University of the Pacific
Scholarly Commons

University of the Pacific Theses and Dissertations

Graduate School

1977

A Comparative Study of Minnesota Multiphasic Personality Inventory Profiles of School, Counseling and Clinical Psychology Trainees

Howard Marvin Budwin
University of the Pacific

Follow this and additional works at: https://scholarlycommons.pacific.edu/uop_etds

Part of the Education Commons

Recommended Citation

Budwin, Howard Marvin. (1977). *A Comparative Study of Minnesota Multiphasic Personality Inventory Profiles of School, Counseling and Clinical Psychology Trainees*. University of the Pacific, Dissertation. https://scholarlycommons.pacific.edu/uop_etds/3004

This Dissertation is brought to you for free and open access by the Graduate School at Scholarly Commons. It has been accepted for inclusion in University of the Pacific Theses and Dissertations by an authorized administrator of Scholarly Commons. For more information, please contact mgibney@pacific.edu.

A COMPARATIVE STUDY OF MINNESOTA MULTIPHASIC PERSONALITY INVENTORY PROFILES OF SCHOOL, COUNSELING AND CLINICAL PSYCHOLOGY TRAINEES

A Dissertation

Presented to

The Faculty of the School of Education

The University of the Pacific

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

---

by

Howard Marvin Budwin

February, 1977

This dissertation, written and submitted by

Howard Marvin Budwin

is approved for recommendation to the Committee on Graduate Studies, University of the Pacific

Dean of the School or Department Chairman:

Oscar T Jarvis

Dissertation Committee:

W Preston Gleason Chairman

Raymond Bauducci

[illegible]

Fred Muskal

[illegible]

Dated 25 February, 1977

Edward W Pohlman 3-1-'77

A COMPARATIVE ANALYSIS OF
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY
PROFILES OF SCHOOL, COUNSELING AND
CLINICAL PSYCHOLOGY TRAINEES

Abstract of Dissertation

A great deal of effort has been expended to identify those qualities in the personality of the counselor that may facilitate the counseling process. Curiously, there are few studies that examine the personality of the individual that seeks counseling as a profession, and there are almost no studies using a well validated measure of adjustment such as the Minnesota Multiphasic Personality Inventory.

This study was designed to examine and compare the profiles of school, counseling and clinical psychology graduate students, each with the other and with the MMPI male and female normal population. Furthermore, it was intended to extend our knowledge of the emotional adjustment of individuals already studying within the above stated existing programs. It was hypothesized that each of the groups would differ from each other and from the MMPI normals.

Statisical analyses included a Two-Way Analysis of Variance for each scale of the MMPI for the comparisons of each group. The ANOVA was followed by the Newman-Keuls Method for determining the difference between separate pairs of groups. For comparison of the graduate groups to the MMPI normals, a t-test for the Difference Between Means was utilized. In addition, there was a qualitative analysis of each group's profile by an expert judge, Dr. W. Grant Dahlstrom.

The Clinical males were most prominent and reflected the most differences in terms of deviations that were observed. They appeared to be quite apart from the other graduate groups. The Clinical females also tended toward a direction of deviation and generally had mean T-scores above that of the other graduate groups. The Counseling males and females tend to be within the normal range with several of the MMPI scales reaching in the direction of deviation. The School males and females scored in the normal range of the MMPI scales.

Males and females reflected certain differences. Males scored significantly higher than females on the Hysteria scale, suggesting that they would be more likely to develop conversion-like symptoms. Also, females reflected traditional interest patterns while males showed interest patterns in the direction of femininity.

The t-test for the Difference Between Means which compared the male and female graduate groups to the MMPI normals reflected that Clinical males and females were the two groups that deviated most. The Counseling males and females also were different from the normal population of the MMPI but not as different as the Clinical students. The School males deviated least from the norm group with the School females showing considerable differences.

The independent, blind evaluation of the expert judge, Dr. W. Grant Dahlstrom, was most significant. His opinions were consistent with the general findings of the study. He found the Clinical males and females to reflect the most pathology, the Counseling males and females were second in terms of personality disturbances, while the School males and females appeared to be the most well adjusted.

There appeared to be a general relationship between the clinical orientation of students and their emotional adjustment. This study indicated that clinical interest and poor emotional adjustment are positively correlated. The profiles of the male groups suggest that the relationship is a linear one. For the females, the relationship is not as clearly defined because of the closeness in scores of the Counseling and School females.

ACKNOWLEDGMENTS

The author wishes to express his gratitude to Dr. W. Preston Gleason for his moral and academic support during the completion of this study. Also, the author is greatly beholden to Dr. Fred Muskal for his consistently helpful assistance in the preparation of this manuscript. Special thanks are given to Dr. Raymond Banducci for his support and assistance in this endeavor. Additionally, Dr. W. Edgar Gregory was most helpful as were Dr. Walter L. Nyberg and Dr. Edward W. Pohlman.

The preparation of this manuscript required time and dedication. The author wishes to express his appreciation to his wife, Donna, for her understanding, patience, and constant support of his efforts.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	The Problem	2
	Statement of the problem	2
	Significance and importance of the study	2
	Purpose of the Study	3
	Hypotheses	4
	Limitations of the study	5
	Definitions of Terms	6
	Minnesota Multiphasic Personality Inventory	6
	Validity scales	6
	Clinical scales	7
	Organization of the Study	14
II.	REVIEW OF THE LITERATURE	15
	Personality Characteristics	15
	Therapeutic Relationships	17
	Counselor Motivations	19
	Selection Procedures	20
	Professional Training	21
	Minnesota Multiphasic Personality Inventory Studies	23
	Summary	26

CHAPTER PAGE

III. DESIGN AND PROCEDURES. 27

Sample. 27

Procedure 28

Statistical Procedures. 28

Expert Rating 29

Hypotheses. 29

Summary 33

IV. RESULTS. 34

Intergroup Comparisons of Graduate Students 34

Comparing Graduate Groups with MMPI Normals. 54

Expert Rating 67

Summary 70

V. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS 74

Introduction. 74

Discussion. 74

Clinical Interpretation of the Data . . . 77

The males. 77

The females. 81

Conclusions 84

Summary 92

Recommendations 93

REFERENCES 95

LIST OF TABLES

TABLE		PAGE
I.	Analysis of Variance - Two Way MMPI Lie (L) Scale	36
II.	Newman-Keuls Method MMPI Lie (L) Scale	36
III.	Analysis of Variance - Two Way MMPI F (Validity) Scale.	38
IV.	Newman-Keuls Method MMPI F (Validity) Scale.	38
V.	Analysis of Variance - Two Way MMPI Hypochondriasis(Hy) Scale	41
VI.	Analysis of Variance - Two Way MMPI Depression (D) Scale.	41
VII.	Newman-Keuls Method MMPI Depression (D) Scale.	42
VIII.	Analysis of Variance - Two Way MMPI Hysteria (Hy) Scale	44
IX.	Analysis of Variance - Two Way MMPI Psychopathic Deviate (Pd) Scale . .	45
X.	Newman-Keuls Method MMPI Psychopathic Deviate (Pd) Scale . .	45
XI.	Analysis of Variance - Two Way MMPI Masculinity/Femininity (Mf) Scale .	47
XII.	Analysis of Variance - Two Way MMPI Psychasthenia (Pt) Scale.	49
XIII.	Newman-Keuls Method MMPI Psychasthenia (Pt) Scale.	49
XIV.	Analysis of Variance - Two Way MMPI Schizophrenia (Sc) Scale.	51
XV.	Newman-Keuls Method MMPI Schizophrenia (SC) Scale.	52

TABLE PAGE

XVI. *t* Test for the Difference Between Means Clinical Males and MMPI Normal Population. 55

XVII. *t* Test for the Difference Between Means Clinical Females and MMPI Normal Population. 57

XVIII. *t* Test for the Difference Between Means Counseling Males and MMPI Normal Population. 60

XIX. *t* Test for the Difference Between Means Counseling Females and MMPI Normal Population. 62

XX *t* Test for the Difference Between Means School Males and MMPI Normal Population . 64

XXI. *t* Test for the Difference Between Means School Females and MMPI Normal Population 66

CHAPTER I

I. INTRODUCTION

A great deal of effort has been expended to identify those qualities in the personality of the counselor that may facilitate the counseling process. Research has examined the outcome of counseling with counselors of differing orientations (Fiedler, 1950; Forgy & Black, 1956; Weiss, 1973). There are articles that study the experienced counselor and attempt to correlate success and counselor characteristics (Cottle & Lewis, 1954; Daane & Schmidt, 1957; Watley, 1966). Curiously, there are few studies that examine the personality of the individual that seeks counseling as a profession, and there are almost no studies using a well validated measure of adjustment such as the Minnesota Multiphasic Personality Inventory. Why is it that graduate schools of school psychology, counseling psychology and clinical psychology tend to examine the prospective candidate with academic criteria and not with adjustment criteria?

It would seem reasonable to assume that those who enter the counseling area should have a modicum of adjustment to life, particularly when they may be so influential upon the lives of others. Yet, the question remains, who is trained and what is their emotional adjustment? Although several studies exist with respect to counselors'

characteristics on the Minnesota Multiphasic Personality Inventory (Bier, 1961; Wren, 1952; Cottle & Lewis, 1954; Arbuckle, 1956; Brams, 1961; Patterson, 1962; Foley & Proff, 1965; Heikkinen & Wegner, 1972), none study counselors in training or prospective counselors in an attempt to identify the Minnesota Multiphasic Personality Inventory scales which might yield clues to emotional adjustment.

II. THE PROBLEM

Statement of the Problem

Because there is a lack of knowledge with reference to the emotional adjustment of school psychology, counseling psychology and clinical psychology trainees, this research expands clinical information in a comparative, controlled manner. The problem that was investigated was whether trainees in the above stated fields differed significantly from each other on the Minnesota Multiphasic Personality Inventory and whether each group differed significantly from the Minnesota normals.

Significance and Importance of the Study

Since the emotional adjustment of the counselor in training had not been examined extensively, it was a fertile area to explore. A study of this nature resulted in greater understanding of the personality configuration of the potential counselors and psychologists who are interested in the helping profession. It was designed to add a new

dimension suggesting the general adjustment of individuals already enrolled in existing programs. This study may help in developing selection procedures with reference to new enrollees. By determining a typical personality profile for counselors, counselor educators might be better able to predict the most desirable counselor characteristics (Arbuckle, 1956).

There are several possible ramifications of this investigation. Do counselors have a definite pattern and range on the Minnesota scales? Could an analysis of Minnesota Multiphasic Personality Inventory scales ascertain certain aspects of a counselor's general functioning? But more important, how do educators effectively screen prospective candidates and on what dimensions?

III. PURPOSE OF THE STUDY

It was the purpose of this study to gain more knowledge about individuals enrolled in existing school psychology, counseling psychology and clinical psychology programs. If one knows more about counselors in training, such knowledge might affect the academic design of training programs. For example, trainees might be required to experience individual psychotherapy or thorough personality appraisal during selection procedures. With an initial thrust in the area of selection with regard to personal-emotional adjustment, the entire field of counseling may well be affected. This study compared and examined, clinically, the emotional

adjustment of clinical psychology, counseling psychology, and school psychology students presently accepted to a degree program with the Minnesota Multiphasic Personality Inventory normal population. Additionally, each graduate group was compared to the other from group profiles in a clinically qualitative manner by independent judges and the writer.

Hypotheses

The following three hypotheses reflect the expected differences between the three groups of students that are being investigated.

1. There will be differences on all scales of the MMPI between Clinical trainees and Counseling psychology trainees.

2. There will be differences on all scales of the MMPI between Clinical trainees and School psychology trainees.

3. There will be differences on all scales of the MMPI between Counseling psychology trainees and School psychology trainees.

It was expected that each of the groups studied would differ from the normal population of the Minnesota Multiphasic Personality Inventory (MMPI).

4. There will be differences on all scales of the MMPI between Clinical psychology trainees and MMPI male and female normals.

5. There will be differences on all scales of the MMPI

between Counselors in training and MMPI male and female normals.

6. There will be differences on all scales of the MMPI between School psychology trainees and MMPI male and female normals.

Limitations of the Study

This study is faced with the limitations caused by the lack of geographical norms. Dahlstrom, Welsh and Dahlstrom (1973) stated that a difference does exist between the responses of urban and rural individuals. It has been demonstrated that urban residents score slightly higher on the MMPI scales then rural residents (Erdberg, 1969). An analysis of the differences reflected that rural adult subjects were greater in interpersonal trust and contentment than were urban individuals. Rural adults experienced more satisfaction with their current situation and exhibited less cynicism about the intentions of others than did urban individuals. The rural people had more optimism about the future, their health was generally better and they reflected fewer antisocial deviant action than did urbans. However, the interpretation of the data, due to lack of norms, is potentially limited to those individuals within the Northern California geographical area.

Since this study does not incorporate long term follow up, the conclusions should be viewed as tentative. Yet, it does serve a needed heuristic function.

IV. DEFINITION OF TERMS

1. The Minnesota Multiphasic Personality Inventory (MMPI) is a measure of emotional adjustment which includes the following categories (Dahlstrom, Welsh & Dahlstrom, 1973):

A. Validity Scales:

Lie Scale (L). The L scale is designed to identify deliberate or intentional efforts to evade answering the test frankly and honestly. When it is high, it indicates that true values are probably higher than those obtained.

F Scale (F). This scale has variously been designated as the frequency (or infrequency) scale, the confusion scale, and sometimes merely as the validity scale. When it is high, the other scales are likely to be invalid because, (1) the subject was careless, (2) the subject was unable to comprehend the items, and (3) extensive scoring or recording errors were made.

K Scale (K). The K scale is devoted to increasing the sensitivity of the validity indices on the test. It identifies the impact of more subtle score-enhancing or score-diminishing factors and provides a means of statistically correcting the values of the clinical scales themselves to offset the effects of these factors on the clinical

profile. The K scale is a correction factor. Portions of the K scale are added to certain of the clinical scales (Hypochondriasis, Psychopathic Deviate, Psychasthenia, Schizophrenia & Hypomania) to raise normal scores to the mean of clinical groups. A high K score represents defensiveness against psychological weakness, and may indicate a defensiveness that verges upon deliberate distortion in the direction of making a more "normal" appearance. A low K score tends to indicate that a person is, if anything, overly candid and open to self-criticism and the admission of symptoms even though they may be minimal in strength.

B. Clinical Scales

Hypochondriasis Scale (Hs). This scale measures the personality characteristics related to the neurotic pattern of hypochondriasis. Persons diagnosed to have this disorder show an abnormal concern for their bodily functions. Their worries and preoccupations with physical symptoms typically persist in the face of strong evidence against any valid physical infirmity or defect. This worry over their health dominates their life and often seriously restricts the range of their activities and interpersonal relations. The classic picture of hypochondriacs also includes egocentricity,

immaturity, and lack of insight into the emotional basis for their preoccupations with somatic processes.

Depression Scale (D). This scale measures the symptom syndrome of depression. This mood state is characterized generally by pessimism of outlook on life and the future, feelings of hopelessness or worthlessness, slowing of thought and action, and frequently by preoccupation of death and suicide.

Hysteria Scale (Hy). This scale identifies patients who use physical symptoms as a means of solving difficult conflicts or avoiding mature responsibilities. This resort to physical disorder may appear only under stress, while in ordinary circumstances no clear personality inadequacy is readily demonstrable.

Psychopathic Deviate Scale (Pd). This scale measures the personality characteristics of an amoral and asocial subgroup of persons with psychopathic personality disorder, termed psychopathic deviates. The major features of this personality pattern include a repeated and flagrant disregard for social customs and mores, and inability to profit from punishing experiences as shown in repeated difficulties of the same kind, and an emotional

shallowness in relation to others, particularly in sexual and affectional display. Since he is relatively free of conflicts and does not show anxiety until actually in serious difficulty, the psychopathic deviate may go undetected by friends and acquaintances until the situation demands evidence of a sense of responsibility, appreciation of social patterns, or personal and emotional loyalties.

Masculine/Feminine Interest Scale (Mf). The Mf scale identifies personality features related to the disorder of male sexual inversion. Persons with this personality pattern often engage in homoerotic practices as part of their feminine emotional makeup; however, many of these men are too inhibited or full of conflicts to make any overt expression of their sexual preferences. The feminism of these men appears in their values, attitudes, and interests, and styles of expression and speech, as well as in sexual relationships.

Paranoia Scale (Pa). The concept of paranoia involves a set of delusional beliefs, frequently including delusions of reference, influence, and grandeur. Although the persons showing these personality features may appear to be well oriented to reality and integrated in the relation of one delusion with

another in their belief structure, they may show misperceptions or misinterpretations of their life situations that are markedly out of keeping with their ability and intelligence.

Psychasthenia Scale (Pt). The scale evaluates the neurotic pattern of psychasthenia, or the obsessive-compulsive syndrome. The personality features include, in addition to the obsessive ruminations and the compulsive behavioral rituals, some forms of abnormal fears, worrying, difficulties in concentrating, guilt feelings, and excessive vacillation in making decisions. Other frequently noted features include excessively high standards on morality or intellectual performance, self-critical or even self-debasing feelings and attitudes, and assumption of rather remote and unemotional aloofness from some personal conflicts. This scale correlates highly with the Schizophrenia scale.

Schizophrenia Scale (Sc). The psychotic pattern of schizophrenia is very heterogeneous and contains many contradictory behavioral features. This may be in part a result of the way that the pattern is identified in terms of bizarre or unusual thoughts or behavior. Most commonly persons showing this psychiatric reaction are characterized as

constrained, cold, and apathetic or indifferent. Other people see them as remote and inaccessible often seemingly sufficient unto themselves. Delusions with varying degrees of organization, hallucinations, either fleeting or persistent and compelling, and disorientation may appear in various combinations. Inactivity, or endless stereotypy, may accompany the withdrawal of interest from other people or external objects and relationships. These persons frequently perform below the levels expected of them on the basis of their training and ability.

Hypomania Scale (Ma). Three features characterize this pattern: overactivity, emotional excitement, and flight of ideas. The activity may lead to a great deal of accomplishment but is frequently inefficient and unproductive. The mood may be good-humored euphoria but may on occasion be irritable, and temper outbursts are frequent. The enthusiasm and over-optimism characteristic of persons with this pattern may lead them into undertaking more than they can handle, although the milder forms of hypomania may be difficult to distinguish from the behavior of ambitious, vigorous, and energetic normals.

Social Introversion Scale (Si). The concept of

introversion-extroversion may be thought of in terms of thinking, social participation, and emotional expression. In this formulation, a particular person need not be generally introverted in all aspects of his personality. For example, he could be introverted only in his emotional patterns, while at the same time his social preferences could be extroverted and his thinking patterns occupy some middle range, neither markedly introverted nor extroverted. In other terms, the socially introverted individual may be characterized by withdrawal from social contacts and responsibilities. Little real interest in people is displayed. In contrast, social extroversion involves the seeking of social contacts and a sincere interest in people. This is not a clinical scale in the strictest sense.

2. "Graduate counseling students" refers to those students who are enrolled in counselor training programs for the purpose of obtaining an advanced degree or credential.

3. "Graduate school psychology students" refers to those students who are enrolled in school psychology training programs for the purpose of obtaining an advanced degree or credential.

4. "Graduate clinical psychology students" refers to

those students who are enrolled in clinical psychology training programs for the purpose of obtaining an advanced degree or credential.

5. The terms "counselor" and "psychotherapist/therapist" will be used as interchangeable.

6. The terms "counseling" and "psychotherapy" will be used as interchangeable.

7. The Minnesota male and female normal group consists of 425 females and 299 males who were accompanying patients or visiting friends and relatives at the University of Minnesota Hospitals. Any subject who indicated that he was under the care of a physician at the time that he was asked to take the MMPI was excluded from the normative sample. In general, such a Minnesota normal adult was about thirty-five years old, was married, lived in a small rural town or rural area, had had eight years of schooling, and worked at a skilled or semi-skilled trade (or was married to a man with such an occupation level) (Dahlstrom, Welsh & Dahlstrom, 1973).

8. The term "elevation" refers to the high points and low points of the plotted MMPI profile.

9. All MMPI scores are reported as T-scores. T-scores have an arithmetic mean of fifty (M=50) and a standard deviation of ten (S.D. = 10).

10. The term "high point" refers to those scales that have a T value greater than 54 ($T > 54$).

11. The term "low point" refers to those scales that have a T value less than 46 ($T < 46$).

12. The term "slope" refers to the positive or negative skewness of the configuration of the MMPI scale after the profile has been drawn and the high and low points have been plotted.

V. ORGANIZATION OF THE STUDY

This report was designed to examine and compare the MMPI profiles of school, counseling and clinical psychology graduate students, each with the other and with MMPI male and female normals. Furthermore, it was intended to extend our knowledge of the emotional adjustment of individuals already studying within the above stated existing programs.

In the next chapter, a review of the literature that reflects the work of other researchers that are both, directly pertinent and tangential will be discussed. There will be a detailed description of the procedures in chapter three. The remaining chapters will concern themselves with a report of the findings, a discussion of the data and conclusions drawn.

CHAPTER II

REVIEW OF THE LITERATURE

The area of emotional adjustment of graduate psychology students has had very little study. The research falls primarily into several general areas, none of which is wholly germane or reflects sufficient depth or breadth to address the questions raised herein.

This chapter will be divided into seven sections: (1) personality characteristics; (2) therapeutic relationships; (3) counselor motivations; (4) selection procedures; (5) counselor training; (6) MMPI studies; and (7) a summary. Each of the aforementioned areas will be reviewed as they pertain to the current question of the counselor's emotional adjustment.

I. PERSONALITY CHARACTERISTICS

There is agreement that the personal characteristics of a counselor are important, but little agreement on just what these characteristics are; as yet, there is no adequate means of assessing them (Peters & Shertzer, 1974). Some characteristics which have been identified include acceptance, spontaneity, ethical behavior and intellectual competence (Brammer & Shostrom, 1960; Fullmer & Bernard; 1964). Hollis (1965) writes about approachableness, and adaptable

personality, personal understanding (being secure with one's self), patience and empathy. The words that are used by authors to express what the counselor's personality should be have similar nuances and each author seems to move in the same direction.

Two of the most outspoken critics of the counseling field have written that the primary factors that should be given priority in selection and in training are empathic understanding, positive regard, genuineness and concreteness (Carkhuff & Berenson, 1967).

These qualities promote an elusive condition known as "being facilitative." Rogers (1962) has stated that congruence, empathy and unconditional positive regard create in the counselor that state of being facilitative. Yet, the condition of "being facilitative" seems to elude authors and researchers. The value of the counselor's being congruent, real and genuine is such that it can be reiterated that counselor preparation programs should place strong emphasis on the understanding of one's self (Bernard & Fullmer, 1969). In no way can the importance of the counselor's personality be diminished with reference to its effect upon the counselee, as several indirectly related studies demonstrated.

In a study of vocational counseling, it was concluded that methods are not as important in accounting for differing client reactions as are the counselor characteristics

of warmth, interest and understanding (Seeman, 1949).

II. THERAPEUTIC RELATIONSHIPS

Fiedler (1950) investigated the nature of therapeutic relationships. He hypothesized that experts will create relationships which resemble more closely the generally acceptable concept of the "Ideal Therapeutic Relationship" and that the relationship between the patient and therapist is a function of the expertness of the therapist rather than his theoretical orientation or therapeutic technique. Fiedler concluded that it was experience and personality that reflected the outcome of therapy and not the theoretical orientation of the therapist. Whether it is just the counselor's personality or his personality and his orientation that is important (Forgy & Black, 1956) seems like a fruitless debate. What has emerged from the debate is the concept of the "therapeutic personality."

In one study of the therapeutic personality and on the basis of peer judgments, female support personnel who are likely to be the more effective in the therapeutic community are inclined to take their responsibilities seriously, (Gordon, 1973). Moreover, they were found to be more emotionally stable, cautious, trusting of other people and to be more energetic (somewhat like the rural population in Erdberg's study, 1969). They were also rated by their supervisors. However, the supervisors identified only those who tended to have a greater sense of responsibility

and who were the more cautious as the more effective. There was little significance between supervisory and peer ratings, though peer ratings proved to be the most definitive.

A related question in terms of the therapeutic personality is that of sex differences and therapeutic effectiveness. Although this question has not been directly answered, we do know that men and women who aspire to be counselors tend to have similar MMPI profiles (Heikkinen & Wegner, 1973). Since we know that both men and women show considerable interest in the counseling field, it would seem prudent to review some of the reasons they enter the field. Behind all therapeutic relationships are the motivations of the professional.

A rather esoteric and secular view was presented by Shafer (1954) when he stated "the apparent psychodynamics of the psychological tester which influence his behavior in the psychological examination are voyeuristic, autocratic, oracular and saintly." He went on to describe eight different personality types that he felt were pertinent. He cited those with an uncertain sense of their own identity, the socially inhibited or withdrawn, the dependent, those with rigid defenses against dependent needs, the rigidly intellectualistic, the sadistic, those with rigid defenses against hostility and the masochistic. Obviously, Shafer drew no conclusions that might be considered desirable.

Templer (1971) examined the motivational structure of

the therapist and came to conclusions that were not the same as Shafer's. Templer felt that being a psychotherapist is prestigious and made the therapist feel as though he were both omnipotent and powerful. He felt that being a therapist put one in a position to express sadistic tendencies in a socially acceptable and professional manner. He stated that therapists receive sexual gratification during their sessions with people and are in a position to incite "the tickling of emotions" because they can "hear as many types of stories as they are willing to reinforce." His most complimentary statement with reference to motivations was that the therapist is able to gratify his needs for succorance. In as much as we know that some people have a great need to help others, for whatever reason, the field of psychotherapy is a fertile playground. Not all authors, however, focus on the psychodynamics of motivational structure.

III. COUNSELOR MOTIVATIONS

In an article about counselor motivations, Rousseve (1969) made the simple statement that there must be a clarification of motives and values for the counselor and he must be able to view the client with perspective. Applicants to psychiatric residency showed a tendency to compartmentalize their thinking and to intellectualize their relations with people. They also showed a high need for achievement and low impulsivity (Plutchik, Conte & Kandler,

1971). Clinical psychology students tended to be arrogant if their orientation was behavior modification, and analytically oriented students tended to reflect humility (Weiss, 1973). The characteristics of sensitivity, self-awareness, emotional stability and ability to work with staff (Plutchik, Klein & Conte, 1970) must be affected by the attitude of an arrogant individual.

These are divergent approaches to a field with the goal of helping others. An individuals' background certainly can be a determining factor in his mental set. All of the preceding motivational structures must be taken into account when selecting the prospective candidate. When one reviews the basis upon which most, if not all, trainees are selected, it becomes apparent that personal adjustment is not taken fully into consideration.

IV. SELECTION PROCEDURES

Questions have been raised regarding selection procedures. One study found that a negative relationship existed between facilitative functioning and grade point average with a drop in the level of interpersonal functioning following preparation, at least in the essentially analytically-oriented program which was studied (Bergin & Soloman, 1963). Another finding reflected no relationship between facilitative functioning and grade-point average; and it was significant that students with high grade-point averages who were most likely to be selected were not significantly, and

certainly not functionally more effective interpersonally than the low grade-point average students (Carkhuff, Piaget & Pierce, 1968).

Yet another study concluded that the Graduate Record Exam and Miller Analogies test have been woefully inadequate in predicting success in graduate school and even more deficient in assessment of clinical potential (Weiss, 1973). In agreement was Dole (1975) when he wrote "we may be unwise to rely entirely on the Miller Analogies Test or the Graduate Record Examination and the undergraduate grade-point average when we make a decision about selection. We may improve the climate for learning if we inquire systematically about the characteristics of our students. He asks, "Where do they come from? What developmental tasks are they facing? What about their motivations for entering professional psychology?" Much of the thrust of these questions remains unanswered.

It seems paradoxical that academic success is the primary criterion for selection of professional trainees when we require lay personnel to have good personal adjustment (Bartz & Loy, 1969; Gordon, 1973). Furthermore, research on lay counselors raises other questions about professional training.

V. PROFESSIONAL TRAINING

The effect of lay counselors upon patient populations has been a matter of concern and interest for some time. A

fairly substantial body of evidence points to uniformly significant improvement in the patients treated by lay group counseling. Several notable effects of lay group counseling were patients getting discharged, better behavior on the wards, more patient cooperation and less verbal hostility (Verinis, 1970). The suggestion is that a specific but relatively brief training program, devoid of specific training in psychopathology, personality dynamics or psychotherapy theory, can produce relatively effective lay mental health counselors (Carkhuff & Truax, 1965). Additionally, of the five lay counselors used in the Carkhuff and Truax study, three of them had only a high-school education or less, two had attended college, and only one of them had actually completed college. Since lay counselors can be effective without extensive training, one wonders what effect professional training has upon graduate students? In fact, there may be little positive effect.

In studying the effects of professional training on the ability to be facilitative, the efficiency of professional graduate training was not established (Carkhuff, Kratochvil & Friell, 1968). On dimensions related to constructive change there was, at best, no improvement; at worst, there were trends which suggest deterioration in the levels of trainee communication of facilitative conditions with graduate experience. The authors concluded that the greatest drop in level of functioning occurred

during the first year and any increments which might possibly follow this period did not seem to allow the trainee to achieve the level of functioning at which he began. A further observation suggested a thorough examination of graduate training programs. It was interesting to note that those trainees who dropped out of the professional training program were functioning at higher levels than those who stayed in the program. One might posit that we are training those people who are least effective.

In a study of clinician effectiveness, the effective clinicians tended to be (1) those needing to express control over others, (2) wanting to be included in activities by others, and (3) needing to receive and express affection (Cooper, 1965). Eggertson (1965) found a significant positive correlation between clinician effectiveness and the MMPI subscale Hypochondriasis (Hs). Having the preceding or similar information either at selection or during training could be most beneficial.

VI. MINNESOTA MULTIPHASIC PERSONALITY INVENTORY STUDIES

To date, there has been a limited number of studies which attempt to correlate counselor personality characteristics with the MMPI. In a study of seminary students, Bier (1948) found that seminarians scored higher on the Mf scale than the college control group. It is important to note that the college group profile in Bier's study (N=369)

closely paralleled the normals in the original MMPI sample. In point of fact, when college normals are randomly taken as a group and administered the MMPI, it is most noticeable that they deviate very little from the original MMPI normal males and females, scoring slightly but not significantly higher on the clinical scales: Hypochondriasis, Depression, Hysteria, Paranoia, Psychasthenia, Schizophrenia, Hypomania and Social Introversion (Spiaggia, 1950; Norman & Redlo, 1952; Schofield, 1953; Drasgow & McKenzie, 1958). The same authors found that their college normals scored significantly higher on the Mf scale and one researcher (Taft, 1961) found that his group of male college normals scored significantly higher on both the Pd and Mf scale. When psychology and sociology senior and graduate students were grouped, they reflected an MMPI protocol that had elevations which exceeded a T-score of sixty ($T > 60$) on the Pd and Mf scale (Norman & Redlo, 1952). There do not appear to be substantial differences between MMPI normals and college normals. Yet, a similarity has been noted between the profiles of males and females in the counseling field with certain MMPI scales that are elevated.

Both males and females reflect "feminine" characteristics, i.e., they tend to be more people-oriented than others in our culture. In addition, their K score is higher than the general norm, indicating that they are more defensive. They have lower Si scores which means they are more extroverted, and their Pd scores indicate more deviancy

from social norms and conventions (Wrenn, 1952; Cottle & Lewis, 1954; Brams, 1961; Patterson, 1962; Foley & Proff, 1965; Heikkinen & Wegner, 1972). However, there would appear to be a limit to which MMPI scale scores may deviate and beyond which counselors may be assessed as undesirable or ineffective.

Seventy counselor trainees were asked to select those of their peers that they would want as a counselor. Most of the trainees preferred peers who subsequently scored significantly lower than themselves on the MMPI scales Hs, D, Hy, Pd, Pt, Sc, and Si with scores within T-score higher than forty ($T > 40$) and T-score lower than sixty ($T < 60$). The rejected trainees scored significantly higher in general on Hs, Hy, Pd, Pa, and Ma; and both D and Hs tended to exceed a T-score of sixty ($T > 60$). All differences were signifiant at the .01 level (Arbuckle, 1956). The clear implication from these results is that counselors in training not only recognize a more prominent degree of pathology in their peers but also, they will quickly reject as a potential counselor/therapist that individual who is not well adjusted. The emotional adjustment of the therapist trainee again becomes a prime factor in the helping profession field.

Being emotionally stable seems to be an important quality when interacting with patients (Gordon, 1973).

All of the aforementioned studies report results but fall short of interpreting group personality profiles in clinical terms of elevations and slopes.

VII. SUMMARY

Research shows that motivations for entering the field of psychology and the personality of the counselor are of prime importance. Even so, there has been no research of a clinically interpretive nature utilizing the MMPI. Critics feel that more knowledge about the counselors' personality would be most useful. And yet, there is still an emphasis in counselor selection which reflects academic achievement and high scores on standardized exams without taking the personality of the prospective counselor into full consideration.

Academic training of clinical people has come under attack because of studies suggesting little increase in interpersonal functioning during training. And as an increment of insult, lay personnel are shown to be most effective with patients, some without training and some with minimal training. But in all cases, there is an emphasis upon mental health of the lay personnel. Yet, not a great deal is known about the mental health of prospective students and students in training.

In view of the importance of good personal adjustment and the possible ramifications of poor adjustment, this study represents an initial effort to investigate the mental health of professionals in training.

CHAPTER III

DESIGN AND PROCEDURES

This study was designed to determine what differences, if any would exist between clinical psychology, counseling psychology and school psychology graduate students upon administration of the Minnesota Multiphasic Personality Inventory. The MMPI was also used to determine if differences exist between the graduate groups and the MMPI population. Since the MMPI yields a profile, for the purposes of scale comparisons, expert judges were asked to evaluate the profiles of each of the graduate groups.

I. SAMPLE

The subjects making up the sample consisted of graduate clinical psychology students (N=35), counseling psychology students (N=48) and school psychology students (N=30). Each student participating had to be enrolled in a degree program. The sample did not include those students who were auditing courses. The sample included populations from four large state universities and two small private universities in Northern California. Two large state universities declined to participate in this research.

II. PROCEDURE

Data from the MMPI were collected from three groups of subjects: clinical psychology, counseling psychology and school psychology graduate students. Each of the Universities involved in the study allowed the researcher to speak to graduate classes in order to enlist their cooperation. Each class that was approached did, in fact, agree to participate. If a student was absent and wished to be involved, the class instructor had an additional number of MMPI forms that he could give to the absent student for completion.

Students were given an MMPI to complete and return to the researcher. All MMPI's were not given at the same time, in that the researcher visited the various universities at different periods. Since all of the MMPI's given to students were valid, there wasn't any need to institute a make-up procedure. In order to analyze results, certain statistical procedures were utilized.

III. STATISTICAL PROCEDURES

A two-way Analysis of Variance was used to determine what differences existed between the graduate groups. If a significant F ratio was achieved, the Newman-Keuls Method for making separate comparisons between each pair of subject groups was utilized. In order to compare the graduate to the MMPI normal population, a t test for the Difference Between Means was used.

IV. EXPERT RATINGS

As an additional step, three expert judges were asked to evaluate the profiles of each graduate group. Each judge was sent a stamped self-addressed envelope for returning evaluations, a profile of each of the six graduate groups that reflected mean T-scores for each scale and a frequency distribution of T-scores for each group.

Of the three judges that were contacted, only one responded. Dr. Harrison Gough was on vacation but I was told that a visiting research professor might cooperate. The visiting professor was Dr. W. Grant Dahlstrom who is the author of the MMPI Handbook, and he did respond.

V. HYPOTHESES

The first three hypotheses tested were concerned with the validity scales of the MMPI.

Hypothesis I. There will be no significant differences on the Lie (L) Scale between the graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the L Scale.

Hypothesis II. There will be no significant differences on the F (validity) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the F scale.

Hypothesis III. There will be no significant differences on the K (Psychological Defensiveness) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the K scale.

The next ten hypotheses will concern themselves with the Clinical Scales of the MMPI.

Hypothesis IV. There will be no significant differences on the Hypochondriasis (Hs) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Hs Scale.

Hypothesis V. There will be no significant differences on the Depression (D) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the D Scale.

Hypothesis VI. There will be no significant differences on the Hysteria (Hy) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Hy Scale.

Hypothesis VII. There will be no significant differences on the Psychopathic Deviate (Pd) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Pd Scale.

Hypothesis VIII. There will be no significant differences on the Masculinity/Feminity (Mf) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Mf Scale.

Hypothesis IX. There will be no significant differences on the Paranoia (Pa) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Pa Scale.

Hypothesis X. There will be no significant differences on the Psychasthenia (Pt) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Pt Scale.

Hypothesis XI. There will be no significant differences on the Schizophrenia (Sc) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Sc Scale.

Hypothesis XII. There will be no significant differences on the Hypomania (Ma) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Ma Scale.

Hypothesis XIII. There will be no significant differences on the Social Introversion (Si) Scale between graduate groups.

Sub-hypothesis A: There will be no significant differences between males and females on the Si Scale.

In order to compare the six groups measured with the MMPI normals, a t test for the Differences Between Means was utilized. Differences were considered significant if they reached to the .05 level of confidence. The following hypotheses were tested:

Hypothesis XIV. There will be no significant differences

between the Clinical males and the normal population of the MMPI.

Hypothesis XV. There will be no significant differences between the Clinical females and the normal population of the MMPI.

Hypothesis XVI. There will be no significant differences between Counseling males and the normal population of the MMPI.

Hypothesis XVII. There will be no significant differences between Counseling females and the normal population of the MMPI.

Hypothesis XVIII. There will be no significant differences between School Psychology males and the normal population of the MMPI.

Hypothesis XIX. There will be no significant differences between School Psychology females and the normal population of the MMPI.

Since the MMPI also yields information in terms of a profile configuration, three expert judges were asked to evaluate each of the six profiles. The three judges asked did not respond but a fourth judge did evaluate the six profiles. The judge was given a composite profile of each group which reflected mean T-scores, the standard deviation for each scale and a frequency distribution which showed T-scores in terms of frequency of occurrence. The expert judge did not know who the groups were or what they might

represent. The profile reading was of the blind type.

VI. SUMMARY

This study was conducted during the Spring of 1976. The sample included four large state universities and two small private universities. For purposes of analysis, a Two-Way Analysis of Variance was utilized for graduate group comparisons. Furthermore, a t test for the Difference Between Means was used for the analysis of differences between each of the six sample groups and the MMPI normals. One-hundred and thirteen (N=113) subjects participated in this study. The .05 level of confidence was adopted for all analyses of variance and t tests. The next chapter will review the results of the study.

CHAPTER IV

I. RESULTS

This chapter will focus on the statistical and evaluative treatment of the data. It will be divided into three broad sections. The first section will provide a review of various MMPI scales, in two ways, for the six sample groups and the males and females. The second section will provide an examination of the *t* tests and how they relate to differences that have occurred between the six sample groups and the normal population. Each of the six sample graduate groups will be referred to in the following manner: Clinical males, Clinical females, Counseling males, Counseling females, School males and School females. The third section will be devoted to the evaluation process of the expert judge.

II. INTERGROUP COMPARISONS OF GRADUATE STUDENTS

As the hypotheses are reviewed and their individual results discussed, all of the data will be presented in tables. For the first thirteen hypotheses, where significant results exist, the data will be illustrated by tables of Two-Way Analyses of Variance (ANOVA). The Newman-Keuls Method for determining differences will be utilized when indicated.

In order for a single administration of the MMPI to be acceptable, the completed instrument must be valid. The MMPI incorporates three separate scales for the purpose of determining validity. These scales reflect the internal validity of the instrument for any given subject on the clinical scales. The first three hypotheses investigate the validity scales: L, F and K.

Hypothesis I. A manifest difference exists on the Lie (L) Scale between the graduate groups. Therefore, the null hypothesis is rejected. However, there was not any difference between males and females. Table I presents the Two-Way Analysis of Variance comparing the six sample groups on the Lie Scale variable. (See page 36)

Because a significant F ratio was reached (.01 level), the Newman-Keuls Method for making separate comparisons between each pair of subject groups on the Lie Scale was used. Table II presents a summary of the information gained from the application of the Newman-Keuls. (See page 36)

According to the results of the Newman-Keuls test, the Counseling females were significantly higher than the Clinical males (.05 level). The Counseling males were significantly higher than the Clinical males (.05 level) and the School males were significantly higher than the Clinical males (.05 level). The Clinical males scored in the low-range of the Lie Scale while the other three groups were in the middle-range wheremost individuals score, indicating

TABLE I

ANALYSIS OF VARIANCE - TWO WAY

LIE (L) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	363.66	181.83	7.86	.01
Within Groups	1	1.77	1.77	--	--
Interaction	2	39.88	19.94	--	--

TABLE II

NEWMAN-KEULS METHOD

LIE (L) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	N	S.D.	MEAN T-SCORE
1. Clinical Males	21	3.01	40.67
2. Clinical Females	14	3.98	42.43
3. Counseling Males	15	6.13	46.00
4. Counseling Females	33	5.21	46.39
5. School Males	10	2.53	45.20
6. School Females	20	5.79	43.85

	Counseling Females	Counseling Males	School Males
Clinical Males	4.53*	5.33*	5.73*

*Significant at .05 level

"care and discrimination in answering the items (and in the remainder of the test)."

There has not been extensive study of low-range scoring on the Lie Scale. However, low scores have several possible interpretations. There is evidence to indicate that people who wish to appear extremely pathological may score low. Also, those who are relatively independent and self-reliant may score low. It would be difficult to believe that Clinical males would attempt to represent themselves as disturbed. However, they were lower than three of the other groups and lower than the Clinical females and the School females, although not significantly so.

Hypothesis II. A manifest difference exists on the F (Validity) Scale between the graduate groups. Therefore, the null hypothesis is rejected. The F Scale is a check upon the validity of the entire instrument. When it is high, the other scales are likely to be invalid. Table III presents the Two-Way Analysis comparing the six groups on the F Scale variable. (See page 38)

Since there was a significant F ratio, Table IV presents the information derived from the use of the Newman-Keuls Method for making separate comparisons between each pair of subject groups on the F Scale. (See page 38)

The Newman-Keuls test reflected that Clinical females had significantly higher mean T-scores than the Counseling males (.01 level) and were also higher than the School males

TABLE III

ANALYSIS OF VARIANCE - TWO WAY

F (VALIDITY) SCALE

MINNESOTA MULTIPHASIC PERSONALITY PROFILE

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	1045.76	552.88	11.43	.01
Within Groups	1	151.31	151.31	--	--
Interaction	2	62.16	31.08	--	--

TABLE IV

NEWMAN - KEULS METHOD

F (VALIDITY) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	N	S.D.	MEAN T-SCORE
1. Clinical males	21	7.17	55.90
2. Clinical females	14	5.40	56.43
3. Counseling males	15	10.58	46.40
4. Counseling females	33	6.31	50.82
5. School males	10	3.51	48.90
6. School females	20	5.31	51.40

	CLINICAL MALES	CLINICAL FEMALES
Counseling males	9.51**	10.03**
School males	7.01*	7.53*

** significant at the .01 level

* significant at the .05 level

(.05 level). Even though the differences are statistically significant, and the groups do differ, all T-scores still fell into the middle-range of validity. Scores in the middle-range are found in normative situations and most clinical settings.

The Clinical males scored significantly higher mean T-scores than the Counseling males (.01 level) and the School males (.05 level). These differences are indicative of primary distinctions that should be drawn when reviewing the F Scale and its effect upon the validity of other scales. Most normal people achieve an F score from 0 to 5 (T = 44 to 53, respectively). Deviant personality reactions fall between 4 and 10 (T = 53 to 60, respectively). If the F score is 10 to 16 (T = 60 to 66, respectively), it is moderately high.

None of the graduate groups reached the moderately high level. However, the Clinical males and females had F scores that would indicate that they are in the range of those individauls that might manifest "deviant personality reactions" and "a variety of patients with neurotic and character disorders (Dahlstrom & Welsh, 1962)." These conclusions might be appropriately applied even though mean T-scores were in the normal range.

Hypothesis III. A manifest difference exists on the K (Psychological Defensiveness) Scale. Therefore, the null hypothesis is accepted. The sample did not reflect a psychological defensiveness that would distinguish them as groups.

Additionally, males and females were not different in their approach to the questions on this scale. All of the groups had T-scores in the high average range. Individuals who score in the high average range usually are well adjusted. However, when such individuals get into psychological difficulties, they will attempt to put up a facade that will make them appear to be functioning adequately.

The following hypotheses concern themselves with the clinical scales of the MMPI. Although the Masculinity/ Femininity Scale and the Social Introversion Scale are not clinical in the strictest sense, nevertheless, they are included in the clinical grouping. The clinical scales will indicate the presence or absence of pathology.

Hypothesis IV. A difference on the Hypochondriasis (Hs) Scale between graduate groups does not exist. Therefore, the null hypothesis is accepted. However, the sub-hypothesis for differences between males and females is rejected. There does exist a manifest difference on T-scores for males and females on this scale. The Hs Scale suggests abnormal concern with bodily functions. Table V presents the Two-Way Analysis of Variance comparing the six sample groups on the Hs Scale. (See page 41)

According to the Two-Way Analysis of Variance, males and females differ significantly (.05 level) on the Hs Scale with the males having higher mean T-scores than the females. This analysis indicates that males as a group will be higher than females in bodily concern. The males in

TABLE V

ANALYSIS OF VARIANCE - TWO WAY

HYPOCHONDRIASIS (Hs) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	347.93	173.97	--	--
Within Groups	1	433.15	433.15	6.81	.05
Interaction	2	55.06	27.53	--	--

the sample consistently had higher mean T-scores than their female counterparts.

Hypothesis V. A manifest difference exists on the Depression (D) Scale between graduate groups. Therefore, the null hypothesis is rejected. Table VI presents the Two-Way Analysis of Variance comparing the six sample groups on the D Scale variable.

TABLE VI

ANALYSIS OF VARIANCE

DEPRESSION (D) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	1246.31	623.16	6.32	.01
Within Groups	1	279.41	279.41	--	--
Interaction	2	419.97	209.98	--	--

There was a significant F ratio; therefore, the following Table VII reflects the information derived from the Newman-Keuls method for determining differences.

TABLE VII

NEWMAN - KEULS METHOD

DEPRESSION (D) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	N	S.D.	MEAN T-SCORES
1. Clinical males	21	14.92	62.57
2. Clinical females	14	9.92	53.86
3. Counseling males	15	7.85	50.13
4. Counseling females	33	9.61	51.48
5. School males	10	4.98	51.90
6. School females	20	6.36	49.15

	SCHOOL MALES	COUNSELING FEMALES	COUNSELING MALES	SCHOOL FEMALES
Clinical males	10.67*	11.09*	12.44**	13.42**

**significant at the .01 level

 * significant at the .05 level

The Newman-Keuls method resulted in differences between the Clinical males and several other groups. The Clinical males had significantly higher T-scores than the School

females (.01 level) and the Counseling males (.01 level). Also, the Clinical males had significantly higher T-scores than the Counseling females (.05 level) and the School males (.05 level). This was the first scale wherein the mean T-score for a group ranged into the sixties. This scale indicates that Clinical males reflect significantly more depression than all other groups except the Clinical females. It should be noted that a T-score in the sixties suggests that a marginal condition may exist and that a range of abnormality is being reached.

Hypothesis VI. A difference between graduate groups on the Hysteria (Hy) Scale does not exist. Therefore, the null hypothesis is accepted. There is a significant difference between males and females. Therefore, the sub-hypothesis is rejected. This scale measures the degree to which the subject is like patients who have developed conversion-type hysteria symptoms. As Dahlstrom notes:

> "These patients appear to use physical symptoms as a means of solving difficult conflicts or avoiding mature responsibilities. This resort to physical disorder may appear only under stress, while in ordinary circumstances no clear personality inadequacy is readily demonstrable. (Dahlstrom, Welch & Dahlstrom, 1973)."

Table VIII presents the Two-Way Analysis of Variance comparing the six sample groups on the Hy Scale. (See page 44) According to the Two-Way Analysis of Variance males and females differ significantly (.05 level) on the Hy scale with the males having higher mean T-scores than the females. The Counseling and School males had mean

TABLE VIII

ANALYSIS OF VARIANCE - TWO WAY

HYSTERIA (Hy) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	206.04	103.02	--	--
Within Groups	1	371.76	371.76	6.11	.05
Interaction	2	29.28	14.64	--	--

T-scores in the high fifties; but the Clinical males were in the low sixties. In each of the groups that were measured, the males consistently had higher mean T-scores than the females. The Clinical males again reached into the marginal range of adjustment.

Hypothesis VII. A manifest difference exists on the Psychopathic Deviate (Pd) Scale between graduate groups. Therefore, the null hypothesis is rejected. This scale measures the absence of deep emotional response, inability to profit from experience and disregard of social mores. Table IX presents the Two-Way Analysis of Variance comparing the six sample groups of the Pd Scale variable. (See page 45)

Since the ANOVA reflected a significant F ratio, the Newman-Keuls Method for making separate comparisons between each pair of subject groups was utilized. Table X presents the results of the Newman-Keuls test. (See page 45)

TABLE IX

ANALYSIS OF VARIANCE - TWO WAY

PSYCHOPATHIC DEVIATE (Pd) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	1466.46	733.23	6.67	.01
Within Groups	1	40.76	40.76	--	--
Interaction	2	472.26	236.13	--	--

TABLE X

NEWMAN - KEULS METHOD

PSYCHOPATHIC DEVIATE (Pd) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	N	S.D.	MEAN T-SCORES
1. Clinical males	21	11.09	69.43
2. Clinical females	14	12.26	65.36
3. Counseling males	15	10.66	61.60
4. Counseling females	33	9.37	56.91
5. School males	10	10.13	56.70
6. School females	20	10.31	61.60

	COUNSELING FEMALES	SCHOOL MALES
Clinical males	12.52*	12.73**

**significant at the .01 level

*significant at the .05 level

According to the results of the Newman-Keuls test, the Clinical males had significantly higher mean T-scores than the School males (.01 level) and Counseling females (.05 level). The statistical differences suggest that the Clinical males do not establish as close an emotional bond as do the School males and Counseling females.

However, it should be noted that the Clinical and Counseling males and School females all had mean T-scores that ranged into the sixties, all of which is indicative of attitudes that may be troublesome to them.

Hypothesis VIII. A manifest difference on the Masculinity/Femininity (Mf) Scale between graduate groups does not exist. Therefore, the null hypothesis is accepted. However, the sub-hypothesis for differences between males and females is rejected; there is a significant interaction which exists between the groups. This scale measures the tendency toward masculine or feminine interest patterns. Table XI presents the Two-Way Analysis of Variance comparing the six sample groups on the Mf Scale. (See page 47)

The difference between males and females on the Mf Scale is significant (.01 level). Males tended to score quite high with mean T-scores in the high sixties and low seventies. This suggests an interest pattern opposite to their given social role. In other words, they have developed opposite to the expected male role or had experiences that perpetuated feminine interest patterns. Females scored in

the direction of feminine interest patterns that are commensurate with the expected role variables of Western society.

TABLE XI

ANALYSIS OF VARIANCE - TWO WAY

MASCULINITY/FEMININITY (Mf) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	124.40	62.20	--	--
Within Groups	1	18,378.18	18,378.18	228.30	.01
Interaction	2	1,535.77	767.88	9.54	.01

The ANOVA reflected an interaction factor that was significant (.01 level). Apparently, there is an area of commonality, in terms of direction of interest patterns, between the sexes wherein males and females share a substantial portion of their own psychic qualities or, possibly, role identities. It would seem appropriate to view this area of commonality as role infusion due to interest patterns, rather than role confusion. In other words, males as a group in graduate psychology tend toward more aesthetic and sedentary activities with interests in the arts. However, it should be noted that certain of the males scored sufficiently high on this scale as to suggest

difficulty with their identity. It is clear that graduate psychology males do not represent traditional masculine role models as measured by the MMPI.

Hypothesis IX. A manifest difference on the Paranoia (Pa) Scale between graduate groups did not exist. Therefore, the null hypothesis is accepted. The sample groups did not reflect a significant difference between mean T-scores. All of the mean T-scores were T > 50 and T < 60. The Clinical males and the highest mean T-scores of the six sample groups (T=59).

Hypothesis X. A manifest difference exists on the Psychasthenia (Pt) Scale between graduate groups and between males and females. Therefore, both the main and sub-hypothesis is rejected. This scale measures the similarity of the subject to psychiatric patients who are troubled by phobias or compulsive behavior. Table XII presents the Two-Way Analysis of Variance comparing the six sample groups on the Pt Scale variable. (See page 49)

Because there was a significant F ratio obtained in the computation of the ANOVA, the Newman-Keuls Method for making separate comparisons between each pair of subject groups was utilized. Table XIII presents the information derived from the use of the Newman-Keuls test. (See page 49)

The Newman-Keuls test resulted in significant differences. The Clinical males had a significantly higher mean T-score

TABLE XII

ANALYSIS OF VARIANCE - TWO WAY

PSYCHASTHENIA (Pt) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	955.67	477.83	5.54	.01
Within Groups	1	355.15	355.15	4.12	.01
Interaction	2	273.48	136.74	--	--

TABLE XIII

NEWMAN - KEULS METHOD

PSYCHASTHENIA (Pt) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	N	S.D.	MEAN T-SCORES
1. Clinical males	21	14.74	63.00
2. Clinical females	14	7.05	54.57
3. Counseling males	15	8.54	53.33
4. Counseling females	33	8.66	51.06
5. School males	10	4.84	52.50
6. School females	20	5.63	51.80

	COUNSELING MALES	SCHOOL MALES	SCHOOL FEMALES	COUNSELING FEMALES
Clinical males	9.67*	10.50*	11.20*	11.94**

**significant at the .01 level

*significant at the .05 level

than the Counseling females (.01 level). The Clinical males were also significantly higher than the School and Counseling males and the School females (.05 level). The Clinical males had a mean T-score of sixty three (T=63). The indication is that Clinical males are bothered by a degree of anxiety. They are significantly higher than four of the other groups and range into a T-score that is strongly suggestive of marginal adjustment.

An additional significant difference was found between males and females (.01 level). Apparently, males and females are highly different in their response to items in the Pt Scale. Generally speaking, the males manifest more symptomology on the Pt Scale than do the females. One can assume that males have a more defensive reaction to stress; therefore, leaving them increasingly vulnerable to mental illness.

Hypothesis XI. A manifest difference exists on the Schizophrenia (Sc) Scale between graduate groups. Therefore, the null hypothesis is rejected. As the Sc scale rises, it measures the similarity of the subject's responses to those patients who are characterized by bizarre and unusual thoughts and behaviors. Table XIV presents the Two-Way Analysis of Variance comparing the six sample groups on the Sc Scale variable. (See page 51)

A perusal of the ANOVA reflects an F ratio which yielded a significant difference between groups. Also, there

TABLE XIV

ANALYSIS OF VARIANCE - TWO WAY

SCHIZOPHENIA (Sc) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SOURCE	DF	SS	MS	F	P LESS THAN
Between Groups	2	1013.16	506.58	6.74	.01
Within Groups	1	106.99	106.99	--	--
Interaction	2	670.15	335.08	4.46	.05

was an interaction effect. Table XV presents the information derived from the use of the Newman-Keuls Method for making separate comparisons between each of the subject groups on the Sc Scale. (See page 52)

According to the Newman-Keuls test, Clinical males had a significantly higher mean T-score than the School males and the Counseling females (.01 level). The Clinical males also had a significantly higher mean T-score than the School females (.05 level). The mean T-score for the Clinical males was sixty-five (T=65). The middle range of the sixties is even more marginal than one would expect in terms of adjustment and manifestation of symptomology. The Clinical males might have difficulty controlling hostility or be opinionated with mood changes that represent major internal conflicts. The significance noted above apparently differentiates the groups quite well.

TABLE XV

NEWMAN - KEULS METHOD

SCHIZOPHRENIA (Sc) SCALE

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	N	S.D.	MEAN T-SCORES
1. Clinical males	21	12.30	65.29
2. Clinical females	14	5.91	57.21
3. Counseling males	15	10.70	56.53
4. Counseling females	33	7.86	53.70
5. School males	10	8.77	51.60
6. School females	20	3.92	56.25

	SCHOOL FEMALES	COUNSELING FEMALES	SCHOOL MALES
Clinical males	9.04*	11.50**	13.69**

**significant at the .01 level

*significant at the .05 level

An examination of the mean T-scores reflects an area of overlap in scores achieved, thus a significant interaction variable (.05 level) working. The area of overlap in the scores represents those factors that fall into a common sphere of the six sample groups. The interaction factor reflects a significant area of commonality that both males and females share. In other words, they answered a

significant number of MMPI questions in a like manner on the Sc scale.

Hypothesis XII. A manifest difference on the Hypomania (Ma) Scale between groups or between males and females did not exist. Therefore, the null hypothesis is accepted. This scale measures the personality characteristics of persons with marked overproductivity in thought and behavior. It should be noted that the Clinical males and females and the Counseling males obtained mean T-scores in the low sixties. The primary interpretation would be that graduate students might, in fact, be overproductive in thought processes.

Hypothesis XIII. A manifest difference on the Social Introversion (Si) Scale between graduate groups or between males and females did not exist. Therefore, the null hypothesis is accepted. All of the sample groups had mean T-scores which indicate an average or above average interest social contacts and emotional relations.

This concludes the section that statistically analyzed the data with an Analysis of Variance. It is clear that distinctions do exist between groups on many of the MMPI scales. In all instances, the Clinical males had higher T-scores than the other groups, many of which were higher at a statistically significant level. The Clinical females were significantly higher than the other groups on several of the scales. There were distinctions found between males and females.

III. COMPARING GRADUATE GROUPS WITH MMPI NORMALS

Since the MMPI uses as its reference point a norm group with which to compare a profile in terms of standardized scores, it seemed prudent and useful to compare the scores of the six sample groups with the normal population of the MMPI. The basic purpose of this comparison is to determine what differences exist, if any, and how generalized are those differences from the normal population. Are the six sample groups manifestly different or do they share common psychic qualities with the normals? In order to perform an analysis, a *t*-test for the Difference Between Means was employed. The following hypotheses were tested:

Hypothesis XIV. There exists a manifest difference between the Clinical males and the normal population on eleven of the thirteen scales of the MMPI. Therefore, the null hypothesis is rejected. Table XVI presents the *t*-test for the Difference Between Means between the Clinical males and the MMPI norm group. (See page 55)

An examination of Table XVI reflects the highly significant differences that exist between the Clinical males and the MMPI norm group. The Lie Scale is significantly lower than that of the normal population (.001 level). The F (Validity) Scale which checks the overall validity of the instrument was significantly higher than the norm group

TABLE XVI

t-TEST FOR THE DIFFERENCE BETWEEN MEANS

CLINICAL MALES AND MMPI NORMAL POPULATION

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	MEAN T SCORES	STANDARD DEVIATION	VARIANCE	t VALUES
Lie	40.67	3.01	9.03	-14.23****
F	55.97	7.17	51.39	3.78***
K	57.24	8.98	80.69	3.69***
Hypochondriasis	55.48	12.73	162.06	--
Depression	62.57	14.92	222.56	3.86****
Hysteria	61.57	7.33	53.76	7.23****
Psychopathic Deviate	69.43	11.09	123.06	8.03****
Masculinity/ Femininity	78.57	10.52	110.66	12.45****
Paranoia	59.43	9.42	88.76	4.59****
Psychasthenia	63.00	14.74	217.30	4.04****
Schizophrenia	65.29	12.30	151.31	5.69****
Hypomania	61.43	11.15	124.36	4.70****
Social Introversion	50.19	9.15	83.76	--

****significant at the .001 level

***significant at the .01 level

(.01 level) but well within normal limits. The K (Psychological defensiveness) Scale was significantly higher than

that of the normal population (.01 level).

An additional check of the validity of the MMPI is the F minus K index. The raw score of K is subtracted from the raw score of F. It has been demonstrated that the median score for normals is -9, when K is subtracted from F. The Clinical males had an F minus K index of -11 which renders their profile as valid by normal limits.

The Clinical scales of the MMPI also reflected some interesting and important differences. The Depression and Hysteria scales were both significantly higher than the norm (.001 level). The Psychopathic Deviate and Masculinity/Femininity scales were also significantly higher (.001 level). The Paranoia, Psychasthenia, Schizophrenia and Hypomania scales all exceeded significance (.001 level).

It would seem reasonable to assume that the Clinical males that were measured are quite different from the normal population of the MMPI when taken as a group. They almost consistently reflect mean T-scores that are in the deviant direction. Only the Lie scale fell below the mean of the norm group, while the other two validity scales, F and K, were above the mean of the norm.

Hypothesis XV. A manifest difference exists between the Clinical females and the normal population of the MMPI on ten of the thirteen scales. Therefore, the null hypothesis is rejected. Table XVII presents the *t*-test for the Difference

Between Means for the Clinical females and the norm group on the MMPI.

TABLE XVII

t-TEST FOR THE DIFFERENCE BETWEEN MEANS

CLINICAL FEMALES AND THE MMPI NORMAL POPULATION

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SCALES	T MEAN SCORES	STANDARD DEVIATION	VARIANCE	t-VALUES
Lie	42.43	3.98	15.80	-7.13****
F	56.43	5.40	29.19	4.45****
K	56.57	4.99	24.88	4.93****
Hypochondriasis	49.50	1.68	39.50	--
Depression	53.86	9.92	98.44	--
Hysteria	56.14	10.49	109.99	2.19*
Psychopathic Deviate	65.36	12.26	150.40	4.69****
Masculinity/ Femininity	40.07	8.47	71.76	-4.39****
Paranoia	57.64	10.95	119.94	2.61*
Psychasthenia	54.57	7.05	49.65	2.43*
Schizophrenia	57.21	5.91	34.95	4.57****
Hypomania	50.14	8.16	66.59	4.65****
Social Introversion	51.36	5.06	25.63	--

****significant at the .001 level

*significant at the .05 level

An examination of Table XVII is indicative of the differences that exist between the Clinical females and the normal population. The Lie scale is significantly below that of the norm group (.001 level) with the F scale being significantly above the norm (.001 level) but well within normal limits. The K scale is also significantly above that of the normal population (.001 level) but within acceptable limits. The F minus K index for Clinical females is -11 which is within the normal range. Thus, the overall stability of the measurement is upheld.

The clinical scales showed that the Hysteria scale significantly exceeded that of the norm (.05 level). The Psychopathic Deviate Scale also reached significant proportions (.001 level) with a mean T-score in the mid sixties. The Paranoia and Psychasthenia scales were above the normal population (.05 level) while the Schizophrenia and Hypomania scales also were significant (.001 level). The Masculinity/Femininity scale fell significantly below the norm (.001 level).

Since ten of the scales were significantly above that of the norm group, it appears that Clinical females manifest distinctively different personality patterns than the normals when measured as a group. The general profile of the Clinical females is sufficiently elevated to warrant close attention, suggesting some covert or latent maladjustment.

Hypothesis XVI. There exists a manifest difference between the Counseling males and the normal population of

the MMPI on nine of the thirteen scales. Therefore, the null hypothesis is rejected. Table XVIII presents the data derived from the t-test for the Difference Between Means for the Counseling males and the MMPI normal population. (See page 60)

An examination of Table XVIII reflects the nine significant differences that exist between the Counseling males and the norm group. The Lie scale is significantly lower than that of the norm (.05 level). The K scale is significantly higher than that of the norm (.01 level) but well within the normal limits. The F minus K index is -16 and therefore, the validity is acceptable.

Both the Psychopathic Deviate and the Masculinity/Femininity scales were significantly higher than the norm (.001 level). The Psychopathic Deviate scale being high suggests that the Counseling males tended to deviate in their approach to emotional involvement and were less conventional in their behavior patterns. The Masculinity/Femininity Scale was sufficiently high as to indicate a definite tendency toward feminine interest patterns. "The feminism of these men appears in their values, attitudes and interests, and styles of expression and speech, as well as in sexual relationships. (Dahlstrom, Welsh & Dahlstrom, 1973)." The extent of deviation may only be demonstrated in each case taken individually.

The Paranoia scale reached significance (.02 level) as did the Schizophrenia and Hypomania scales (.001 level).

TABLE XVIII

t-TEST FOR THE DIFFERENCE BETWEEN MEANS

COUNSELING MALES AND THE MMPI NORMAL POPULATION

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SCALE	MEAN T SCORES	STANDARD DEVIATION	VARIANCE	t VALUES
Lie	46.00	6.13	37.57	-2.53*
F	46.40	10.58	111.97	--
K	57.60	9.13	83.26	3.23***
Hypochondriasis	50.13	5.54	30.70	--
Depression	50.13	7.86	61.70	--
Hysteria	57.07	7.79	60.64	3.51***
Psychopathic Deviate	61.60	10.66	113.54	4.22****
Masculinity/ Femininity	69.27	9.41	70.78	8.87****
Paranoia	54.13	5.48	29.98	2.92**
Psychasthenia	53.33	8.54	72.95	--
Schizophrenia	56.53	10.70	114.55	2.36*
Hypomania	63.40	8.45	71.40	6.14****
Social Introversion	45.33	6.40	40.95	-2.82**

****significant at the .001 level

***significant at the .01 level

**significant at the .02 level

*significant at the .05 level

All were in the deviant direction, suggesting movement away from the norm. The Social Introversion scale was significant in a negative direction (.02 level), which suggests that Counseling males tend to be more socially and people oriented or feel better about others than do the normal population.

Hypothesis XVII. A manifest difference exists between the Counseling females and the normal population of the MMPI on seven of the thirteen scales. Therefore, the null hypothesis is rejected. Table XIX presents the data derived from the _t_-test for the Difference Between Means for the Counseling females and the MMPI normal population. (See page 62)

An examination of Table XIX reflects the seven scales which were significantly different. The Lie scale was significantly lower than that of the norm (.001 level). The K scale was significantly higher than the normal population (.001 level). The F minus K index was -12 which upholds the general validity of the measurement.

Of the Clinical scales, Hysteria was significantly higher (.01 level) and the Psychopathic Deviate scale also reached a level of confidence (.001 level). The Paranoia scale reached significance (.01 level) as did the Schizophrenia scale (.001 level). Although significance existed for seven of the scales, all T-scores still fell within the normal range of scores. However, there is clinical reason to believe that under stress, those scales that reached

TABLE XIX

t-TEST FOR THE DIFFERENCE BETWEEN MEANS

COUNSELING FEMALES AND MMPI NORMAL POPULATION

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY SCALES

SCALE	MEAN T SCORE	STANDARD DEVIATION	VARIANCE	t VALUES
Lie	46.39	5.21	27.18	-3.97****
F	50.82	6.31	39.84	--
K	55.97	8.86	78.47	3.87****
Hypochondriasis	47.82	6.98	48.65	--
Depression	51.49	9.61	92.38	--
Hysteria	54.03	7.99	63.78	2.90***
Psychopathic Deviate	56.91	9.37	87.77	4.24****
Masculinity/ Femininity	47.00	9.38	87.94	--
Paranoia	53.91	7.81	61.02	2.88***
Psychasthenia	51.06	8.66	75.06	--
Schizophrenia	53.70	7.86	61.78	2.70**
Hypomania	56.70	9.17	84.16	4.19****
Social Introversion	52.67	10.67	113.92	--

****significant at the .001 level

***significant at the .01 level

**significant at the .02 level

significance would rise sharply. This would be an indication that the integrity of the personality was being threatened and the individual's personality was defending itself.

Hypothesis XVIII. A manifest difference exists between the School males and the normal population of the MMPI on five of the thirteen scales. Table XX presents the data derived from the *t*-test for the Difference Between Means for the two groups. (See page 64)

An examination of Table XX indicates that of the validity scales, the Lie scale was significantly lower than the norm (.001 level) and the K scale was significantly higher (.01 level). The School males tended to be more honest in their answers and more defensive about their psychological well being.

The clinical scales reflected little deviation from the norm. The Hysteria scale was significantly higher (.01 level) and the Paranoia scale was also significant (.05 level). The Masculinity/Femininity scale which ranged into the upper sixties was highly significant (.001 level). For the School males, eight of the thirteen scales fell within a T-score range of 46 to 54 and is indicative of the relative normality of the group.

Hypothesis XIX. A manifest difference exists between School females and the MMPI normal population on eight of the thirteen scales. Therefore, the null hypothesis is rejected. Table XXI presents the data derived from the

TABLE XX

t-TEST FOR THE DIFFERENCE BETWEEN MEANS
SCHOOL MALES AND THE MMPI NORMAL POPULATION
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SCALE	MEAN T SCORES	STANDARD DEVIATION	VARIANCE	*t* VALUES
Lie	45.20	2.53	6.40	-6.00****
F	48.90	3.51	12.32	--
K	58.50	7.14	50.94	3.77***
Hypochondriasis	50.30	7.59	57.56	--
Depression	51.90	4.98	24.77	--
Hysteria	57.70	7.18	51.57	3.39***
Psychopathic Deviate	56.70	10.13	102.68	--
Masculinity/ Femininity	67.20	6.30	39.73	8.63****
Paranoia	54.50	6.04	36.50	2.36*
Psychasthenia	52.50	4.84	23.39	--
Schizophrenia	51.60	8.77	76.93	--
Hypomania	53.10	7.94	62.99	--
Social Introversion	47.70	6.60	43.57	--

****significant at the .001 level

***significant at the .01 level

*significant at the .05 level

t-test for the Difference Between Means for the two groups. (See page 66)

The validity scales reflected that the Lie scale was significantly lower than the norm group (.001 level). The K scale was significantly higher (.01 level). The School females were much like their counterparts, the School males, in that they tended to be more honest in their answers and were somewhat defensive about their psychological well being.

Of the clinical scales, Hypochondriasis was significantly lower than the norm (.01 level), indicating less concern with bodily functioning. Hysteria was significantly higher (.01 level), statistically, but well within the normal range. The Psychopathic Deviate scale was high (.001 level) with the accompanying suggestion that close relationships do not frequently occur even though they may be needed, and that, there is a greater degree of non-conformity than that of the norm group. The Masculinity/Femininity scale was significantly lower than that of the norm (.05 level) and within the acceptable limits of the scale.

The Schizophrenia and Hypomania scales were higher in the deviant direction (.001 and .01 level, respectively). With the Hypomania and Schizophrenia scales high, there may be a surgency in the personality of the individual that may cause some difficulty at work. In other words, the individual needs for self expression can potentially interfere with interpersonal interaction.

TABLE XXI

t-TEST FOR THE DIFFERENCE BETWEEN MEANS

SCHOOL FEMALES AND THE MMPI NORMAL POPULATION

MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

SCALE	MEAN T SCORES	STANDARD DEVIATION	VARIANCE	t VALUES
Lie	43.85	5.79	33.50	-4.75****
F	51.40	5.31	28.15	--
K	57.60	8.79	77.31	3.87***
Hypochondriasis	46.00	5.36	28.74	-3.34***
Depression	49.15	6.36	40.45	--
Hysteria	54.50	5.85	34.26	3.44***
Psychopathic Deviate	61.60	10.31	106.25	5.03****
Masculinity/ Femininity	45.95	8.29	68.68	-2.19*
Paranoia	53.65	8.96	80.35	--
Psychasthenia	51.80	5.63	31.75	--
Schizophrenia	56.25	3.92	15.36	7.13****
Hypomania	58.55	10.64	113.10	3.60***
Social Introversion	47.45	7.52	56.58	--

****significant at the .001 level

***significant at the .01 level

*significant at the .05 level

IV. EXPERT RATING

As a final reflection upon the results of this study, the researcher asked three independent judges and subsequently, one additional judge, to evaluate the profiles of the six graduate groups that were studied. Each judge had a profile of each of the six graduate groups that reflected mean T-scores for each scale and a frequency distribution of T-scores for each group.

Dr. W. Grant Dahlstrom responded to my request and provided the following information on a blind reading of profiles.

Clinical Males:

> "This group of 21 men appears to be showing characterological difficulties rather than neurotic or psychotic disorders. As a group they are middle class or upper middle class in educational and socio-economic background. Although under moderate tension and discomfort, they are more of a problem to others around them than they are to themselves. The main area of difficulty is sexual, showing either strong personality inversion or mixed identification. Their sexual histories have been quite chaotic, acting out a variety of deviant patterns. Several members of this group appear to be sufficiently disenchanted with their own sex and identified with feminine personality characteristics to consider sex-change surgery. For men with this personality pattern, however, prognosis for such an operation has proven to be quite poor with many identity problems remaining unresolved by the anatomical changes. In addition, this group is characterized by irritability, unstable moods, and impulsiveness. They are restless and seeking, trying a variety of solutions to their emotional turmoil in drugs, religious movements, alcohol, different jobs, encounter groups, food fads, and the like. They see themselves as creative but as a group

are probably underachievers, talking much more than they actually do."

Clinical Females

"This group of 14 women appear to be quite hostile, bitter and complaining. They are ambitious and driving, seeking recognition, personally, power and control, in dealing with others, and security, emotionally. They appear to come from middle-class backgrounds and espouse many of the values of status, money, and possessions. They push their spouses, compete directly themselves, and are rarely satisfied by their own accomplishments or the rewards for their efforts. They are sarcastic, critical, and belittling. They make others uncomfortable and their marriages are turbulent and crisis-ridden. Their jealousies and envy make them difficult spouses, parents, or friends. As a group, these women do not appear to be greatly upset at this time, however, perhaps because they are getting their way at present. Under pressure, they may resort to extreme methods of gaining and maintaining control: suicidal gestures, connivances and subterfuges of various kinds. Their prickly irritability and tendency to disown all responsibility for difficulties make them very poor therapeutic prospects for traditional psychotherapy."

Counseling Males

"This group of 15 men appears to be quite typical of college-educated men with business or professional backgrounds. They show many features of middle class socio-economic backgrounds. They view themselves as stable, sociable, and ambitious. They are hard-driving, self centered, and relatively insensitive to the impact that they have on others. While protective of their image and reputation, they are capable of covert actions of questionable morality and probity. Emotionally, they are shallow and unfeeling, although they may be able to fake a convincing picture of remorse, concern, and empathy. Those who know them well see the coldness and self-centeredness. They typically have a wide range of acquaintanceship which involves casual social contacts and easy informality; few friendships develop closeness. Marital relationships suffer from this lack of depth in feeling; most have histories of divorce

and separations. Many of these men have also explored casual homophilic relationships but without much satisfaction. As a group these men are relatively free of intrapsychic distress at this time."

Counseling Females

"This group of 33 women appear to be typical middle-class, college-educated ladies. They are self-effacing and responsible, taking on more duties and chores than others in an extra effort to be accepted. They are sociable, participating in a variety of activities and projects. They do not seek leadership or ascendancy but do not avoid work assignments. They have some misgivings about their own personal worth and seek reassurances and praise to offset these persistent doubts. At this time, most of them appear to have enough opportunities in which to gain this kind of security that they are free of serious discomfort or tension just now. Many are minor martyrs in their homes and families. They are energetic in various uplift projects and seek frequent contacts with others to minimize the doubts that arise when they are alone for long periods. If they marry someone who easily tolerates their dependency, their marriages tend to be quite stable."

School Males

"This group of 10 men appears to be quite stable, well controlled and comfortable. They show interests and attitudes characteristic of middle class, college-educated men. They are outgoing, sociable and easy to relate to. They are not hard-driving but probably somewhat passive and underachieving. They espouse traditional values and value their reputations, without great depth or commitment, however, Friends and spouses see them as easy-going and unflappable. Although a few may be unmarried, most of them have sought a wife upon whom they can be comfortably dependent. They do not have very much insight into their own motivations and form rather superficial relationships with others. They are open and expressive, emotionally. Under pressure, they become anxious and show their agitation. At this time, however, they seem quite free of emotional distress."

School Females

> "This group of 20 women appears to be an active, ascendant, outgoing group who seek social activities from a genuine liking for such involvement. They show many characteristics of middle class backgrounds, valuing status and social position. They are relatively free of conflicts and self-doubts. They have a get-up and go outlook, with abundant energy and a liking for a variety of activities. They do not reflect or introspect very often and have difficulties understanding others who do. They have a large number of acquaintances with few close ties to anyone. Most of the women in this group have a positive view of themselves, are easy to know and relate to, and are non-threatening in their relationships with others. They probably enjoy the company of men more than women. If they marry a person who can accept them as equals, they form stable and reasonably satisfactory marriages. They may show some mood swings but most in this group seem to be quite free of emotional problems at this time."

It seems most clear that Dr. Dahlstrom found the Clinical males and females to be manifesting general personality disorders. His evaluation of the Counseling males and females also reflected some general maladjustment with life style; however, he also saw some strengths in their functioning. The School males and females tended to have the most positive comments in terms of general adjustment, except that the School females weren't as well adjusted as the School males.

V. SUMMARY

In order to obtain the results of the study, the following statistical analyses were used: (1) a Two-Way Analysis of Variance followed by the Newman-Keuls Method for determining

the difference between separate pairs of groups; (2) a *t*-test for the Difference Between Means; and (3) the evaluation of each group's profile by an expert judge. The results of each were listed in tables and discussed.

The ANOVA yielded results that reflected upon each scale of the MMPI in terms of comparing each graduate group to the other. The information derived from the statistical analyses clearly were indicative of distinctions that arose out of the comparisons that were being researched in this study. All of the graduate groups were not the same.

The Clinical males were most prominent and reflected the most differences in terms of deviations that were observed. They appeared to be quite apart from the other graduate groups. The Clinical females also tended toward a direction of deviation and generally had mean T-scores above that of the other graduate groups. The Counseling males and females tended to be within the normal range with several of the MMPI scales reaching in the direction of deviation with the concomitant suggestion that under stress, their behavior patterns would become bothersome. The School males and females scored in the normal range of the MMPI scales. They were the group that most tended toward normalcy. They seemed to be well adjusted and functioning best.

In general, the Clinical males and females were the only two groups to deviate at a statistically significant level with higher T-scores. The four remaining groups were

not distinguishable from each other in terms of the MMPI scales when submitted to analysis with the Two-Way ANOVA.

Males and females reflected certain differences. The most notable being on the Mf scale. Females reflected traditional interest patterns while males showed interest patterns in the direction of femininity. Another notable difference was observed on the Hysteria scale. Males scored significantly higher than females, suggesting that they would be more likely to develop conversion-like symptoms.

A comparison was made between the six sample graduate groups and the normal population of the MMPI. The *t*-test for the Difference Between Means was utilized. The Clinical males and females were the two groups that deviated most, being unlike the norm group. The Counseling males and females also were different from the normal population of the MMPI but not as different as the Clinical students. The School males deviated least from the norm group with the School females showing considerable differences.

The independent evaluation of the expert judge, Dr. W. Grant Dahlstrom, was most significant. His opinions were most consistent with the general findings of the study. He found the Clinical males and females to reflect the most pathology. The Counseling males and females were second in terms of personality disturbances, while the School males and females appeared to be the most well adjusted.

Chapter V will discuss the findings of this study and make recommendations for further directions in research.

CHAPTER V

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

I. INTRODUCTION

The purpose of this study was to gain more knowledge about individuals enrolled in existing clinical psychology, counseling psychology and school psychology programs. This study compared and examined, clinically, the emotional adjustment of the aforementioned groups on the Minnesota Multiphasic Personality Inventory, each group being compared to the other. Secondly, each group profile was compared to the normative population of the MMPI. As a final step, each group was evaluated in a clinically qualitative manner by an independent judge.

II. DISCUSSION

A survey of the literature showed that an examination of graduate psychology students had not been done with the MMPI, particularly from a clinical point of reference and certainly not with a critical eye for the presence or absence of emotional well being. Of the research that exists with respect to graduate psychology students, little is specifically relevant to mental health and much of it is tangential to the problem that was investigated.

As far back as 1950, Fiedler was interested in the effects of personality on the therapeutic process. His conclusions focused upon the theoretical orientation of the therapist and the therapist's personality. Carkhoff, Kratochvil and Friell (1968) found that graduate students who finished programs were the least effective counselors and had become less effective as they progressed through graduate school.

The personality characteristics of psychology graduate students are most important in terms of their interaction with their clients. However, few researchers have specifically designed instruments to measure personality qualities that are facilitative. Carkhuff and Berenson (1967) have made the attempt to create such an instrument but others have not followed their pathbreaking efforts. Though little disagreement exists that personality is an important variable in graduate training, the continuing emphasis is upon academic achievement, graduate record exam scores and other academic measures that ignore the personality variable.

The studies in which psychology graduate student selection was investigated showed that there was little, if any, relationship to clinical functioning and grade-point average (Carkhuff, Piaget & Pierce, 1968). Several universities have begun to interview those students who are available for the interview process. However, if they live far from the university and their various grade reports are

sufficiently impressive, they stand a very high likelihood of being accepted without further information and without regard to emotional well being. In point of fact, they are taken blind. There are several universities in Northern California which make an interview a part of entrance requirements but they are a minority and their procedure is subjective in nature.

One important factor is the necessity of the counselor/therapist to possess a degree of adjustment. It is interesting to note that almost all, if not all, professionals would agree upon the tenet that mental health people should be emotionally healthy. Unfortunately, the literature does not reflect an overwhelming desire on the part of professionals to investigate this area. Of the few articles that exist, most are speculative and only a few are genuinely critical.

The present study employed a sample of 113 graduate psychology students drawn from four large public universities and two small private universities. Each graduate student was given an MMPI to complete and return to the researcher.

Data were treated with an ANOVA for the differences between graduate groups. A secondary step was to analyze data between graduate groups and the MMPI normal population. The third and final step was an independent, blind evaluation by an expert judge. Interpretation of the data was potentially limited to the Northern California geographical

area. Since college students tend to look the same on the MMPI profiles regardless of the area of the country where they are measured, the researcher suggests that the data gathered may have widespread application.

III. CLINICAL INTERPRETATION OF THE DATA

The Males

The pattern established by male graduate students showed that clinical orientation was inversely related to emotional adjustment. The Clinical males had the highest mean T-scores on the MMPI, reflecting the poorest adjustment. The Counseling males had the second highest set of mean T-scores, suggesting better adjustment than the Clinical males. The School males had the lowest mean T-scores, indicating the best emotional adjustment of all the groups. The more clinically oriented the group measured, the poorer the adjustment of that group. The Clinical males tended to stand apart from the other two male groups.

Many of the mean T-score levels for the Clinical males reached into that marginal area of the profile which show scores at or above sixty. The Depression scale had a mean T-score of 63, the Hysteria scale a mean T-score of 62, the Psychopathic Deviate scale a mean T-score of 69, the Paranoia scale a mean T-score of 59, the Psychasthenia scale a mean T-score of 65 and the Hypomania scale a mean T-score of 61. Of the non-clinical scales, the Masculinity/

Femininity scale had a mean T-score of 78. The Social Introversion scale had a mean T-score of 50 which is also the mean of the normal population of the MMPI. The profile of the Clinical males is clearly elevated, but the slope of the scales would not allow a definitive diagnostic label.

There isn't any diagnostic label that can be assigned to the Clinical male group. A perusal of the profile level suggests that the Clinical males are not well adjusted and have general difficulty in handling the stresses of everyday life. They haven't manifested symptomatic behavior that would lead to specific diagnoses, but rather, are having experiences that are not gratifying. When ones' needs are not met, frustration and anxiety about future goals and life needs create self doubt. Generally speaking, individuals of this group will not be able to enjoy their successes.

The two high points of the profile for the Clinical males were Psychopathic Deviate (Pd) and Masculinity/Femininity (Mf) scales. On the Mf scale, the Clinical males had a high point mean T-score of 78, which is indicative of a degree of femininism in their personality. Since it is known that college students tend to score high on this scale, within a range of $T > 55$ to $T < 65$ (artistically oriented students being on the high end), the best interpretation for the Clinical males is that their interests, attitudes and values are different from that of the general population.

The Pd mean T-score of the Clinical males was 69. A T-score of this magnitude is near the accepted dividing line for the real onset of symptomology, a mark of seventy. There are several possibilities that might contribute to the high Pd mean T-score. One explanation for a high Pd score is when the subject or subjects are in real difficulty. Another possiblity is that college students frequently see themselves as unconventional, free thinking and profess a dislike for social mores. However, there are those subjects that contributed to the mean T-score of 69 who are on the high end of the scale. These people may very well have difficulty in being loyal and responsible to those close to them, which can be the antithesis of a therapeutic relationship.

The Clinical males were significantly higher on the D and Pt scales than all of the other groups except for the Clinical females. In a longitudinal study of college students, Strupp (1975) found that those students who had elevated scores on the Depression (D) and Psychasthenia (Pt) scales had the most difficulty adjusting to life. Dr. Strupp concluded that D and Pt are genuine indicators of enduring psychological problems. In line with the pattern mentioned earlier, the group that had the second highest profile was the Counseling males.

The Counseling males reflected a profile that suggested some difficulty in adjusting to life decisions, though not as great as the Clinical males. Two of the scales rise

when one is under stress or in danger of being exposed. They were, namely, Hysteria (T=57) and Psychopathic Deviate (T=62). Hysteria measures a neurotic response to stress and is enhanced by anxiety. The Psychopathic Deviate scale also tends to rise when one is under stress. This may reflect their life adjustment or contemporary problems.

The Counseling males also showed some propensity toward abnormal amounts of energy and overactivity in thought processes. The Hypomania scale had a mean T-score of 63. Although this may be appropriate for some situations, it would be of questionable utility for the counselor since counseling theory generally argues that the counselor be a thoughtful and reflective listener. A surgency in the personality of the counselor may be detrimental to the counseling environment.

Counseling males had the lowest mean T-score (T=45) of any group on the Social Introversion scale (Si). This means they have an interest in other people, a need for social participation and emotional expression. Although this author would not consider the Counseling male group disturbed at the time of testing, questions still remain. There are individuals in the counseling programs with profiles near or parallel to the Clinical males. However, the School males tended toward the average.

The School male profile was closest to the norm group of the MMPI. They seemed to have good adjustment to life

and reflected a normal amount of energy. They form good interpersonal relationships and are able to maintain them on a long-term basis. At the time of testing, they certainly were not experiencing personal difficulties. The School females displayed a similar pattern of general emotional well-being.

The Females

The Clinical females tended to fall between the Clinical males and the other four groups. Their mean T-scores were not inordinately high but did tend to have a slight positive slope. The Psychotic Tetrad was higher than the Neurotic Triad. All four scales (Paranoia, Schizophrenia, Psychasthenia and Hypomania) exceeded significant levels when compared to the MMPI normals. It is possible that the Psychotic Tetrad might rise when the Clinical females are under stress. Their defensive reaction to stress might be that they would become more withdrawn, suspicious and make greater attempts to control their surroundings. In addition, there might be a noticeable quality of excitability in their personality. In keeping with Strupp's study (1975), the Psychasthenia scale (Pt) was significantly higher than all other groups except for the Clinical males, suggesting an enduring pathology present in the personalities of the Clinical females.

This group of Clinical females appear to have sufficient energy to carry them through many difficult situations. They

may involve themselves with others in order to have social contact but the underlying purpose of these contacts will be to keep from being lonely, rather than establish close interpersonal bonds. They will find that emotionally close relationships can be threatening. These conclusions are a result of the Psychopathic Deviate scale mean T-score of 65 in combination with the Psychotic Tetrad being significantly higher than the normal population. The type of relationship that will probably best suit the Clinical females may very well be one that allows freedom to be self directed because of the need for achievement. For some of the Clinical females, there is a compulsive trend to their functioning. In terms of accomplishing goals, the compulsivity will be a determining factor. But in interpersonal relationships, it can interfere because of the need for these females to maintain control of their interpersonal situations. There is good reason to believe that the need for control is a prime factor in the choice of clinical psychology as a profession (Templer, 1971). The clinician can be most influential in a patient's life and can be a major motivational factor, thus filling the needs of the counselor/therapist.

The Counseling females reflected a profile which suggests fairly average amounts of energy (Ma scale, T=57). This energy is primarily channeled into their goals. The profile did not suggest a negative or positive slope, nor did the Psychotic Tetrad or Neurotic Triad become a factor.

The high point of the profile was the Psychopathic Deviate scale (Pd) which had a T-score of 57. As a group, the Counseling females tend to be quite active and trustworthy, although their values may fluctuate depending upon the situation in which they must take a major role or make a significant contribution. They are able to form good interpersonal relationships and develop close emotional bonds.

The Counseling females were not extremely different from the normal population of the MMPI. Most notably, they were not differentiated on the Depression of Psychasthenia scales, suggesting that as a group there is not an enduring pathology in their personalities. However, the Counseling females would tend to channel their anxiety into physical ailments when under stress.

The School females reflected a profile that was quite close to the Counseling females. The Psychopathic Deviate and Hypomania scales were slightly higher. The School females may not form as close a relationship to others as might be desirable. They may have many people with whom they are friendly but only in a superficial manner. The formation of close emotional bonds on a long term basis will elude them. They will be supportive to a point with those that they like but will keep an emotional and social distance from many who respond to their pleasant manner of relating, probably because of their fear of dependency.

However, their heterosexual relationship will probably be most stable and enduring when they are finally able to choose an appropriate mate. They show sufficient energy to carry through with planned activities.

The School females did tend to deviate from the normal population of the MMPI. However, the Depression and Psychasthenia scales were not significantly higher, which is indicative of freedom from anxiety that creates self-doubt and worry. They have feminine interests that are commensurate with their expected roles. Although they have self confidence, they are not competitive in a masculine manner.

There appears to be a general relationship between the clinical orientation of students and their emotional adjustment. The nature of the relationship must be examined in a more narrowly defined study. However, the results of this study indicated that clinical interest and poor emotional adjustment are positively correlated. The profiles of the male groups suggests that the relationship is a linear one. For the females, the relationship is not as clearly defined because of the closeness in scores of the Counseling females and School females. These results raised a number of questions worthy of further investigation.

IV. CONCLUSIONS

The purpose of this study was to gain more knowledge about individuals enrolled in existing clinical psychology,

counseling psychology and school psychology programs. It was the express purpose of this study to investigate and examine, in depth, with the use of an accepted personality measure, the emotional well being of those individuals. The information heretofore related to the reader has attempted just that. At this point in the discussion, it seems appropriate to acknowledge that a large number of students enrolled in the examined graduate programs may not manifest the most desirable adjustment.

The author is acutely aware that the discussion in this text has primarily centered around a presentation of group responses to scales of the MMPI. It is now necessary to review the data more narrowly. For each group that was measured and for purposes of discussion, it is the author's judgment that a focus on the upper half of each of the graduate groups is warranted. Those individuals that make up the lower portion of the graduate groups are well adjusted and are coping with life in an adequate manner. And for the purpose of this study, they have probably made an adequate and fruitful decision when they chose to be counselor/therapists. However, the situation of their counterparts (those in the upper half of the graduate groups) demands closer scrutiny. Factors supporting this conclusion include a discussion of the foregoing literature and the questionable utility of the individual who is manifesting an emotional disorder, character disorder or general maladjustment when working with mental patients.

Several authors (Bartz & Loy, 1969; Gordon, 1973) have focused upon and stressed the importance of mental health for people in the helping professions.

To talk about the upper half of any one of the graduate groups is to make an arbitrary division. However, it is not likely that those with an average MMPI profile (the range being from $T > 46$ to $T < 54$) would be considered unstable. The concern of this study, as supported by the literature review, is the individual who scores high on the MMPI or in the borderline or marginal range. If one accepts the precept that those who manifest disorders are not as functional as those who do not, then it is tenable to examine the upper half of the graduate groups closely. The plain fact is that too many of the mean T-scores were high. The emphasis here is on the trainee's ability to establish appropriate professional relationships. Since the stability of the MMPI is not in question here, we must turn our attention to the stability of those who are enrolled in our graduate programs.

Selection procedures of the universities are designed to assess intellectual competence but do not assess ethical behavior. The Pd scale of the MMPI is a measure that reflects, to a degree, how much an individual will deviate from the norm in terms of responsibility and social nonconformity. A substantial number of the sample population scored quite high. Even if one takes into account the fact

that college students tend to score somewhat higher on the Pd scale, there is still a goodly number of the graduate students measured who were marginal or above. Except for the Counseling females, all groups had mean T-scores in the sixties. Obviously, there are a large number that deviate from expected norms. It is quite possible that those who scored marginal or above will experience difficulty in forming appropriate professional relationships.

Being a counselor/therapist allows one to function as an authority with control and influence over the lives of others. It is a prestigious position that allows one to feel omnipotent and powerful (Templer, 1971). In the discussion of the literature, there were frequent references to the personality structure of the counselor/therapist. It was suggested that he be ethical and possess intellectual competence.

Other important factors include, the counselor/therapist be approachable, have an adaptable personality and personal understanding. The MMPI does not measure personal understanding (introspectiveness). However, a rise in the Pd scale may very well suggest a manipulative quality, which in the end, could be quite detrimental to client relationships. Generally speaking, an adaptable personality is one that is flexible and functional. The results of this study suggest that many of the graduates measured may very well manifest personality disorders that impede their ability to adapt.

The Pt scale is a measure of compulsiveness in the personality. The author grants that a degree of compulsiveness is necessary in order to accomplish tasks and continue to move in an orderly manner, such as finishing college. However, it is the degree of compulsiveness that is important. Those graduate students who scored high on the Pt scale may be compulsive to the point that it can interfere with their interpersonal and social relationships while being quite functional in terms of academic progress.

Those graduates who scored high on the MMPI scales are not secure within themselves. A high profile on the MMPI reflects symptomology indicative of pathology. The author would posit that many of those who were measured manifest the symptoms of anxiety and depression. Most importantly, the graduates consistently had higher scores than the normal population of the MMPI on the Hy scale. It is quite clear that they would like to manifest their symptomology in a socially acceptable manner, i.e., covering over symptoms with physical illness. When an individual has personal concerns about himself, it is more difficult to relate and maintain relationships with others.

In order to be empathic and show positive regard with genuineness (Carkhuff & Berenson, 1967), the counselor/ therapist must have an understanding of oneself. Individuals manifesting symptomology, more frequently than not, do not show good insight. However, this situation may be corrected

with personal psychotherapy or counseling. Yet, psychotherapy is not a major requirement of training programs. The graduate student is not made to inquire into his own motivations for entering the helping profession. Since many of the graduates would reflect sufficiently high profiles if taken individually, a strong case may be made for personal counseling as a part of training programs.

A focus upon the therapist personality is not an inordinate subject for discussion when one considers the therapist's impact on others. Fiedler (1950) concluded that therapist experience and personality determine the outcome of therapy. Although Fiedler did not measure the adjustment of his sample, his conclusions emphasize personality and training. Furthermore, untrained lay counselors have had success with patient populations. They were required to be well adjusted but were not given training in psychopathology and personality dynamics. Graduate schools give their students substantial training in both of these areas, but neither require nor examine the adjustment of their graduates.

Existing clinical psychology, counseling psychology and school psychology programs seem to disregard the import of the individuals adjustment in selection and training procedures. To be emotionally stable and develop appropriate relationships requires the individual to be trusting. Except for the School females, all of the groups were higher than the normal population of the Pa scale. In each of the

groups, there are individuals that scored sufficiently high as to indicate a high degree of paranoia in their personalities. An emphasis on good adjustment may be the cornerstone to increasingly functional people enrolling in and finishing graduate programs, which would be the antithesis to Weiss' (1973) conclusion that only the least functional finish. One explanation of this conclusion may be that the students' own maladjustment has lured him into the helping profession as a means to discover self help.

The need for achievement can be accepted as a given for the sample population that was measured. This conclusion was drawn because they were in graduate school attempting to better themselves and reach a goal. But personal achievement and intelligence cannot be substituted for sensitivity, self-awareness, emotional stability and ability to work with others (Plutchik, Klein & Conte, 1970). Quite to the contrary, emotional instability usually leads to difficulty in functioning on a daily acceptable level. Moreover, if the person is functioning, adjustment may be only marginal. Many graduate students had T-scores that would lead an examiner to question their ability to pursue ongoing relationships even in a professional atmosphere. It is both selection and training where emphasis must be applied.

The results of this study do not suggest who is best suited to work with patients (lay personnel or graduates).

They do raise questions about graduate training and its effect upon personal functioning. Those graduates measured who do not manifest suitable adjustment, by accepted standards, should be investigated further. Unfortunately, that is not possible because of guarantees of secrecy in this study.

Graduate training institutions need to take a hard look at clinical, counseling and school psychology student populations. Arbuckle pointed this out when he suggested that counselors in training not only recognize pathology in their peers but will also reject them as counselors for themselves. Emotional instability is not a quality that will attract individuals to a counseling relationship (Arbuckle, 1956). A large portion of the graduate psychology population that was sampled in this study reflect very real personality disorders. This conclusion is identifiable by virtue of student MMPI profiles. This condition does exist and further investigation in this area is warranted. The need for screening of prospective students on the variable of emotional adjustment is clear. The conclusions that have been drawn by the author are supported in substance by the expert judge.

The results of Dr. Dahlstrom's blind readings support the conclusion that personality disorders do exist for a major portion of the groups investigated. Only the School females were seen as free from conflicts and well adjusted. Also, the School males were relatively well adjusted when

reviewed as a group. However, the four other groups (Clinical males and females; Counseling males and females) had many individuals that manifested a marginal or pathological condition.

V. SUMMARY

The purpose of this study was to gain knowledge about graduate students in existing clinical, counseling and school psychology programs. A review of the literature reflected an emphasis upon the therapist's personality, his relationship to the client and personal mental health. There was little research utilizing an accepted personality measure such as the Minnesota Multiphasic Personality Inventory and none of the research compared graduate clinical, counseling and school psychology students in a clinically qualitative manner.

The results of the study indicated that substantive differences exist between Clinical males and females and the other four groups (Counseling males and females; School males and females). All of the groups reflected differences from the normal population of the MMPI. The Clinical males had the highest mean T-scores that were between the Clinical males and the other four groups. The Counseling males and females and the School males and females were not substantially differentiated from each other when compared with an ANOVA. However, they did differ, in degree, from the normal population.

The author suggested that the level of symptomology in the upper portion of each of the graduate groups was beyond accepted standards of adjustment. Dr. W. Grant Dahlstrom, the independent judge, came to much the same conclusion in a more general way. Since a portion of the profiles were elevated, further exploration in this area seems needed.

The results suggest closer examination of selection procedures in terms of emotional adjustment. Graduate training programs might well stress the emotional well being of the graduate student and measure their facilitative qualities while in psychotherapy/counseling practicums. A longitudinal study of therapist/counselor effectiveness could be initiated.

VI. RECOMMENDATIONS

Recommendations for further study fall into two general areas which can be encompassed in one longitudinal study. The first area must emphasize the procedure for selection and the second focuses upon the relationship between trainees adjustment and client progress.

If the selection process encompasses an objective personality measure at the entry level, a study may be designed that will determine the effects of the therapist's personality upon the client.

For those students who do manifest emotional problems, training programs might offer psychotherapy/counseling

and possibly, be mandatory in nature.

The foregoing suggestions will, hopefully, lead to finer distinctions in selection and eventually, training. The future success of graduates in clinical, counseling and school psychology could be greatly enhanced.

REFERENCES

Arbuckle, D. S. Client perception of counselor personality. Journal of Counseling Psychology, 1956, 3, 93-96.

Bartz, W. R. & Loy, D. L. Multidisciplinary determination of desirable and undesirable psychiatric technician characteristics. Nursing Research, 1969, 18, 316-319.

Bernard, H. W. & Fullmer, D. W. Principles of Guidance: a basic text. Scranton, Pennsylvania: International Textbook Company, 1969.

Bier, W. C. Comparative study of seminary group and four other groups on the Minnesota Multiphasic Personality Inventory. Studies in Psychology and Psychiatry from the Catholic University of America, 1948, 7, 1-107.

Brammer, L. M. & Shostrom, E. L. Therapeutic Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960.

Brams, J. M. Counselor characteristics and effective communication in counseling. Journal of Counseling Psychology, 1961, 8, 25-30.

Carkhuff, R. R. & Berenson, B. G. Beyond Counseling and Psychotherapy. New York: Holt, Rinehart and Winston, 1967.

Carkhuff, R. R., Kratochvil, D. & Friel, T. Effects of professional training: Communication and discrimination of facilitative conditions. Journal of Counseling Psychology, 1968, 15, 68-74.

Carkhuff, R. R., Piaget, G. & Pierce, R. The development of skills in interpersonal functioning. Counselor Education and Supervision, 1968, 7, 102-106.

Carkhuff, R. R. & Truax, C. B. Lay mental health counseling: The effects of lay group counseling. Journal of Consulting Psychology, 1965, 29, 426-431.

Cooper, E. B. Clinician personality factors and judged effectiveness in varying therapeutic relationships, 1965, Asha, 7, 408 in Clinician personality factors and effectiveness: A three study report. Journal of Communication Disorders, 1972, 5, 270-274.

Cottle, W. C. and Lewis, W. W., Jr. Personality characteristics of counselors: II. Male counselor responses to the MMPI and GZTS. Journal of Counseling Psychology, 1954, 1, 27-30.

Daane, C. J. & Schmidt, L. G. Empathy and personality variables. Journal of Educational Research, 1957, 51, 129-135.

Dahlstrom, W. G., Welsh, G. S. & Dahlstrom, L. E. An MMPI Handbook, Volume I: Clinical Interpretation. Minneapolis, Minnesota: University of Minnesota Press, 1973.

Dole, A. A. Views on the preparation of professional psychologists. Professional Psychologist, 1975, 6, 1-7.

Eggertson, S. A. Therapist personality traits and therapist effectiveness. Master of Education paper, The Pennsylvania State University, cited in Clinician personality factors and effectiveness; A three study report. Journal of Communication Disorders, 1972, 5, 270-274.

Erdberg, S. P. MMPI differences associated with sex, race, and residence in a southern sample. Dissertation Abstracts International, 1970, 30, 5236B.

Fiedler, F. E. A comparison of psychoanalytic, nondirective and Adlarian therapeutic relationships. Journal of Consulting Psychology, 1950, 14, 436-445.

Foley, W. J. & Proff, F. C. NDEA Institute trainees and vocational rehabilitation counselors: A comparison of characteristics. Counselor Education and Supervision, 1965, 4, 154-159.

Forgy, E. W. & Black, F. D. A follow-up after three years of clients counseled by two methods. Journal of Counseling Psychology, 1956, 3, 210-216.

Fullmer, D. W. & Bernard, H. W. Counseling: Content and Process. Chicago, Illinois: Science Research Associates, Inc., 1964.

Gordon, L. V. The therapeutic personality in the therapeutic community. Journal of Applied Psychology, 1973, 58, 108-112.

Heikkinen, C. A. & Wegner, K. W. Counselor characteristics revisited: An extension of the MMPI, 1972, in Minnesota Multiphasic Personality Inventory studies of counselors: a review. Journal of Counseling Psychology, 1973, 20, 275-279.

Hollis, J. W. & Hollis, L. U. Organizing for Effective Guidance. Chicago, Illinois: Science Research Associates, Inc., 1965.

Patterson, C. H. Test characteristics of rehabilitation counselor trainees. Journal of Rehabilitation, 1962, 28, 15-16.

Peters, H. J. & Shertzer, B. Guidance Program Development and Management. Columbus, Ohio: Charles E. Merrill Publishing Co., 1974.

Plutchik, R., Conte, H. & Kandler, H. Variables related to the selection of psychiatric residents. American Journal of Psychiatry, 1971, 127, 1503-1508.

Redlo, M. & Norman, R. D. MMPI personality patterns for various college major groups. Journal of Applied Psychology, 1952, 36, 404-409.

Rogers, C. R. The interpersonal relationship: The core of guidance. Harvard Educational Review, 1962, 32, 416-429.

Rousseve, R. J. Counselor know thyself! The Personnel and Guidance Journal, 1969, 47, 628-633.

Schofield, W. A study of medical students with the MMPI: II. Group and individual changes after two years. Journal of Psychology, 1953, 36, 137-141.

Seeman, J. A. A coordinated research in psychotherapy. Journal of Consulting Psychology, 1949, 13, 154-195.

Shafer, R. Psychoanalytic Interpretation in Rorschach Testing. New York, New York: Grune & Stratton, 1954.

Soloman, S. & Bergin, A. E. Personality and performance correlates of graduate training. American Psychologist, 1963, 18, 393.

Spiaggia, M. An investigation of the personality traits of art students. Educational and Psychological Measurement, 1950, 10, 285-293.

Taft, R. A. A psychological assessment of professional actors and related professions. Genetic Psychology Monographs, 1961, 64, 309-383.

Templer, D. I. Analyzing the psychotherapist. Mental Hygiene, 1971, 55, 234-236.

Watley, D. J. Counselor variability in making accurate predictions. Journal of Counseling Psychology, 1966, 13, 53-62.

Weiss, S. L. Differences in goals, interests and personalities between students with analytic and behavior therapy orientations. Professional Psychology, 1973, 4, 145-150.

Wrenn, C. G. The selection and education of student personnel workers. Personnel and Guidance Journal, 1952, 31, 9-14.