity, as opposed to simplicity, and very high scorers are disposed to seek out and enjoy diversity and ambiguity.
5. **Autonomy:** The characteristic measured in this scale is composed of liberal non-authoritarian thinking and a need for independence. High scorers show a tendency to be independent of authority as traditionally imposed through social institutions. They oppose infringements on the rights of individuals and are tolerant of viewpoints other than their own; they tend to be realistic, intellectually and politically liberal, and much less judgmental than low scorers.
6. **Religious Orientation:** High scorers tend to be skeptical of religious beliefs and practices and tend to reject most of them, especially those that are orthodox or

fundamentallistic in nature. Religious orientation is indicated by a low score.

7. Social Extroversion: This measure reflects a preferred style of relating to people in a social context. High scorers tend to display a strong interest in being with people, and they seek social activities and gain satisfaction from them. The social introvert (low scorer) tends to withdraw from social contacts and responsibilities.
8. Impulse Expression: This scale assesses a general readiness to express impulses and to seek gratification either in conscious thought or in overt action. High scorers have an active imagination, value sensual reactions and feelings; very high scorers have frequent feelings of rebellion and aggression.
9. Personal Integration: The high scorer admits to few attitudes and behaviors that characterize socially alienated or emotionally disturbed persons. Low scorers often unintentionally avoid others and experience feelings of hostility and aggression along with feelings of isolation, loneliness, and rejection.
10. Anxiety Level: High scorers deny that they have feelings of anxiety, and do not admit to being nervous or worried. Low scorers describe themselves as tense and high strung. They may experience some difficulty in adjusting to their social environment, and they tend to have a poor

- opinion of themselves. (Note direction of scoring - a high score indicates a low anxiety level, and vice versa.)
11. Altruism: The high scorer is an affiliative person and trusting and ethical in his relations with others. He has a strong concern for the feelings and welfare of people he meets. Low scorers tend not to consider the feelings and welfare of others and often view people from an impersonal, distant perspective.
 12. Practical Outlook: The high scorer on this measure is interested in practical, applied activities and tends to value material possessions and concrete accomplishments. The criterion most often used to evaluate ideas and things is one of immediate utility. Authoritarianism, conservatism, and non-intellectual interests are very frequent personality components of persons scoring above the average.
 13. Masculinity-Femininity: This scale assesses some of the differences in attitudes and interests between college men and women. High scorers (masculine) deny interests in esthetic matters, and they admit to few adjustment problems, feelings of anxiety, or personal inadequacies. They also tend to be somewhat less socially inclined than low scorers and more interested in scientific matters. Low scorers (feminine), besides having stronger esthetic and social inclinations, also admit to greater sensitivity and emotionality.

14. Response Bias: This measure, composed chiefly of items seemingly unrelated to the concept, represent an approach to assessing the student's test-taking attitude. High scorers are responding in a manner similar to a group of students who were explicitly asked to make a good impression by their responses to these items. Low scorers, on the contrary, may be trying to make a bad impression or are indicating a low state of well being or feelings of depression.

APPENDIX B

CALIFORNIA PSYCHOLOGICAL INVENTORY

1. Dominance: High scorers tend to be seen as aggressive, confident, persistent, and planful; as being persuasive and verbally fluent; as self-reliant and independent; and as having leadership potential and initiative.
2. Capacity for Status: High scorers tend to be seen as ambitious, active, forceful, insightful, resourceful, and versatile; as being ascendant and self-seeking; effective in communication; and as having personal scope and breadth of interests.
3. Sociability: High scorers tend to be seen as outgoing, enterprising, and ingenious; as being competitive and forward; and as original and fluent in thought.
4. Social Presence: High scorers tend to be seen as clever, enthusiastic, imaginative, quick, informal, spontaneous, and talkative; as being active and vigorous; and as having an expressive, ebullient nature.
5. Self-acceptance: High scorers tend to be seen as intelligent, outspoken, sharp-witted, demanding, aggressive, and self-centered; as being persuasive and verbally fluent; and as possessing self-confidence and self-assurance.
6. Sense of Well-being: High scorers tend to be seen as energetic, enterprising, alert, ambitious, and versatile; as

- being productive and active; and as valuing work and effort for its own sake.
7. Responsibility: High scorers tend to be seen as planful, responsible, thorough, progressive, capable, dignified, and independent; as being conscientious and dependable; resourceful and efficient; and as being alert to ethical and moral issues.
 8. Socialization: High scorers tend to be seen as serious, honest, industrious, modest, obliging, sincere and steady; as being conscientious and responsible; and as being self-denying and conforming.
 9. Self-control: High scorers tend to be seen as calm, patient, practical, slow, self-denying, inhibited, thoughtful, and deliberate; as being strict and thorough in their own work and in their expectations for others; and as being honest and conscientious.
 10. Tolerance: High scorers tend to be seen as enterprising, informal, quick, tolerant, clear-thinking, and resourceful; as being intellectually able and verbally fluent; and as having broad and varied interests.
 11. Good Impression: High scorers tend to be seen as cooperative, enterprising, outgoing, sociable, warm, and helpful; as being concerned with making a good impression; and as being diligent and persistent.
 12. Communality: High scorers tend to be seen as dependable, moderate, tactful, reliable, sincere, patient, steady,

- and realistic; as being honest and conscientious; and as having common sense and good judgment.
13. Achievement via Conformance: High scorers tend to be seen as capable, cooperative, efficient, organized, responsible, stable, and sincere; as being persistent and industrious; and as valuing intellectual activity and intellectual achievement.
 14. Achievement via Independence: High scorers tend to be seen as mature, forceful, strong, dominant, demanding, and foresighted; as being independent and self-reliant; and as having superior intellectual ability and judgment.
 15. Intellectual Efficiency: High scorers tend to be seen as efficient, clear-thinking, capable, intelligent, progressive, planful, thorough, and resourceful; as being alert and well-informed; and as placing a high value on cognitive and intellectual matters.
 16. Psychological-mindedness: High scorers tend to be seen as observant, spontaneous, quick, perceptive, talkative, resourceful, and changeable; as being verbally fluent and socially ascendant; and as being rebellious toward rules, restrictions, and constraints.
 17. Flexibility: High scorers tend to be seen as insightful, informal, adventurous, confident, humorous, rebellious, idealistic, assertive, and egoistic; as being sarcastic and cynical; and as highly concerned with personal pleasure and diversion.

18. Femininity: High scorers tend to be seen as appreciative, patient, helpful, gentle, moderate, persevering, and sincere; as being respectful and accepting of others; and as behaving in a conscientious and sympathetic way.

APPENDIX C

ROKEACH DOGMATISM SCALE

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE	-1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE	-2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH	-3: I DISAGREE VERY MUCH

- _____ 1. The United States and Russia have just about nothing in common.
- _____ 2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- _____ 3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- _____ 4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
- _____ 5. Man on his own is a helpless and miserable creature.
- _____ 6. Fundamentally, the world we live in is a pretty lonesome place.

- _____ 7. Most people just don't give a "damn" for others.
- _____ 8. I'd like it if I could find someone who would tell me how to solve my personal problems.
- _____ 9. It is only natural for a person to be rather fearful of the future.
- _____ 10. There is so much to be done and so little time to do it in.
- _____ 11. Once I get up in a heated discussion, I just can't stop.
- _____ 12. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
- _____ 13. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- _____ 14. It is better to be a dead hero than to be a live coward.
- _____ 15. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein or Beethoven or Shakespeare.
- _____ 16. The main thing in life is for a person to want to do something important.
- _____ 17. If given the chance, I would do something of great benefit to the world.
- _____ 18. In the history of mankind there have probably been just a handful of really great thinkers.
- _____ 19. There are a number of people I have come to hate because of the things they stand for.
- _____ 20. A man who does not believe in some great cause has not really lived.
- _____ 21. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- _____ 22. Of all the different philosophies which exist in this world, there is probably only one which is correct.

- _____ 23. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of a person.
- _____ 24. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
- _____ 25. When it comes to differences of opinion in religion, we must be careful not to compromise with those who believe differently from the way we do.
- _____ 26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.
- _____ 27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
- _____ 28. In times like these, it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.
- _____ 29. A group which tolerates too much differences of opinion among its own members cannot exist for long.
- _____ 30. There are two kinds of people in this world: those who are for truth and those who are against the truth.
- _____ 31. My blood boils whenever a person stubbornly refuses to admit he is wrong.
- _____ 32. A person who thinks primarily of his own happiness is beneath contempt.
- _____ 33. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
- _____ 34. In this complicated world of ours, the only way we can know what's going on is to rely on leaders or experts who can be trusted.
- _____ 35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- _____ 36. In the long run, the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

- _____37. The present is all too often full of unhappiness.
It is only the future that counts.
- _____38. If a man is to accomplish his mission in life, it
is sometimes necessary to gamble "all or nothing
at all."
- _____39. Unfortunately, a good many people with whom I have
discussed important social and moral problems don't
really understand what's going on.
- _____40. Most people just don't know what's good for them.

BIBLIOGRAPHY

Books

- Brammer, L.M. and E.L. Shostrom, Therapeutic Psychology, New Jersey, Prentice-Hall, 1968.
- Buros, Oscar Krisen, The Sixth Mental Measurements Yearbook, New Jersey, The Gryphon Press, 1965.
- Carkhuff, R.R., Helping and Human Relations, Vol. 1 and 2, New York, Holt, Rinehart and Winston, 1969.
- Chickering, A.W., Education and Identity, San Francisco, Jersey-Bass, 1972.
- Counseling as a Growing Profession, a joint ACESASCA publication, Washington, D.C., American Personnel and Guidance Association, 1964.
- Cox, Rachel D., Counselors and Their Work, Philadelphia, University of Pennsylvania Press, 1945.
- Dameron, Joseph D., editor, A Monograph for the Preparation of Guidance Associates and Professional Counselors within the Framework of a Competency Based Program, American Personnel and Guidance Association, 1973.
- Danish, S.J. and A.L. Hower, Helping Skills: A Basic Training Program, New York, Behavioral Publications, 1973.
- Delworth, U., G. Sherwood, and N. Casaburri, Student Paraprofessionals: A Working Model for Higher Education, Student Personnel Series No. 17, Washington, D.C., American Personnel and Guidance Association, American College Personnel Association, 1974.
- Ferguson, George A., Statistical Analysis in Psychology and Education, New York, McGraw and Hill Book Company, 1971.
- Freedman, M.B., The College Experience, San Francisco, Jersey-Bass, 1967.
- Fromm, E., The Art of Loving, New York, Harper, 1956.
- Gage, N.L. (Ed.), Handbook of Research on Teaching, Chicago, Rand McNelly, 1963.

- Gough, G.H., California Psychological Inventory, Great Britain, Consulting Psychologists Press, Inc., 1956.
- Guernsey, B.G., Psychotherapeutic Agents: New Roles for Nonprofessionals, Parents and Teachers, New York, Holt, Rinehart and Winston, 1969.
- Heath, Douglas, Exploration of Maturity - Studies of Mature and Immature College Men, New York, Appleton-Century-Crafts, 1965.
- Heist, P. and P. Webster, Manual for the Omnibus Personality Inventory, Berkeley, University of California, Center for the Study of Higher Education, 1957.
- Huck, Cormier, and Bounds, Reading Statistics and Research, New York, Harper and Row, 1974.
- Ivey, A.E., Microcounseling: Innovations in Interviewing Training, Springfield, Ill., Charles C. Thomas, 1971.
- Lehman, I.J. and S.J. Inkenberry, Critical Thinking, Attitudes, and Values in Higher Education. A Preliminary Report, East Lansing, Michigan State University, 1959.
- Ohlsen, Merle M., Group Counseling, New York, Holt, Rinehart and Winston, Inc., 1970.
- May, R., Man's Search for Himself, New York, Norton, 1953.
- Montague, A., On Being Human, New York, Harper, 1956.
- Porter, E.H., Jr., An Introduction to Therapeutic Counseling, Boston, Houghton, 1950.
- Powell, John, Why Am I Afraid to Tell You Who I Am? Niles, Ill., ARGUS Communications, 1969.
- Resnick, W.C. and D.H. Heller, On Your Own in College, Columbus, Ohio, Charles E. Merrill Publishing Company, 1969.
- Rogers, C.R., Client-Centered Therapy, Boston, Houghton, 1951.
- Rokeach, Milton, The Open and Closed Mind, New York, Basic Books, Inc., 1960.
- "Standards for the Preparation of Elementary School Counselors," Washington, D.C., ACES Publication, American Personnel and Guidance Association, 1968.

Trent, J.W. and L.L. Medsker, Beyond High School: A Study of 10,000 High School Graduates, San Francisco, Jossey-Bass, 1968.

Weber, W.A., J.M. Cooper, and W.R. Houston, A Guide to Competency Based Teacher Education, Westfield, Texas, Competency Based Instructional Systems, 1973.

Articles

American Personnel and Guidance Association, "Support Personnel for the Counselor: Their Technical and Non-Technical Roles and Preparation," Personnel and Guidance Journal, XLV (1967).

Cody, J.J. and G. Knock, "Student-Centeredness: Comparison of Counselor Candidates, Teachers and Administrators," Counselor Education and Supervision, VI (Winter, 1967), 114-119.

Cooper, James M. and Wilford A. Weber, "A Competency Based Systems Approach to Education," Competency Based Teacher Education: A Systems Approach to Program Design, edited by James M. Cooper, Wilford A. Weber, and Charles E. Johnson, Berkeley, California, McCutcheon Publishing Corporation, 1973, 7-18.

Crane, J., W. Anderson, and K. Kerchner, "Counseling Center Director's Attitudes Toward Paraprofessionals," Journal of College Student Personnel, 1975, 16(2), 119-122.

Dameron, J.D. and J.E. Carrier, "A Rating Scale of Preprofessional Competencies of Guidance Associates," published by North Texas State University, 1974.

Demos, G.D. and F.W. Zuwaylif, "Counselor Movement as a Result of an Intensive Six-week Training Program in Counseling," Personnel and Guidance Journal, XLII (October, 1963), 125-128.

Dlabal, J.J. and R.L. Hanson, "What Kind of Teacher for the Culturally Deprived?" Elementary School Journal, LXVII (January, 1967), 218-223.

Dressel, P.L. and I.J. Lehmann, "The Impact of Higher Education on Student Values and Critical Thinking Abilities," Educational Record, Summer, 1965, 45(3), 248-258.

Fiedler, F.E., "A Comparison of Psychoanalytic, Nondirective and Adlerian Therapeutic Relationships," Journal of Consulting Psychologist, 1950, 14, 436-45.

- Foley, W.J. and F.C. Proff, "NDEA Institute Trainees and Vocational Rehabilitation Counselors: A Comparison of Characteristics," Counselor Education and Supervision, IV (Spring, 1965), 154-159.
- Forgy, E.W. and J.D. Black, "A Follow-up after Three Years of Clients Counseled by Two Methods," Journal of Counseling Psychologist, 1954, 1, 1-8.
- French, W.T., "A Survey of the Guidance and Counseling Needs of the Junior College Level," Newsletter, Illinois Guidance and Personnel Association, 1966, 20, 28-31.
- Gruberg, Ronald, "A Significant Counselor Personality Characteristic: Tolerance of Ambiguity," Counselor Education and Supervision, VIII (Winter, 1969), 119-124.
- Gust, T., "Support Personnel vs. the Counselor," Counselor Education and Supervision, VII (1968), 81-82.
- Hansen, D.A., "Functions and Effects of 'Subprofessional' Personnel in Counseling," Counselor Development in American Society, edited by J. McGowan, Washington, D.C., U.S. Department of Labor and U.S. Office of Education, 1957.
- Hanson, D.J., "Validity Tests of the Dogmatism Scale," Psychological Reports, XXVI (1970), 585-586.
- Hill, G.E., "How to Define the Functions of the School Counselor," Counselor Education and Supervision, 1964, 3:56-62.
- Hobbs, Nicholas, "The Compleat Counselor," Personnel and Guidance Journal, XXXVI (May, 1958), 594-602.
- Hoffman, A. Edward, "An Analysis of Counselor Sub-Roles," Journal of Counseling Psychology, VI (Spring, 1959), 61-67.
- Holland, John L., Alexander W. Austin, "The Prediction of Academic, Artistic, Scientific, and Social Achievement of Undergraduates of Superior Scholastic Aptitude," Journal of Educational Psychology, LIII, 1962, 1132-1143.
- Holt, Fred S., "A Study of Change in Certain Personality Variables of Counselors in Training," Dissertation Abstracts, XXIII (March-April, 1963), 3775.

- Hoyt, D.T. and M.R. Raines, "On Appraisal of Basic Student Personnel Functions within Junior Colleges," in M.R. Raines (Ed.), Junior College Student Personnel Programs, a report to the Carnegie Corporation of New York, 1965.
- Hoyt, D.T. and J.J. Rhatigan, "Professional Preparation of Junior and Senior College Student Personnel Administrators," Personnel and Guidance Journal, 1968, 47, 263-270.
- Johnson, Dorothy, Bruce Shertger, J.E. Linden, and S.C. Stone, "Relationship of Counselor Candidate Characteristics and Counseling Effectiveness," Counselor Education and Supervision, VI (Summer, 1967), 297-304.
- Jones, Lawrence K. and Wray K. Cox, "Support Personnel: Attitudes Toward Functions and Training Responsibility," Counselor Education and Supervision, X (February, 1970), 51-55.
- Jones, V., "Attitude Changes in an N.D.E.A. Institute," Personnel and Guidance Journal, XLIII (December, 1963), 387-392.
- Kemp, C.G., "Comparative Study of the Need Structures of Administrators, Teachers and Counselors," Journal of Education Research, LVII (1964), 425-427.
- _____, "Influence of Dogmatism on the Training of Counselors," Journal of Counseling Psychology, IX (1962), 155-157.
- King, S.H., Personality Stability: Early Findings of the Harvard Student Study, paper presented at the American College and Personnel Association Conference in Dallas, Texas, March 21, 1967.
- McGowan, J.F. (Chmn.), "Counseling Psychology: Its Quest for Professional Identity," Proceedings of the 78th Annual Convention of the American Psychological Association, 1970, 5, 919-920.
- Moore, M., "Training Professionals to Work with Paraprofessionals," The Personnel and Guidance Journal, 1974, 53, 308-312.
- Mordock, John B. and C.H. Patterson, "Personality Characteristics of Counseling Students at Various Levels of Training," Vocational Guidance Quarterly, XIII (1965), 265-269.

- Munger, P.F., R.A. Myers and D.F. Brown, "Guidance Institutes and the Persistence of Attitudes: A Progress Report," Personnel and Guidance Journal, XLI (January, 1963), 260-263.
- _____, "Support Personnel vs. the Counselor," Counselor Education and Supervision, VII (Winter, 1968), 81-82.
- Newcomb, T.M. and K.A. Feldman, The Impacts of Colleges upon Their Students, a report to the Carnegie Foundation for the Advancement of Teaching, January, 1968.
- Nichols, R.C., "Effects of Various College Characteristics on Student Aptitude Test Scores," Journal of Educational Psychology, 1964, 55(1), 45-54.
- Patterson, C.H., "Subprofessional Functions and Short-term Training," Counselor Education and Supervision, IV (1965), 144-146.
- _____, "The Place of Values in Counseling and Psychotherapy," Journal of Counseling Psychology, V (1958), 216-223.
- Polymontier, P.C., "The Personality of the Counselor," Vocational Guidance Quarterly, XV (December, 1966), 95-100.
- Rogers, C.R., "Some Directions and End Points in Therapy," in Mowrer (Ed.) Psychotherapy: Theory and Research, New York, Ronald, 1953.
- Salim, M. and H.J. Vogan, "Selection, Training, and Functions of Support Personnel in Guidance: The Counselor Assistant Project," Counselor Education and Supervision, VII (1968), 227-228.
- Sanford, N., "The Developmental Status of the Entering Freshman," in N. Sanford (Ed.), The American College, New York, Wiley, 1962, 253-282.
- Silvey, H.M., "Changes in Test Scores after Two Years in College," Educational and Psychological Measurement, 1951, 11, 494-502.
- Stefflre, B. and F. Leafgreen, "Value Differences Between Counselors and Administrators," Vocational Guidance Journal, X (1962), 226-228.
- Steenland, R., "Paraprofessionals in Counseling Centers," Personnel and Guidance Journal, 1973, 51(6), 417-418.

- Strowig, R.W., "Prospects for Use of Support Personnel in Counseling," Guidepost, XL (1968), 5-6.
- Strupp, H.H., "The Outcome Problem in Psychotherapy Revisited," Psychotherapy: Research and Practice, 1963, 1, 1-13.
- Sue, D.W., and D. Sue, "Undergraduate Asian Americans: The Neglected Minority," Personnel and Guidance Journal, 1973, 51(6), 387-389.
- Thoresen, C.E., "On Developing Personally Competent Individuals: A Behavioral Perspective," paper presented to the Annual Meeting of the American Psychologists Association, September, 1970.
- Tooker, Ellis D., "Counselor Role: Counselor Training," Personnel and Guidance Journal, XXXVI (December, 1957), 263-267.
- Tosi, D.J., T.K. Fagan, and R.M. Frumkin, "Relation of Levels of Dogmatism and Perceived Threat under Conditions of Group Personality Testing," Perceptual Motor Skills, XXVI (1968), 481-482.
- Truax, C.B. and R.R. Carkhuff, "The Old and the New: Theory and Research in Counseling and Psychotherapy," Personnel and Guidance Journal, 1964, 42, 860-866.
- Truax, C.B. and J.L. Lester, "Effectiveness of Counselors and Counselor Aids," Journal of Counseling Psychology, 1970, 17(4), 331-334.
- Webb, A.P. and J.T. Harris, "A Semantic Differential Study of Counselors in an NDEA Institute," Personnel and Guidance Journal, XLII (November, 1963), 260-263.
- Webster, H., M.B. Freedman, and P. Heist, "Personality Changes in College Students," in N. Sanford (Ed.) The American College, New York, Wiley, 1962, 811-846.
- Whetstone, B.D., "Personality Differences Between Selected Counselors and Effective Teachers," Personnel and Guidance Journal, XLII (November, 1963), 260-263.
- White, R.W., "Sense of Interpersonal Competence: Two Case Studies and Some Reflections on Origins," in R.W. White (Ed.) The Study of Lives, New York, Atherton Press, 1963, 72-73.

Wrenn, C.G., "Crisis in Counseling: A Commentary and a Contribution," Counselor Development in American Society, edited by J. McGowan, Washington, D.C., U.S. Department of Labor and U.S. Office of Education, 1965.

Wrightsman, L.S., W.C. Richard and F.C. Noble, "Attitude Changes of Guidance Institute Participants," Counselor Education and Supervision, V (Summer, 1966), 212-220.

Zunker, V. and W. Brown, "Comparative Effectiveness of Student and Professional Counselors," Personnel and Guidance Journal, 1966, 44(7), 738-743.