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ABSTRACT

Founded on a review of literature, this study compares the personality characteristics of graduate students entering the field of special education (SP) and those entering elementary education (EE). Within the field of special education, a comparison was also made between graduate students specializing in emotional disturbance (ED) and those specializing in mental retardation (MR). Two hypotheses were formed: a) no significant difference in personality characteristics would be found between SP graduate students and EE graduate students and b) no significant difference in personality characteristics would be found between ED and MR graduate students. The Sixteen Factor Questionnaire, Forms A and B, was administered to 45 EE, 18 ED, 23 MR, and 16 miscellaneous graduate students enrolled at Arizona State University. The results rejected both hypotheses. The EE sample was more intelligent, better at abstract thinking, more trusting, and more adaptable than the SP students. The ED sample was more emotionally stable and more likely to face reality than the MR sample. (Assumptions and limitations of the research are presented, along with recommendations for refinement of the design for future research. Three tables and two figures of data are also included.) (BRB)

ED 077871

A COMPARISON OF  
THE PERSONALITY CHARACTERISTICS  
OF SELECTED GRADUATE STUDENTS  
MAJORING IN SPECIAL EDUCATION  
AND ELEMENTARY EDUCATION

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BY

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

There is a considerable amount of research in the literature that attempts to qualify various occupational groups on the basis of values, attitudes, personality characteristics, and general intelligence. In order to refine applicant selection procedures, graduate school admissions, as well as occupational selection procedures, several researchers have attempted further qualification by determining the criteria with which to compare the individual to those who have proven successful in a given field. Teaching has been the focus of numerous studies of this nature. However, teaching as an occupational group has increasingly become a conglomerate of various teaching specialties, and there has been little research that has attempted to determine whether each of these sub-groups attracts a distinct type of person on the basis of qualifying criteria. Special education is one of these specialties that has been neglected as a subject for research of this type.

#### Purpose of the Study

The purpose of this study was to determine whether those entering the field of special education have personality characteristics which are significantly different from those entering elementary education.



To achieve this purpose, two specific objectives were defined. They are as follows:

1. To compare the personality characteristics of selected students enrolled in graduate level special education courses with selected students enrolled in graduate level elementary education courses.

2. To compare the personality characteristics of those students enrolled in graduate level special education courses who are specializing in emotional disturbance, with the characteristics of those specializing in mental retardation.

#### Statement of the Hypotheses

The following two hypotheses, in the null form, were tested.

1. That there is no significant difference in personality characteristics between those majoring in special education and those majoring in elementary education.

2. That there is no significant difference in personality characteristics between those specializing in emotional disturbance and those specializing in mental retardation.

#### Definition of Key Terms

1. Personality Characteristics--those characteristics or factors of personality that are measured by the Sixteen Personality Factor Questionnaire (16 PF). These specific factors are discussed in detail in Chapter III.

2. Significant difference--the difference between mean raw scores of two groups, as measured by a two-tailed T-test, significant at or beyond the .05 level of confidence.

#### Assumptions Underlying the Study

1. That all those enrolled in special education classes are either majoring in special education or have enrolled for some reason which distinguishes them from those in their major field who have not enrolled in such classes, and which is common to special education majors.

2. That the instrument used, the 16 PF, is valid and reliable.

#### Organization of the Remainder of the Study

The remaining chapters of the study are composed of a review of the literature related to the problem, the methods and procedures of the study, analysis of the data and the results of the analysis, and a summary, conclusions and recommendations resulting from this study.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

Research deemed relevant to this study fall into two general categories. The first consists of those studies which attempt to qualify various occupational groups on the basis of stated criteria. The second is composed of those studies which focus on teacher characteristics or teacher differences.

In 1922, Fryer (10), working with data obtained in a U.S. Army study of approximately 60,000 cases, compiled a listing of occupational intelligence standards for ninety-six different occupational categories. His expressed purpose was to provide "...a significant guide in the judgment of workmanship ability." (10:274) Such a guide, he maintained, would constitute "...essential information for a vocational office." (10:274)

Harrell and Harrell (13), in a similar study, used the Army General Classification Test scores of 18,782 men and categorized them according to their pre-service occupations. Seventy-four distinct occupational profiles resulted from their analysis. The results of the study were intended to "...supplement present knowledge concerning ability levels for occupational groups and are of value in educational and vocational counselling." (13:237)

In their research on the Minnesota Teacher Attitude Inventory (MTAI), Cook, Leeds, and Callis (8) recognized the possibility

of differences in attitudes of different student and teacher populations. Their research in standardizing the MTAI yielded different normative tables for high school students, college students, teacher trainees, experienced elementary school teachers, and experienced secondary school teachers. (8:13-17)

Cattell and Shotwell (7) hypothesized differences in personality characteristics for those who were more successful and less successful in a given occupation. Using the 16 PF in a study of psychiatric technicians, they reported significant profile differences to the .05 level or better, on three factors: those who were determined to be more successful scored significantly higher on the measures of emotional stability (C), super-ego strength (G), and conservatism (Q<sub>1</sub>). Other non-significant differences reported were that those who were more successful were less schizoid (A), less "bohemian" (M), less anxious (O), and of lower nervous tension (Q<sub>4</sub>).

Cattell, Day, and Meeland (4) reported personality factor profiles for eleven occupational groupings using the 16 PF. Profiles were provided for airmen, athletes, clerks, cooks and kitchen help, editorial workers, executives and directors, nurses, priests, psychiatric technicians, salesmen, and teachers. The last group included elementary and junior high school teachers. In their recommendations, these investigators noted that:

the comprehensive use of this [counseling] technique requires the determination of mean profiles on primary factors (including general ability) for more occupations, and the calculation of...criteria of success within the occupations. (4:18)

Getzels and Jackson (2) comment that:

There has always been a concern with the personal qualities of teachers, and recently this concern has become the basis for a growing body of research. (12:506)

Barr (1) and Domas and Liedeman (9) have compiled bibliographies of research in this area prior to 1950. Approximately 1500 references are cited in these works alone. Accordingly, using 1950 as a point of departure, Getzels and Jackson reported that they compiled a list that exceeded 800 references! (12:506) Therefore, it was necessary to select only those studies whose relevance to this research was immediately apparent. For a comprehensive listing of research in the broad area of teacher characteristics, the reader is referred to the above mentioned sources.

Callis (2), in a study of change of teacher-pupil attitudes, reported significant mean score differences on the MTAI for students majoring in different education curricula. Major areas of specialization that were studied were: early childhood, academic field majors (e.g., english, mathematics) and special field majors (e.g., art, home economics).

Fuller (11), in a study of the use of attitudes as the basis for selection of early childhood and primary teachers, reported

...while the MTAI may serve a highly useful purpose in selecting students from the general population for training in early childhood education, or even for refinement of selection policies within subdivisions of the College of Education, it does not identify the ablest or weakest student teachers within the experimental group. (11:682)

Lamke (16), in a study of the relationship between teacher personality and teaching success, reported significant differences on three scales of the 16 Personality Factor Questionnaire. The successful teachers scored above average on factors F and H, indicating a tendency to be impulsive, uninhibited and enthusiastic, while the unsuccessful teachers scored significantly lower. On factor N, both groups scored below average, but the unsuccessful group scored significantly lower, indicating a tendency to be more unpretentious and forthright. However, it is necessary to note that a severe limitation of this study is the small sample sizes involved (successful N=10, unsuccessful N=8). The results and conclusions of Lamke's study must be considered with this limitation in mind.

In 1955, Kearny and Rocchio (14) compared the attitudes of elementary school teachers who taught in self-contained classrooms and the attitudes of those who taught different pupils throughout the day in specialist classrooms. They reported significant differences at the .01 level of confidence.

The Teacher Characteristics Study (17) is a landmark in this area of research. It encompassed ninety-eight separate researchers, involving "...over six thousand teachers in seventeen hundred schools..." (17:368). Getzels and Jackson remarked that it is "...the single most extensive study of teachers to date." (12:566). Ryans states:

The Teacher Characteristics Study was conducted with two possible uses of the results in mind: first, by

school systems as an aid in identifying teachers who, at the time of selection for employment...have characteristics similar to those deemed important and desirable...; and second, by teacher education institutions as an aid to a better understanding of teacher characteristics...which would contribute to improved procedures for selecting teacher candidates... (17:11)

A significant portion of the study compared groups of teachers on the basis of personality and behavior. Groups that were compared were elementary and secondary teachers, married and unmarried teachers, and teachers in progressive and traditional school systems.

#### Summary

The review of the literature illustrated a definite trend in research in the area of occupational characteristics. Earlier research tended to be more general in nature on two dimensions. First, earlier research accepted broad, non-specific occupational groupings. A category noted in each of the early studies was that of "teacher". As researchers became more sophisticated and specialization within occupations occurred, more specific categories emerged (e.g., secondary, elementary, academic, and specialized teachers). Second, earlier studies used broad criteria as the basis of research. General ability or global intelligence was most frequently used. More recent studies utilized multifactors of personality, values, and attitudes as criteria.

Also illustrated is the fact that researchers have recognized that different specialties within an occupation attract or produce

people with different characteristics. In the teaching profession, certain specialties have emerged and become the focus of research. However, the literature reveals an absence of research focused on special education and its component sub-specialties.



## CHAPTER III

### METHODS AND PROCEDURES

The population for this study was all students enrolled in graduate level elementary education (EE) and Special Education (SP) courses at Arizona State University during the Spring, 1972, semester.

#### Sample Selection

The EE sample consisted of two class sections randomly selected from all graduate level EE course sections listed in the Spring, 1972, Schedule of Classes distributed by Arizona State University. The total sample (N=45), composed of 5 males and 40 females, had a mean age of 29 and a mean teaching experience of 3.5 years. All members of the sample were EE majors.

The SP sample was selected in an identical fashion from all graduate level SP course sections listed in the Schedule. The total group (N=57) was composed of 13 males and 44 females, had a mean age of 28 and a mean teaching experience of 2.8 years. As the occupational category of teaching can be divided into various teaching specialties, the SP sample included a number of sub-specialties. A group of 23 specializing in mental retardation (MR) was composed of 6 males and 17 females, and had a group mean age

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**TABLE I**  
**DESCRIPTIVE CHARACTERISTICS OF THE SP, EE, ED, AND MR SAMPLES**

Elementary Education

Mean Age = 29	Male=5	
Mean Experience=3.5	Female=40	Total=45

Special Education

Mean Age=28	Male=13	
Mean Experience=2.5	Female=44	Total=57

Emotional Disturbance

Mean Age=25.5	Male=5	
Mean Experience=2.5	Female=13	Total=18

Mental Retardation

Mean Age=27.6	Male=6	
Mean Experience=1.6	Female=17	Total=23

Miscellaneous

	Male=2	
	Female=14	Total=16

Learning Disabilities (N=6)

EE (N=3)

Early Childhood (N=2)

Administration (N=1)

MR/ED (N=1)

Nursing (N=1)

Resource (N=1)

Speech (N=1)

of .27.6 and a group mean teaching experience of 1.6 years. Another major sub-division was emotional disturbance (ED), totalling 18 (N=18), which included 5 males and 13 females, and had a group mean age of 25.5 and a group mean teaching experience of 2.5 years. The remainder of the sample (Misc) did not fall into any clearly defined sub-division. The composition of Misc. is represented in Table I along with the composition of the other samples.

### The Instrument

The instrument used to determine the personality characteristics of the samples was the Sixteen Personality Factor Questionnaire (16 PF), Forms A and B. The publisher states that this instrument was designed "...to give the most complete coverage of personality possible in a brief time...Coverage of personality is insured by the sixteen functionally independent and psychologically-meaningful dimensions....(5:3). The validity and reliability of the instrument is assumed on the basis of its use in previous studies of a similar nature that are reported in the literature (4, 7,16), as well as on the basis of statistical data provided by the publisher. Reliability, reported as dependability coefficients for a test-retest after a six day lapse on each of the 16 factors (Forms A & B) range from .82 to .93 (5:6). Trait stability coefficients on the basis of a test-retest after two months on each of the 16 factors are reported as ranging from .63 to .88 (5:6). The direct validities (Form A & B) were arrived at by the Spearman-Brown formula and range from .74 to .92 (5:7).

It is necessary at this point to fully describe the factors of personality measured by the instrument. The following factor descriptions are abstracted from Cattell (3:176-355), Cattell and Eber (5:13-18) and Laird and Laird (14:218-235).

Factor A The person who scores low on factor A tends to be detached, critical, and aloof. "He likes things rather than people, working alone, and avoiding compromises of viewpoints" (5:13). He also tends to adhere rigidly to his personal standards.

The person who scores high on this factor tends to be good-natured, emotionally expressive, and participating. He is attentive to people and usually adaptable. He is less afraid of criticism and, therefore, forms warmer personal relationships.

Factor B The person scoring low on factor B tends to be more concrete thinking, slower to learn, and more apt to perceive literal interpretations.

The person who scores high on this factor tends to be an abstract thinker and a fast learner. "There is some correlation with level of culture and some with alertness" (5:13).

Factor C The person who scores low on factor C tends to be emotionally less stable, he has a low frustration tolerance for unsatisfactory conditions, and tends to be changeable, evading necessary demands of reality. He often has neurotic symptoms, such as phobias, sleep disturbances, and psychosomatic complaints.

The person scoring high on this factor is likely to be emotionally mature and, therefore, more realistic about life. He possesses

greater ego strength and is better able to maintain solid group morale.

Factor E The person who scores low on factor E tends to be accommodating, docile, and conforming. He is often dependent and anxious to be socially proper.

The person who scores high on factor E is independent, self-assured and stubborn. He tends to be aggressive, thinking himself a law unto himself, and may be authoritarian, yet resisting the authority of others.

Factor F The person scoring low on factor F tends to be prudent, serious, and introspective. He is sometimes pessimistic and may be considered primly correct. He tends to be a dependable person.

The person who scores high on this trait tends to be cheerful, enthusiastic, lively, and talkative. He is frank and impulsive, and is frequently chosen as an elected leader.

Factor G The person who scores low on factor G tends to feel few obligations. He is unsteady in purpose and often evades rules. He is casual and free from group influence.

The person scoring high on factor G tends to be dominated by a sense of duty, persevering, and responsible. "He is usually conscientious and moralistic, and he prefers hard working people to witty companions" (5:15).

Factor H The person who scores low on this trait tends to be shy, restrained and cautious. He tends to have feelings of inferiority. He may be slow in expressing himself and may often lose contact with what is going on around him.

The person who scores high on factor H is socially bold, spontaneous and uninhibited. He can be careless of details and danger signals. "He tends to be 'pushy' and actively interested in the opposite sex" (5:15).

Factor I The person who scores low on factor I tends to be practical, self-reliant, and realistic. He is sometimes cynical and smug and tends to operate on a "no-nonsense" basis.

The person who scores high on factor I tends to be dependent, sensitive, and artistic. He is sometimes impatiently demanding of attention.

Factor L The person scoring low on factor L tends to be free of jealous tendencies, trusting, and has an uncompetitive concern about other people. He is easy to get along with and is a good team worker.

The person who scores high on this factor is self-opinionated and tends to be hard to fool. He is deliberate in his actions and generally unconcerned about other people.

Factor M The person who scores low on factor M tends to be regulated by external realities, careful, and conventional. He is attentive to practical matters and concerned with detail. He may be unimaginative.

The person who scores high on this factor tends to be unconcerned with everyday matters, bohemian, and self-motivated. He is imaginatively creative, but may be oblivious to particular

people and physical realities. His individuality may prevent him from becoming involved in many group activities.

Factor N The person scoring low on this factor tends to be "...unsophisticated, sentimental, and simple." (5:16) He affects few pretenses and is easily pleased.

The person who scores high on factor N tends to be worldly, shrewd and penetrating. "He has an intellectual, unsentimental approach to situations, an approach akin to cynicism" (5:16).

Factor O The person who scores low on factor O tends to be self-assured and confident. He is serene and has confidence in his capacity to deal with things. He is resilient and secure.

The person scoring high on this factor tends to be depressed, moody, and self-reproaching. He is a troubled person and does not feel well-accepted in groups.

Factor Q<sub>1</sub> The person scoring low on factor Q<sub>1</sub> "...is confident in what he has been taught to believe, and accepts the 'tried and true,' despite inconsistencies, when something else might be better" (5:17). He tends to be cautious in regarding new ideas.

The person who scores high on this factor has doubts on "...fundamental issues" (5:17). He is critical, free thinking, and has an analytical mind. He tends to be more well informed, more inclined to experiment, and more tolerant of change.

Factor Q<sub>2</sub> The person scoring low on this factor "...likes and depends on social approval and admiration" (5:17). He feels he

needs group support and, therefore, tends to go along with the group.

The person who scores high on factor  $Q_2$  prefers making his own decisions. He is resourceful and "...accustomed to going his own way...but is not necessarily dominant in his relations with others. He does not dislike people, but simply does not need their support"(5:17).

Factor  $Q_3$  The person who scores low on this factor is careless of protocol and has little regard for social demands. He tends to follow his own urges.

The person scoring high on factor  $Q_3$  tends to be self-controlled. He is inclined to be socially aware and precise in following his self-image. He has high regard for social reputation.

Factor  $Q_4$  The person scoring low on factor  $Q_4$  tends to be tranquil, composed, and satisfied. His satisfaction may lead to low performance inasmuch as he may have low motivation.

The person who scores high on factor  $Q_4$  tends to be tense, frustrated and over-wrought. He is excitable, restless, and impatient. He is often unable to remain inactive, even when fatigued. "His frustration represents an excess of stimulated, but undischarged, drive" (5:18).

### Procedures

The instrument was administered to the samples by the investigator during the regularly scheduled meetings of the selected



course sections. The only information given to the subjects concerning the nature of this study at the time of testing was that it was a study being conducted in the College of Education and that some test data was needed from their class. The subjects were instructed not to sign their names to the answer sheet, and to include their age, sex, number of years of teaching experience, and specialized field of graduate study. As insufficient numbers of either Form A or Form B of the instrument were available for this study, both forms were randomly distributed to each course section in approximately equal numbers.

The answer sheets were hand scored and the raw score data for each sample, on each scale, was compiled. The statistical technique used for the analyses of the raw score data was the two-tailed t-test (18:378-381), and a computer was used for the calculations.

## CHAPTER IV

### ANALYSIS AND RESULTS

In the following sections, the results of the procedures described above will be presented. Results of the analysis which are deemed significant are based on the five percent level of confidence. On factors where no significant differences were found, a discussion of the tendencies of both groups is included. For the purpose of these discussions, it was necessary to establish a central or average interval on each scale, as factor scores on the 16 PF merely indicate tendencies toward one pole as opposed to the other, not absolutes. In order to establish this interval as realistically as possible, the investigator chose to work with the normative information available from the publisher. The norms for college students were chosen as the most appropriate for the population of this study (6:12,15). The publisher's normtables convert raw scores to standard ten scores, consequently, the mean lower limit of sten 5, and the mean upper limit of sten 6, for males and females, on both forms A and B were accepted as the limits of this interval.

#### EE versus SP

On the basis of a separate t-test performed on each of the sixteen factors, using raw score data for the EE and SP samples,

the first null hypothesis was tested and rejected at the .05 level. The results of this analysis are summarized in Table II. Significant differences were found on two factors. The differences on factor B ( $t=2.3350$ , significant to the .05 level) indicate that those in the EE sample tend to be significantly more abstract thinking and of significantly higher general intelligence than those in the SP sample. The differences on factor L ( $t=2.1445$ , significant to the .05 level) indicate that those in the EE sample tend to be significantly more trusting, more adaptable, easier to get along with, and freer of jealousies than those in the SP sample.

Although no significant differences were found on the remaining factors, certain tendencies were noted for both groups on several other factors. It must be kept in mind, however, that the following tendencies are in relation to the sample of college students used by the publisher in computing the norm tables. The following discussion is illustrated in Figure I.

On Factor A, both groups scored within the average range between being reserved and detached. Both EE and SP scored within the average interval on Factor C, indicating no tendencies toward being either affected by feelings or emotionally stable. No inferences can be drawn on Factor E as the mean scores of the two groups were not stable. On Factor F, both groups scored within the average interval, showing no tendency toward either sober or happy-go-lucky behavior. Both EE and SP scored in the average

TABLE II  
 MEANS, STANDARD DEVIATIONS AND T-RATIOS OF THE RAW SCORE DATA OF THE EE AND SP SAMPLES

FACTOR/RANGE	EE		SP		T-RATIO
	MEAN	S.D.	MEAN	S.D.	
A. Reserved-Outgoing/0-20	10.4318	3.6643	10.1754	3.0269	.3810
B. Less-More Intelligent/0-26	8.6818	1.8802	7.7894	1.8894	2.3350*
C. Less-More Stable/0-26	16.5455	3.9683	16.5965	3.7175	.0658
E. Humble-Assertive/0-26	11.7273	4.3608	13.3684	4.4075	1.8455
F. Sober-Gay/0-26	14.7273	4.2069	15.4912	3.4900	.9869
G. Expedient-Conscientious/0-20	11.7500	2.7890	11.7368	3.8686	.0189
H. Shy-Venturesome/0-26	13.6591	6.1542	14.7193	5.6156	.8925
I. Tough-Tender Minded/0-20	13.2273	3.1970	12.4035	3.1891	1.2730
L. Trusting-Suspicious/0-20	6.2273	3.5024	7.6491	3.0807	2.1445*
M. Practical-Imaginative/0-26	13.8182	4.0535	13.9123	4.1939	.1122
N. Natural-Calculating/0-20	9.0909	2.7783	9.4737	2.8783	.6661
O. Confident-Troubled/0-26	10.4318	5.1053	9.7193	4.1707	.7640
Q <sub>1</sub> Conservative-Experimenting/ 0-20	8.2046	3.6468	9.4386	2.7275	1.9261
Q <sub>2</sub> Group-Self Reliant/0-20	8.8636	3.3411	9.3333	3.6722	.6561
Q <sub>3</sub> Undisciplined-Controlled/0-20	12.5909	2.6911	12.3333	2.7166	.4697
Q <sub>4</sub> Relaxed-Tense/0-26	13.2727	5.6301	11.5088	4.1130	1.8007

\*Significant to the .05 level

FIGURE I  
 MEAN RAW SCORE PROFILES OF THE EE AND SP SAMPLES  
 IN RELATION TO THE AVERAGE INTERVAL ON THE 16 PF

A RESERVED	0	9	$\otimes$ 12	20 OUTGOING
*B LESS	0	7.5 X 8.5	$\otimes$	26 MORE INTELLIGENT
C LESS	0	13.75	$\otimes$ 17	26 MORE STABLE
E HUMBLE	0	9.25	$\otimes$ 12 X	26 ASSERTIVE
F SOBER	0	13.5	$\otimes$ 17	26 GAY
G EXPEDIENT	0	11.5	$\otimes$ 14	20 CONSCIENTIOUS
H SHY	0	10.5	$\otimes$ 15.25	26 VENTURESOME
I TOUGH	0	9.75	12 X $\otimes$	20 TENDER-MINDED
*L TRUSTING	0	$\otimes$ 7 X 9.25		20 SUSPICIOUS
M PRACTICAL	0	9.75	12.25 $\otimes$ X	26 IMAGINATIVE
N NATURAL	0	9.25	11	20 CALCULATING
O CONFIDENT	0	9.25	12.75	26 TROUBLED
Q <sub>1</sub> CONSERVATIVE	0	$\otimes$ 8.25 X 10		20 EXPERIMENTING
Q <sub>2</sub> GROUP	0	8.75	$\otimes$ 10	20 SELF RELIANT
Q <sub>3</sub> UNDISCIPLINED	0	9	11 X $\otimes$	20 CONTROLLED
Q <sub>4</sub> RELAXED	0	11.25 X	$\otimes$ 15.25	26 TENSE

$\otimes$  = EE X = SP

\*Significant to the .05 level

range on Factors G and H, again showing no tendency in either direction. On Factor I, the scores of both groups indicated a tendency toward being sensitive as opposed to tough-minded and realistic. Both groups showed a tendency towards being imaginative and wrapped up in inner urgencies as opposed to being practical and regulated by external realities on Factor M. Both EE and SP showed no tendencies in either direction on Factors N and O, as their mean scores fell within the average interval. No conclusions can be drawn from the scores on Factor Q<sub>1</sub>, as the two group scores were not stable on this scale. The mean scores on factor Q<sub>2</sub> are within the average range and do not show a tendency in either direction. Both EE and SP indicated a tendency to follow their self-image, to be controlled and socially precise, as opposed to undisciplined and following inner urges on Factor Q<sub>3</sub>. The mean scores of both samples on factor Q<sub>4</sub> indicated no tendencies in either direction, falling within the average range.

#### ED versus MR

On the basis of a separate t-test performed on each of the sixteen factors, using raw score data for the ED and MR samples, the second null hypothesis was tested and rejected at the .05 level of significance. The results of this analysis are summarized in Table III. A significant difference was found on one factor. The difference between mean scores on factor C ( $t=2.0733$ , significant to the .05 level) indicates that those in the ED sample

TABLE XII  
 MEANS, STANDARD DEVIATIONS AND T-RATIOS OF THE RAW SCORE DATA OF THE ED AND MR SAMPLES

FACTOR/RANGE	ED		MR		T-RATIO
	MEAN	S.D.	MEAN	S.D.	
A. Reserved-Outgoing/0-20	10.2778	3.0515	10.2609	3.3391	.0163
B. Less-More Intelligent/0-26	8.2778	1.5918	7.6087	1.9051	1.1686
C. Less-More Stable/0-26	17.9444	3.3412	15.5652	3.7163	2.0733*
E. Humble-Assertive/0-26	14.3333	4.7726	13.7826	4.3033	.3780
F. Sober-Gay/0-26	15.6667	2.7889	15.7826	3.9227	.1035
G. Expedient-Conscientious/0-20	10.1667	4.9131	12.4348	3.0335	1.7707
H. Shy-Venturesome/0-26	15.8889	3.8714	14.3043	6.3686	.9067
I. Tough-Tender Minded/0-20	12.4444	2.2662	12.0435	3.9395	.3753
L. Trusting-Suspicious/0-20	7.1111	3.3148	7.7391	2.9373	.6261
M. Practical-Imaginative/0-26	13.6111	4.8892	14.3043	3.5684	.5116
N. Natural-Calculating/0-20	8.8333	3.2016	9.6087	2.6985	.8201
O. Confident-Troubled/0-26	8.8333	4.2590	9.7826	4.1594	.6999
Q <sub>1</sub> Conservative-Experimenting/ 0-20	10.3889	2.9653	9.1739	2.5135	1.3838
Q <sub>2</sub> Group-Self Reliant/0-20	8.5000	2.8333	9.7826	3.8443	1.1565
Q <sub>3</sub> Undisciplined-Controlled/0-20	12.2778	2.5778	12.2609	3.0676	.0183
Q <sub>4</sub> Relaxed-Tense/0-26	10.2778	3.5403	12.4348	4.2203	1.6983

\*Significant to the .05 level

tend to be significantly more emotionally stable and more likely to face reality than those in the MR sample.

No significant differences were found on the remaining factors. However, certain tendencies were noted for both groups, in relation to the average interval discussed above, on several remaining factors. It must be kept in mind that these tendencies are in relation to the sample of college students which are represented in the test publisher's norm tables (6:12,15). The following discussion is illustrated in Figure II.

Both groups scored within the average range on Factors A, B, F, and L, showing no tendency in either direction. Scores on Factors G, H, N, O, Q<sub>1</sub>, Q<sub>2</sub>, and Q<sub>4</sub> were not stable, therefore, no comment can be made. However, scores did reveal definite tendencies on the remaining factors. Both groups scored above the average interval on Factor E, indicating a tendency to be assertive and aggressive, as opposed to conforming and accommodating. On Factor I, both ED and MR scored slightly above average, indicating a tendency to be sensitive as opposed to tough-minded. Both groups indicated a tendency to be imaginative and concerned with inner urgencies as opposed to practical, conventional, and concerned with external realities, on Factor M. The scores of both groups on Factor Q<sub>3</sub> showed a tendency toward being controlled and following their self-image, as opposed to being undisciplined and following inner urges.



FIGURE II

MEAN RAW SCORE PROFILES OF THE ED AND MR SAMPLES  
IN RELATION TO THE AVERAGE INTERVAL ON THE 16 PF

A	RESERVED	0	9 X	12	20	OUTGOING	
B	LESS	0	7.5 X	8.5	26	MORE INTELLIGENT	
*C	LESS	0	13.75 X	17	X	26 MORE STABLE	
E	HUMBLE	0	9.25	12	X	26 ASSERTIVE	
F	SOBER	0	13.5	X	17	26 GAY	
G	EXPEDIENT	0	X	11.5 X	14	20 CONSCIENTIOUS	
H	SHY	0	10.5	X	15.25	X	26 VENTURESOME
I	TOUGH	0	9.75	10 X	20	TENDER-MINDED	
L	TRUSTING	0	7 X	9.25	20	SUSPICIOUS	
M	PRACTICAL	0	9.75	12.25	X	26 IMAGINATIVE	
N	NATURAL	0	X	9 X	11	20 CALCULATING	
O	CONFIDENT	0	X	9.25 X	12.75	26 TROUBLED	
Q <sub>1</sub>	CONSERVATIVE	0	8.25	X	10 X	20 EXPERIMENTING	
Q <sub>2</sub>	GROUP	0	X	8.75 X	10	20 SELF RELIANT	
Q <sub>3</sub>	UNDISCIPLINED	0	9	11	X	20 CONTROLLED	
Q <sub>4</sub>	RELAXED	0	X	11.25 X	15.25	26 TENSE	

X = ED    X = MR

\*Significant to the .05 level

### Summary

It was indicated that the EE and SP groups differ significantly on two dimensions of personality. First, those in the EE sample are significantly more intelligent and abstract thinking than those in the SP sample. This indicates that the former learn faster and are quicker to grasp abstract ideas. Secondly, those in the EE sample tend to be more trusting, more adaptable, easier to get along with, and more free of jealousies than those in the SP sample. This indicates that the former tend to be uncompetitive and tend to work well in groups.

In testing the second hypothesis, it was found that those in the ED sample tend to be significantly more emotionally stable and more likely to face reality than those in the MR sample. This indicates that the former tend to be more emotionally mature, more realistic about life, and better able to maintain group morale.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The characteristics of different occupational groups has been the focus of a considerable amount of research reported in the literature. Typically, the ultimate purpose of such studies has been to provide assistance in occupational guidance, applicant selection, and professional or trade school admissions. The teaching profession has been included as an occupational category in many studies of this nature. However, with the advent of specialization in teaching, this profession has increasingly become a conglomerate of sub-specialties. Researchers have noted this to some extent, and a number of studies have been conducted in an attempt to determine the characteristics of several of these sub-categories. Special Education, however, is one teaching specialty which has been neglected in the literature.

#### Purpose

The purpose of this study was to determine whether those entering the field of special education have personality characteristics which are significantly different from those entering elementary education. The following specific objectives provided the focus of this study:

1. To compare the personality characteristics of selected students enrolled in graduate level special education courses (SP) with those of selected students enrolled in graduate level elementary education courses (EE).

2. To compare the personality characteristics of those students in the SP sample who were specializing in emotional disturbance (EC), with those specializing in mental retardation (MR).

### Hypotheses

The following two hypotheses were tested:

1. There is no significant difference in personality characteristics between graduate students majoring in special education and those majoring in elementary education.

2. There is no significant difference in personality characteristics between graduate students specializing in emotional disturbance and those specializing in mental retardation.

### Procedures

The following procedures were employed in order to test the hypotheses of this study. The study was conducted during the Spring, 1972, semester at Arizona State University, Tempe, Arizona. Two graduate level SP course sections were randomly selected from all such sections being offered. Similarly, two graduate level EE course sections were randomly selected from all such sections being offered. The instrument used to evaluate the personality character-

istics of the sample was the Sixteen Personality Factor Questionnaire (16 PF), Forms A and B. The test was administered during the regularly scheduled hours of the sample sections. The tests were hand scored and a two-tailed t-test was used to compare each individual factor score of the EE and SP samples, as well as the ED and MR samples. The .05 level of significance was chosen as the point at which the null hypotheses would be rejected.

### Results

1. The first null hypothesis was tested and rejected at the .05 level. Significant differences were found between the SP and the EE samples on two factors. The EE sample scored significantly higher on factor B, indicating a tendency of those majoring in elementary education to be more abstract thinking and faster to grasp abstract ideas than those majoring in special education. On factor L, the EE sample scored significantly lower, indicating that those majoring in elementary education tend to be more trusting, more adaptable, easier to get along with and free of jealousies than those majoring in special education.

2. The second null hypothesis was similarly tested and rejected at the .05 level. The ED sample scored significantly higher than the MR sample on factor C. This indicates that those specializing in emotional disturbance tend to be more emotionally stable and more likely to face reality than those specializing in mental retardation.

### Conclusions

The conclusions developed from this research should be considered in light of the assumptions and limitations underlying the study.

These assumptions and limitations were as follows:

#### Assumptions

1. Those enrolled in special education courses are either specializing in special education, or are there for some reason which distinguishes them from those in their major field who are not enrolled in such classes, and which is common to special education majors.
2. The factors of the Sixteen Personality Factor Questionnaire were valid and reliable.

#### Limitations

1. The groups studied were sampled from a limited population of all students enrolled during the Spring, 1972, semester, in graduate level EE on SP courses at Arizona State University.
2. Due to the unavailability of sufficient numbers of either form A or form B of the instrument, both forms were utilized in data gathering.

With these assumptions and limitations taken into consideration, the following conclusions were reached:

1. Students majoring in elementary education are significantly more abstract thinking, more trustive, more adaptable, and easier to get along with than those majoring in special education.

2. Students specializing in emotional disturbance are significantly more emotionally stable than those specializing in mental retardation.

3. It is possible to quantify and compare personality characteristics of various teaching specialties.

4. Assessment of personality characteristics for highly specific teaching specialties, as a means of distinguishing those in one specialty from those in another or from a more general specialty, is a viable concept.

#### Recommendations

The following recommendations for future research are suggested:

1. Studies with a similar design should be conducted to determine and compare personality profile patterns of other highly specific specializations in the teaching profession.

2. On the basis of data obtained in the above recommended studies, the possibility of matching the personality profile of an individual to the profile of a teaching specialty should be investigated. Such a study would ultimately maximize the efficacy of guidance, admissions, and selection procedures.

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