FOUR BROAD COMPONENTS OF PERSONALITY AS IT RELATES TO THE PERCEIVED EFFECTIVENESS OF THE DISTRIBUTIVE EDUCATION STUDENT TEACHERS AND THEIR STUDENTS IN MINNESOTA

Thesis for the Degree of Ph. D.
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DONALD ROBERT MAYLEBEN
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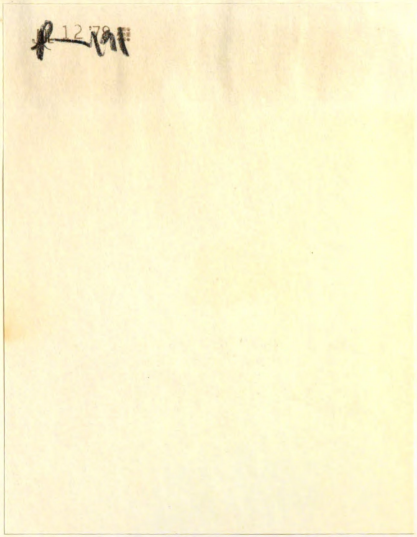
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ABSTRACT

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Specifically, the study was undertaken for the following purposes:

(1) To develop an instrument that would measure the same four Gordon Personal Profile test's factors, ascendency, responsibility, emotional stability, and sociability by reconstructing the unabridged Minnesota Teachers Attitude Inventory test into a personality test called the Modified MTAI.

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(1) To develop an instrument that would measure the same four Gordon Personal Profile test's factors, ascendency, responsibility, emotional stability, and sociability by reconstructing the unabridged Minnesota Teachers Attitude Inventory test into a personality test called the Modified MTAI.

(2) To study the relationship between the students' and student teachers' perceived similarities in personality, which were identified through four broad components of the Gordon Personal Profile test: ascendency, responsibility, emotional stability, and sociability, and the performance rating that the students and student teachers gave to each other;

(3) To determine if any difference existed between the spring and fall classes;

(4) To detect differences, if any, between the classes at the post-secondary level of instruction and classes at the high school level;

(5) To determine if any difference existed between the classes of the student teachers who were judged socially secure by the Minnesota Teacher Attitude Inventory test and the classes of those student teachers who were judged socially insecure by the same measurement.

A specially constructed personality test, the Modified MTAI, and the Gordon Personal Profile test were administered to 380 students and 22 student teachers of 14 distributive education classes in the spring and 8 in the fall of 1971. This was done during the first week of the student teaching assignment. However, 3 student

teachers and 61 students were eliminated from the population because of improper coding and/or marking of the tests. A rank correlation was used to analyze the relationship between the four factors on each instrument for each class. It was found that only four of eight correlations were significant at the .05 level. Therefore, the first two null hypotheses were accepted. Therefore, it was concluded that the Modified MTAI was not a substitute for the Gordon Personal Profile in this situation.

At the end of the student teaching experience, the students and student teacher from each class completed a ten-question rating form on the perceived performance and attitudes of each other. The difference in the rating of the students and student teacher was compared with the difference of the students' and student teachers' scores for each of the four Gordon Personal Profile test factors in each class. The data were analyzed by using simple correlation and the following results were noted:

1. Ascendency, responsibility, and emotional stability factors each had nine significant correlations while sociability had eight.
2. Thirty-five of a possible eighty correlations were significant and twenty-five of them were significant at the .05 level.
3. Fourteen classes had one or more significant correlations.

4. Three classes had significant correlations for all four factors.

5. Four classes had three significant correlations for the same factors, ascendency, emotional stability, and sociability.

6. Four classes had two significant correlations and three classes had one significant correlation but each for different factors.

Therefore, it was concluded that it appeared that some relationship existed between the performance and attitude rating of the distributive education student and student teacher and the perceived similarities in the four broad components of personality. However, it is unclear what the relationship was.

In an effort to determine the difference in populations, the classes were divided into three sets of pairs. They were spring versus fall, post-secondary versus high school, and classes of socially secure teachers versus classes of socially insecure teachers. Since the pairs consisted of an uneven number of classes and subjects, an average weighted correlation was computed for each set and substituted into Fisher's Z transformation formula, which was used to analyze the data. At the .05 level, no significant difference in populations for any of the four Gordon Personal Profile test factors was found for the

spring and fall classes, nor for the post-secondary and high school groups. However, in the case of the classes with socially secure teachers versus the classes with socially insecure teachers, significant differences were noted in the population for each of the four factors of the Gordon Personal Profile test. The Z values were 4.790765 for ascendency, 3.904121 for responsibility, 3.790871 for emotional stability, and 4.716555 for sociability.

In addition, the following pertinent findings were noted:

1. Twenty-five of the possible twenty-eight correlations for the classes of the seven socially secure teachers, or 89 per cent, were significant at the .10 level.

2. Five-sevenths of all significant correlations were recorded in the classes of the seven socially secure teachers.

Therefore, it was concluded that in the classes of the socially secure teacher, the perceived similarities in personality of the student and student teacher affected strongly the performance and attitude rating.

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CHAPTER I

INTRODUCTION

Modern man, generally, has been concerned about his relationship with his fellow man. This is demonstrable, not only in his family life, his occupations, and his education, but also in any of his pursuits involving other human beings.

Interpersonal relationships for the future appear to be even more paramount. Toffler (152:122-23) states, " . . . that we must necessarily reach that ultimate degree of transience in human relations." Inherent in this concept is the fact that due to acceleration of change, which in itself denotes a temporariness in relationship, man must be able to accelerate relationships. Carl Rogers, (130:2) a noted psychologist, says:

> So he is seeking, with great determination and inventiveness, ways of modifying his existential loneliness. The intensive group experience, perhaps the most significant social invention of this century, is an important one. . . . People will be experimenting with ways in which a whole person can communicate himself to another whole person.

Therefore, one could conclude from Toffler and Rogers that a major emphasis for the future appears to be development of an ability to establish meaningful temporary relationships.

Within the school building, the concept that interpersonal relationship is important finally comes down to the teacher and his effectiveness. Since 1891 numerous research studies have been conducted in order to identify "effective" teachers or to identify some consistent criteria that would measure "good" teachers. In attempts to identify some criteria for future effectiveness, many approaches have been tried and replicated. Some studies have been based on student achievement, some on situational criteria, and others had been done on personality traits and/or behavior of teachers.

What were the findings and conclusions of the voluminous studies? The following were typical: "The notion of the 'good teacher' which appears so basic to the study of teacher effectiveness turns out to be almost as vague and diffuse as the range of human experiences relative to teaching," (Ellena, 52:54). "And yet, with all this research activity, results have been modest and often contradictory. Few, if any, facts are now deemed established about teacher effectiveness, and many former 'findings' have been repudiated" (Biddle, 21:38). It seems evident that, even with hundreds of studies

involving thousands of teachers, the objective of determining criteria for judging teacher effectiveness had not been met.

If educators accept the concept that schools should be a mirror of society, then it might be projected that education should seek ways of preparing the student to meet the challenges of the future. Therefore, education should attempt to determine the affect of interpersonal relationships on teaching and learning. Following this line of reasoning resulted in one of the functions of this study being to discover the perceived effectiveness of the distributive education teacher as observed by the distributive education student. It was the contention of the researcher that perceived similarities in four basic components of personality will affect the perceived effectiveness of the teacher and/or the student. The four components of personality used in this study were: ascendency, responsibility, emotional stability, and sociability.

The Problem Statement

This study is concerned with determining the affect that perceived similarities in four broad components of personality had on the perceived effectiveness of the distributive education student teacher and their students. The four broad components of personality were:

ascendency, responsibility, emotional stability, and sociability. These were defined as:

Ascendency.--Mobility upward, especially in respect to power, prestige, and influence. Tendency to control the behavior of associates.

Responsibility.--Accountability for actions and their consequences. The character trait of carrying out one's agreements or one's duties.

Emotional Stability.--Characteristic of a person who does not react excessively to emotive situations.

Sociability.--Inclination to seek the company of others and to be friendly and agreeable toward them.

It was contended by the researcher that distributive education students and student teachers would have a tendency to perceive each other to be more effective if similarities in personality were observed. The problem was specified by a major hypothesis:

> There are no differences in the attitude and perceived effectiveness rating made by the student and student teacher of each other, when one perceives similarities in one of the four components of personality as measured by the Gordon Personal Profile.

The primary hypothesis was first tested by specifying four questions, each isolating a component of personality.

1. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in ascendency?

2. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in responsibility?

3. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in emotional stability?

4. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in sociability?

It was further assumed that if the hypothesis were to be rejected and that if differences were determined, that certain factors in the instructional setting for distributive education should be analyzed to determine if they were causal. These factors were:

(1) time of the school year; spring classes versus fall;

(2) level of instruction: post-secondary versus secondary;

(3) socially secure teachers versus socially insecure teachers.

5. Another aspect of this study was to devise an instrument called the Modified MTAI, that would measure the same four components of personality as the Gordon Personal Profile. The unabridged Minnesota Teachers Attitude Inventory Test provided the basis for the development of the Modified MTAI.

Outcomes Expected

The outcomes of this study were presumed to be the following:

1. In teacher education programs in distributive education, there would be a greater emphasis in the direction of interpersonal relationship skills. This would occur in the preservice teacher education programs as well as the in-service approach.

2. Distributive education materials for training teachers as well as students would in effect have to be redesigned in order to emphasize the interpersonal relationship skills.

3. The selection of students for entry into a distributive education program would assume a new dimension, such as matching life styles against some form of pre-determined testing system.

4. Within a given teacher education program further investigation would be undertaken in an attempt to modify teacher behavioral patterns.

5. The entire process of recruitment for a distributive teacher education program might be significantly changed.

Need for Study in Distributive Education

A review of the literature revealed that vocational educators traditionally had not undertaken psychologically based research. Their concern had centered mainly around the cognitive aspects of vocational programs or around descriptive studies of procedure and practice of programs. This was not to say that there had not been some attention given to the role of interpersonal relationship in vocational education but as a rule this form of research had been left to the psychologist.

Education for distribution and marketing has always recognized that human relations are a large component of occupational competency. This belief was recently reinforced by Crawford (37) who has identified human relations as one of the competencies a Distributive Education Teacher-Coordinator must possess. As noted in the review of literature, since 1958 a much greater emphasis has been placed on the recognition of the need for closer personal relationships between teacher and more understanding of them. In Minnesota, new certification requirements state that all teachers, new or recertified, must have a human relations component.

In the area of distributive education, it has become more apparent that there is a need to discover the extent to which interpersonal relationships affect the entire program. In the past, distributive education personnel, teacher educators, teachers, and coordinators believed that the interpersonal relationship of students and teachers had a direct bearing on the total effectiveness of a program. However, little research had been done to establish this fact.

By the very nature of a distributive education program, it seemed that the aforementioned statements were even of greater significance. A great deal of emphasis has been placed on the recruitment and selection, placement, and performance of students within a distributive education program. Since the components in the preceding statement were such an integral part of the distributive education program, there must be some way to determine the extent of their importance. If a relationship can be established between the ratings of teachers and students to the life styles of each other, then it may be possible to demonstrate that recruitment and selection of students is of vital importance to the success of any distributive education program.

Definition of Terms

Terms which have special meaning for the understanding of this paper are:

Ascendency.--Mobility upward, especially in respect to power, prestige, and influence. Tendency to control the behavior of associates.

Responsibility.--Accountability for actions and their consequences. The character trait of carrying out one's agreements or one's duties.

Emotional Stability.--Characteristic of a person who does not react excessively to emotive situations.

Sociability.--Inclination to seek the company of others and to be friendly and agreeable toward them.

Security.--A complex attitude of self-possession, self-confidence, and certitude that one belongs in a valued social group.

Insecurity.--An indefinite condition of feeling anxious, unsafe, threatened, or apprehensive which is shown by withdrawing reactions, by severe limitations of responsiveness, and by inability to make friends because of a lack of trust in self or in others.

Personality.--It is the physical, mental, emotional, and moral characteristics of man and any changes, which are constantly occurring, in them.

Distributive Education.--For the purpose of this study only, distributive education is a cooperative

vocational program designed to educate secondary and post-secondary students for careers in marketing and distribution as practiced in the schools of Minnesota.

Distributive Education Teacher-Coordinator.--The teacher in the Distributive Education program who assists the student in developing employable competencies in marketing by coordinating the instructional program with the student's on-the-job activities.

Distributive Education Teacher-Educator.--The person responsible for the planning, developing, and implementation of a program at the college level designed to prepare Distributive Education teachers at all levels.

Gordon Personal Profile.--A test designed to measure four aspects of personality which are significant in the daily functioning of the normal person, namely, ascendency, responsibility, emotional stability, and sociability.

Minnesota Teacher Attitude Inventory (MTAI).--A test designed to measure those attitudes of a teacher which predict how well he will get along with pupils in interpersonal relationships and indirectly how satisfied he will be with teaching as a vocation.

Modified MTAI.--A test designed to measure four aspects of personality which are significant in the daily

functioning of the normal person, namely, ascendency, responsibility, emotional stability, and sociability.

Human Relations.--It is the integration of people into a work or learning situation in a way that motivates them to work together productively, cooperatively, and with economic, psychological, social, and self-satisfaction.

Interpersonal Relationships.--It is the process by which one whole person can be totally free to communicate himself to another whole person.

Rating Agreement Index.--It is the difference between the teacher's rating of each student in his class and the individual student's rating of that teacher.

Test Factor Agreement Index.--It is the difference between the teacher's score for each factor on the Gordon Personal Profile test and the student's test score for each factor.

P.--The letter P will be substituted for the Greek letter p.

Limitations

For the purposes of this study, the following limitations were noted:

1. The spring and fall distributive education teacher coordinators from all four teacher education institutions in the state of Minnesota totalled seventy-one. All student teachers were utilized during the spring; however, five student teachers in the fall did not wish to participate in this study. Therefore, the size of this population may pose some problems as to the reliability of the recommendations and may tend to increase any error within the study.

2. Due to the fact that none of the teacher education institutions within Minnesota had enough student teachers in any one quarter to establish a large enough sample of the population to be significant, it became necessary to utilize all four institutions. However, the teacher education programs are different in structure and content as well as having personnel that differ greatly in background and personality. Therefore, the background preparation of the various institutions student teachers may affect the results of this study.

3. The student teachers were assigned by the institution, and the researcher had no control over where these individuals were placed. Therefore, the type of school setting, structure of the distributive education programs, environmental

conditions of the community, and size of the school may have an effect on the results. However, it would not be possible to determine what effect, if any, these conditions would have on the findings.

4. Since all the willing student teacher coordinators for spring and fall, 1971, were included in this study, there was no control as to the age, sex, or backgrounds. The universe was made up of eighteen males and four females, varying widely in age and background.

5. In order to develop a control factor for the Gordon Personal Profile test, a modified MTAI test was developed. The researcher relied heavily upon clinical psychologists to select questions from the unabridged Minnesota Teachers Attitude Inventory Test.

6. Individual differences do exist in the perceptual domain. The statement is true not only for type and quantity of information that is perceived but also for the interpolation of the data that have been received.

Delimitations

It is assumed that in the United States there are approximately thirty-two states that have distributive education programs similar to those found in Minnesota.

Similarities are not only noted in the teacher education programs but also observed at all levels of instructions in distributive education. Therefore, it is anticipated that student teacher subjects selected from the distributive education teacher education institutions and the students from their assigned student teaching site will constitute a sample of the total population represented by the distributive education programs found in the thirty-two states.

Cost factors and lack of cooperation on the part of local school administrators prohibited the researcher from employing additional psychological testing instruments.

As in most research studies, a significant problem as to the size of the sample to be studied may arise. It was the intention of the researcher to deal exclusively with the teachers in distributive education, since the major field of study is in the area of distributive education.

Background of the Study

Although according to Biddle and Ellena (20:352) little is presently known for certain about teacher excellence, this does not diminish the importance of continued research, nor does it mean that researchers should give up in the hope of finding some criteria to predict teacher effectiveness. Barr et al. (16:147), after

summarizing seventy-five doctoral studies, suggested that more research is "needed to clear up many unresolved problems relative to the measure and prediction of teacher effectiveness." Biddle and Ellena (21:4) have also noted:

> The problem is not an idle one. The domestic science and world outlook both clearly demonstrate the urgent need for more and better education for all men. Of all societies, the free one depends most heavily on quality education for the fulfillment of its destiny. Thus, the teacher and the quality of his teaching are of paramount importance.

The importance of determining some criteria from which to measure teacher effectiveness has increased.

Some recent research has attempted to attack the general problem of defining teacher traits that might be related to effectiveness from the theoretical reference of "self" psychology. Self-psychology is based on the works of such men as Allport (4, 5), Maslow (111, 112), Rogers (128, 129), Lecky (102), Tillich (151), Jersild (91), and Combs and Snygg (34). This approach advocates that each person is a "unique" individual, and that one operates according to his self-concept or perception. Behavior is in accordance with one's perception of himself and the world in which he lives (Combs and Snygg, 34:14).

This approach using the "self as instrument," or an approach based on what an individual is from "within" has shown some promise in defining criteria for effectiveness. Recently, under the direction of Arthur Combs,

studies by Gooding (69) and Usher (156) have demonstrated that administrative and student ratings of teachers are related to, or consistent with, an observed perceptual structure. For example, those teachers who rated high with administrators and students had:

(1) Accurate perceptions about what people are like;

(2) Perceptions of self leading to adequacy;

(3) Accurate perceptions about the purpose and process of learning (Combs, 33:20).

Other studies by Shafer (141), Walker (159), and Good (67) have also shown a positive relationship between supervisors' perceptions of prospective teachers and the teacher's self-concept.

Even though the present research has indicated that there is some positive indication that self-psychology may assist in defining a criterion for effective teachers, as yet no conclusive proof has been established. Therefore, it may be safe to conclude that it may be impossible to establish criteria for effective teaching since years of research has been unable to produce any significant results, and since the phenomena of the individual's uniqueness is such an integral part of the teaching profession.

Dr. David Merrill (113) undertook a research project in which he was concerned with the social life

styles of individuals. Merrill has divided social life styles into four categories. They are driver, analytical, amiable, and expressive.

If Dr. Merrill's contention, that the social life styles of individuals play a significant role in interpersonal relationships in the world of work is correct, would it not be logical to conclude that the same is true in the field of education? Hence, this would set up the condition that maybe there is no one effective criterion for teaching, but that students and teachers would perceive each other to be more effective when their social life styles are similar, regardless of the techniques used or the way they are used or by whom they are used.

If the above statements contain some degree of truth, maybe other questions should be posed. If man is in a constant state of change, meaning growth and development, why not approach effective teaching from the standpoint of the teaching situation and the individuals involved in that same situation at a given point in time.

CHAPTER II

REVIEW OF RELATED LITERATURE

An examination of the literature in distributive education revealed that existing research did not provide a sufficient foundation for this study which dealt with both the students' and teacher's perceived behavior during their interaction. Some research in distributive education had attempted to identify desired behavior of a teacher-coordinator, such as Harris (82), Samson (136), and Crawford (39, 40, 41). Others tried to establish the desired behavior of the distributive occupations personnel, such as Ertel (56), Van Blois (157), and Crawford (39, 40, 41). Yet others sought to identify the types of students in distributive education, Ball (8), Larson (100), and Estes (57); and some studies investigated teacher-coordinator's job satisfaction, such as Johnson (92), and Olson (120). However, no studies in distributive education were located that dealt specifically with the affect of the interpersonal of both the student and the teacher. Therefore, it necessitated

exploring other disciplines, such as: general elementary and secondary education and psychology.

The review of related literature was divided into two categories, general and specific. In the general category, three broad areas are reviewed:

(1) Teacher Efficiency and Characteristics;

(2) Personality Characteristics and Perception; and

(3) Field Dependency Personality and Perception.

Since this study concerned itself with the effectiveness of a student and/or student teachers based upon a perceived life style which was measured by four broad components of personality, it was the intention of the researcher to draw upon the three aforementioned areas to show a general historical development and create a conceptual picture of the research related to the purpose.

Contained in the specific section were studies pertaining to the instruments, the Gordon Personal Profile and the Minnesota Teacher Attitude Inventory tests used in this study. The purpose of the special review was to present an overview of some of the research which illustrated several ways in which the instruments were utilized.

General Review--Teacher Effectiveness

Research in the area of teacher efficiency in earlier decades of this century was aimed at discovering

the characteristics of the effective teacher. Much of it relied upon measurement devices that are still in use today. These devices employed for the measurement of teaching efficiency were of three general types:

(1) rating scales;

(2) tests of teaching ability and efficiency; and

(3) tests of pupil achievement.

The following studies are intended to be indicative of typical research using the above-mentioned devices and being produced in the decades between 1910 and 1970. Barr et al. (13:46) commenting on the last four decades (1910 - 1950) of teacher research reported that the research did not make adequate use of established psychological or sociological theory. It had proceeded too often on hypotheses derived from an over-simplification of the situation and an inadequate methodology, leading to conclusions that frequently did not make psychological or educational sense.

The Period--1900-1929

While rating scales were employed earlier, the Elliot scale in 1910 and the Boyce scale in 1915 were the first relevant scales for the evaluation of teaching efficiency.

As a result of Elliot's (53) work, Boyce (26) developed a score card using forty-five traits and

correlated these items against a general estimate of merit of the teacher. He found that a high correlation existed between the forty-five items and the criterion.

Barr (9) found fault with the then current methods of classroom supervision because he doubted their validity, reliability, and objectivity. Barr suggested that supervisors be trained to observe, analyze, and describe teaching in terms of specific teacher and pupil activities. In his study he sought to test out a better method of supervision using the standard items he helped develop in Detroit some six or so years earlier. He concluded that the performance of teachers was so variable as to make it next to impossible to say that an observed teaching practice is wholly good or wholly bad without further research.

Barr (9, 10:222) indicated that frequently these early studies of teaching efficiency were based upon the general estimates of supervisors and administrative officials visiting the teacher at work and therefore, yielded a method which was very subjective and unreliable. He suggested that standardized tests of teaching ability and efficiency provided more reliable evaluation and offered the Knight (98:14) Aptitude Tests for Elementary and Secondary Teachers as an example.

Knight (98) has been cited by Boardman (24:6) and others as a pioneer in the standardized tests field.

Madsen (108:43) cited Knight's study as the first really scientific investigation concerning factors of prognostic value in teacher selection and it served as a base for many of the teacher rating scales and devices then in use. Knight (97) used both the supervisor and teachers' associated as judges to rate a teacher upon the broad quality of general teaching ability such as: the number and types of questions asked in class. These factors were then ranked by each judge in order of merit. A correlation of .541 existed between teaching efficiency and IQ scores of elementary teachers. Knight concluded that a professional test of teaching efficiency for elementary school teachers was highly predictive but suggested that some test other than IQ may be more desirable. Somers (144:9) followed Knight's pattern but used normal school marks, participation in extra-curricular activities and personality estimates in addition to IQ scores to predict success of prospective teachers. He reported the most significant coefficients of correlation were normal school success, .73, two years marks in school, .71, and student teaching in training school, .70.

The Period--1930-1949

Wrightstone (168:32) shifted from research on objective teacher supervision to using the classroom climate. Data for those types of studies were obtained through the use of trained observers who made notations

of pupil behavior in the classroom. Each time a pupil engaged in a specified activity, the observer wrote the coded symbol for this activity next to the pupil's name. The accumulated material was then rated by a panel of trained observers. In this way, Wrightstone was able to conclude that teachers using the newer type practices in their classrooms offered many more opportunities for self-initiated, cooperative, and leadership activities. It was also possible to note how teacher personality and practices affected the democratic process.

Mort et al. (117) developed a questionnaire which specified the attitudes of the teacher toward the role of the school in modern society. Teachers who did poorly on the seven categories of school policy covered by statements indicated unawareness or disagreement with progressive trends and practices.

Kelley and Perkins (95:7) felt self-evaluation of teaching practices should be of importance to the teacher. They developed an inventory to indicate teacher fitness for the responsibilities of dealing constructively with youthful personalities in the classroom. Differences between high and low scoring teachers were found to be significant. While not denying the value of self-evaluation, Barr and Harris (14:9) presented a means of evaluating the teacher's performance systematically on an activity basis which was the anecdotal-performance record approach to teacher evaluation.

After examining hundreds of studies, Corey, (38: 578), in search of scientific investigation into the traits associated with fine teaching, claimed that supervisory ratings were invalid criteria for teacher effectiveness because the emphasis had been on the teacher and not on the development of the child. Another researcher, Grieder, (79:691-92), in his analysis of temperament used Rosanoff's seven components which were: the "normal" component, the hysteroid, the cycloid, the schizoid component, comprised of the autistic phase and the paranoid phase, and the epileptoid phase, in an attempt to establish common patterns of temperament among the student teachers. He also was looking for some supervisory rating to use as criteria. His findings revealed no common temperamental element or pattern of components in the data for various groupings of student teachers.

Barr (10:220 and 11:280-81), in a summary of investigations on the prediction of teaching efficiency for two three-year periods (1940-1942 and 1945-1947), summarized over 200 studies relating to the measuring and prediction of teaching efficiency. Barr reported many exhaustive and extensive studies had been made and the majority reported correlations between such variables as intelligence test scores, achievement test scores, academic averages, and supervisors' ratings. Barr attempted to show the trends and the problems of teaching efficiency in these reports.

The Period--1950-1970

In the Second Report of the Committee on Criteria of Teacher Effectiveness, Barr, Beckdolt, Burly, Gage, Orleans, Pace, Remmers, and Ryans, (133:15), stated that in the earlier decades of this century, research was directed at discovering the characteristics of the effective teacher. Attempts were made repeatedly to correlate single traits of teachers with one or more criteria. Most often, the criteria employed was the rating of teachers, thus bringing, in a sense, both the criteria and the characteristics into the same dimension. This approach led to an over-generalized view of teaching and reduced considerably the likelihood that good teaching might be viewed as part of some broader situation. Barr reported that too many of the ratings were made by persons untrained for such tasks, and hence, were of questionable validity.

Almost as if to answer the objections of Barr et al., Ryans (133:11) reported on a study begun by the American Council on Education in 1948 and completed in 1953. The study was, in part, an outgrowth of the program of the National Committee on Teacher Examinations. The important role of personal and social behavior patterns of teachers was recognized from the first in planning the National Teacher Examinations, but lack of reliable

research data in the personal and social behavior areas discouraged inclusion of them in the test battery which evolved.

The purpose of Ryans' study was to identify and analyze some of the patterns of classroom behavior, attitudes, viewpoints, and intellectual and emotional qualities which characterized teachers, and to develop objective measures that might be used in evaluating and predicting teacher behavior. In order to attain these objectives, it was necessary to develop techniques for the reliable assessment of classroom behavior, to determine some of the more prominent patterns of teacher behavior, and to develop inventories composed of materials hypothetically related to teacher classroom behavior dimensions and other personal and social characteristics of teachers.

The design of Ryans' study set it apart from the others on which Barr et al. (13:46) had reported because most of what was known about teacher characteristics was derived from subjective data-gathering rather than a more objective norm. Specifically, Ryans' study dealt with the weaknesses Barr et al. pointed out by:

(1) viewing teaching as a part of some broader situation;

(2) using qualified raters and observers whenever part of the research design called for them;

(3) by basing hypotheses and methodologies on established psychological and sociological theory.

Ryans' study examined almost every conceivable variable in teaching effectiveness such as age, sex, work habits, marital status, value judgments, size of school, educational philosophy, classroom behavior, teaching experience, avocational activities, religious activities, academic success, size of community, and the socio-economic status of the community. Findings and conclusions were given on each area researched and trends were reported. For instance, neither age nor teaching experience appeared to be associated with teacher attitudes, and actual pupil behavior in the classroom did not appear to be related to the attitudes held by teachers. Ryans, however, believed that the usefulness of his findings for the prediction of teacher behavior would be greatest when the results were considered in an actuarial context, rather than in attempting highly accurate predictions for given individuals.

Bush (28), working on teacher-pupil relationships, pointed out the complexity of measuring teaching competence because of the divergence of ratings, the different vantage points, and the different standards in mind used by supervisors, administrators, and pupils. He indicated that it was not possible to classify all pupils or teachers into one or another of three pupil and three teacher types he described; but for those who could be so classified, it

emerged that a failure to match these types frequently resulted in disturbed teacher-pupil relations. He suggested that the effectiveness of the teacher-pupil relationship might be increased by experiments involving matching of pupils and teachers. He further reported findings that pupil liking for the teacher was highly related to pupil liking for the subject and to subject matter achievement, and there was a marked tendency for those pupils who most liked the teacher to feel that they were learning more, even though they may not have been learning as much. Allen (3:13), warned that professional persons retain their effectiveness only as long as they remain warmly human in the relationships. The more skillful they are (therapists or teachers), the more natural and human they can be as they incorporate the theoretical background of their skill into the relationship.

Some recent research has attempted to attack the general problem of defining teacher traits that might be related to effectiveness from the theoretical reference of "self" psychology. Self-psychology is based on the works of such men as Allport (4, 5), Maslow (111, 112), Rogers (128, 129), Lecky (102), Tillich (151), Jersild (91), and Combs and Snygg (34). This approach advocates that each person is a "unique" individual, and that one operates according to his self-concept or perception.

Behavior is in accordance with one's perception of himself and the world in which he lives (34:522 and 33:134).

This approach using the "self as instrument," or an approach based on what an individual is from "within" has shown some promise in defining criteria for effectiveness. Recently, under the direction of Arthur Combs, studies by Gooding (69) and Usher (156) have demonstrated that administrative and student ratings of teachers are related to, or consistent with, an observed perceptual structure. For example, those teachers who rated high with administrators and students had:

(1) accurate perceptions about what people are like;

(2) perceptions of self leading to adequacy;

(3) accurate perceptions about the purpose and process of learning (Combs, 33:20).

Other studies by Shafer (141), Walker (159), and Good (67) have also shown a positive relationship between supervisory perceptions of prospective teachers and the teacher's self-concept.

Even though the present research has indicated that there is some positive indication that self-psychology may assist in defining a criteria for effective teachers, as yet no conclusive proof has been established. Therefore, it may be safe to conclude that it may be impossible to establish criteria for effective teaching since years

of research has been unable to produce any significant results, and since the phenomena of the individual's uniqueness is such an integral part of the teaching profession.

Since there was a voluminous amount of research in the area of teacher efficiency and characteristics, the preceeding review was presented for the purpose of showing the general historical development of the methodology and problems encountered in the scientific search for evidence.

General Review--Personality Characteristics and Perception

Personality and perception had been studies and had a history almost as long as psychology itself. Research designed to measure individual differences in abilities, personality traits, and intelligence likewise have a history almost as long. Early studies in the area of perception stressed the differences in perceptual and sensory characteristics. Galton (60) investigated what forms of imagery different subjects took and so devised tests to measure weight discrimination and sensitivity to high tones. Cattell and Farrand (30:620) used a battery of tests on college students and were seeking measures of perceptual differences. Gilbert (64:2, 3) compared the physical growth of hundreds of children to the performance on perceptual and motor tests.

These researchers and others working at the turn of the century were struggling to determine individual differences in perception. They and other investigators believed that individual variations in attention, attitudes, motivation, and set had an effect on perception.

A survey by Gibson (63:783-84) was made of research on set with emphasis on perceptually oriented studies. At first, a set was described as a transient condition of the subject due to the instructions of the experimenter. But it was soon learned that what the subject perceived was also dependent on general expectations arising from the pattern of the entire situation and on habits gained by previous experience. Thus the notion of set was broadened to include those perceiver conditions. Researchers have become interested in the motivational factors and personal determiners of perceptual experience and have studied their relationship to perception. This research direction has blended with a general shift of emphasis in differential psychology. That shift has been from the measurement of cognitive traits to the measurement of motivational traits (Tyler, 155).

The relationship of personality and perception is best shown in the area of projective techniques. The relationship is contingent upon the hypotheses that responses to ambiguous or unstructured stimuli reveal characteristics of the individual's personality. The

most familiar examples of this evaluation of personality approach were Rorschach's Ink Blot Test and Murray's Thematic Apperception Test (Abt and Bellak, 1). These traditional clinical-psychometric approaches have been complemented in recent years, however, by experimental investigations which attempt to apply laboratory techniques to the study of individual differences in perception. Typologies, contrasting persons whose usual ways of experiencing the world in one way or another, have been constructed by past investigators based on individual differences in perception.

Jaensch (89) gave one of the most inclusive typologies based on perception. He contrasted those whose perceptions were unstable, irregular, and not firmly linked to reality with those whose perceptions are systematic, logical, and realistic. Tyler (155) discussed a somewhat similar typology and contrasts subjective with objective perceivers. The objective type had a slow, rigid, narrow consistency in the approach to a perceptual task while the subjective perceiver viewed and interpreted what was seen with a fluctuating, broad overview marked by considerable subjective interpretation.

The perceptual typology of Eysenck (58) has appealed to many psychologists and it contrasted form reactors to color reactors by using four tests which were:

(1) suggestibility,

(2) dark vision,

(3) questionnaire,

(4) Rorschach ranking.

The form-color typology demonstrated some relationship with scoring procedures for Rorschach determinants. However, it was concluded that a combination of the four tests was a better measure than any of them used singly. This was true not only because of the statistical fact that four tests are better than one, but because the Rorschach appeared to be more diagnostic with respect to hysteria than to dysthymia.

Another researcher, Vernon (158), discussed the terms "analyzers" and "synthesizers." The analytic observer concentrated on small details and tended to see separate parts while the synthetic observer saw the field as an integrated whole, but missed some of its details completely. Various workers cited by Vernon mentioned the fact that subjects spontaneously adopted one or the other attitude in experiments on psychological relationships, illusions, or comparisons of complex geometrical forms. The subjects were most successful at a perceptual task when they adopted the attitude natural for them. In the distinction between what Vernon describes as analyzers and synthesizers, there was a relationship

to the Rorschach location interpretations of whole (W), large detail (D), and small detail (d).

The function of the Personality Characteristics and Perception section was to provide a general overview of some of the earlier as well as more recent attempts to link the development of personality characteristics with perception. Since this study dealt with the effectiveness of a student and/or student teacher based upon a perceived life style, which was measured by four broad components of personality, it seemed only logical to incorporate some of the earlier developments.

General Review--Field Dependency Personality, and Perception

The first large-scale quantitative investigation in perceptual characteristics was a series of factor-analytic studies published by Thurstone (149). A number of factors centering around perceptual speed or "freedom from Gestalt-binding" which appeared to be related to mental ability were described. Speed and flexibility of closure were seen as related primarily to temperament. This dimension emerged in subsequent factor-analytic studies by Thurstone (150:55), Botzam (25), and Pemberton (122). Using Gottschaldt's test and Glaser's association Value of Nonsense symbols test to determine the subject's ability to make distinctions between aspects of given fields presented useful information about personality according to Gollin and Baron (66:260).

Witkin (165) described a perceptual type or mode called field dependency which was related to certain personality characteristics. To measure this type of orientation, Witkin devised a twenty-four item Embedded Figures Test (EFT) selected from those developed by Gottschaldt (76:262). To make Gottschaldt's black-and-white outline complex figures more difficult, colored patterns were superimposed. The simple figure was hidden by being incorporated into the pattern of the larger figure and the S was required to separate the item from the field in which it was incorporated. The EFT has become a standard part of the tests of field dependence, and shorter forms of it have also been developed (Witkin, 164). In a manner similar to the typologists of the past, Witkin formulated polar perceptual approaches characterized as global and analytical types. The global manner of perceiving involved the inability or difficulty in overcoming an embedding context, while the analytical method involved a tendency to experience items as discrete from their backgrounds, and reflected an ability to overcome the influence of an embedding context. These individual differences in approach to perception have been called field dependence and field independence and are frequently referred to just as field dependence. The tendency toward one or the other approaches of field dependence characterized a person's perception in a wide variety of

situations, and there is a considerable body of literature specifying the relationship between field dependence and performance in constancy situations (Thurstone, 149; Witkin et al., 165; Perez, 123; Holtzman and Bitterman, 85; Podell and Phillips, 124; Gardner et al., 59; Gardner, Jackson, and Messick, 62). The perceived was markedly self-consistent in respect to the global or analytical approach of perception.

In general, the field dependence dimension was related to dimensions of perceptual functioning identified by other investigators. "Field dependency, Thurstone's flexibility of closure, Phillip's spatial decontextualization, Duncker's functional fixedness, Guilford's adaptive flexibility, and perceptual organization on the Wechsler scale all appear to involve the ability to overcome an embedding context" (Witkin, 165:80). Even stronger evidence of such a relationship was shown in studies by Gardner, Jackson, and Messick (62:8) and Podell and Phillips (124:439).

Gardner, Jackson, and Messick (62:8) factor analyzed a large battery of perceptual, intellectual, and personality tests. They included two tests to represent the field-dependence dimension, the EFT and RFT, and two tests to represent the flexibility of closure dimension, Concealed Figures and Designs. All four tests had their major loadings on the same factor. It

was also evidenced that the field dependence dimension referred quite specifically to the ability to overcome an embedding context, which appeared distinct from the ability to overcome the effects of distracting field (Witkin et al., 164).

Witkin et al. (164), using the interview technique and various psychometric instruments, discovered field dependent Ss were unadaptive under stress and made significantly more errors than field independent Ss when their social attitudes conflicted with the correct solution. The field dependent Ss had a tendency to lack insight, to repress their impulses, to be passive, to yield to inferiority feelings, and to be tense. Moreover, they tended to be submissive to authority, to require environmental support, and to deny inner events. For defenses, field dependent Ss tended to use massive repression and primitive denial.

Witkin found the field independent perceiver tended to maintain his own direction in the face of the contradictory attitudes, judgments, and values of others. The field independent Ss tended to have relatively stable self-views in varying social contexts since they needed these less for self-definition, and tended to show self-awareness, to express impulses directly, to be active, to deal with inferiority feelings in a compensatory way, to show self-assurance, and to have a sense of humor.

The field independent Ss tended to use intellectualization, isolation, and over-control as defenses. It was assumed, then, that an individual's performance in perceptual tasks provided a measure of his manner of operating in other areas of life; in other words, it represented the nature of his personality functioning. As such, it provided more valid information on a teacher's personal-social behavior than did the MTAI for, as Ryans (133:12) indicated, research seemed to point toward clusters of behavior, and it is reasonable that some behavior was more suitable for elementary than for high school situations. It was assumed that a teacher developed and displayed certain types of attitudes and behavior because of his perception of self and of others. Attempts to determine attitudes characteristic of superior teachers to gain better teacher-pupil relations were not greatly beneficial. Swinford (147:214) reported that the type of person a teacher is, including his knowledge, was more important in influencing his teaching behavior and attitudes than the pressures and influences of his education, administration, and community. Englander (54:262) pointed out in his study of elementary education majors that the perceived elementary teaching was a means of maintaining and enhancing the phenomenal self. Congruency with respect to perceived personal characteristics of self with the characteristics of elementary teachers was

significant at the 1 per cent level of confidence. In addition, these elementary education majors perceived that the features of elementary teaching would be congruent with the features desired for themselves. These findings tended to confirm Super's (146:189) notion that one's vocational choice was a means of implementing the self-concept which required a person to determine rather explicitly their concept of self and to say, "I am this or that type of person." An exploratory study by Dillon (48) also lended support to Super's concept and reported a definite relationship between a subject's motivational pressure and his concept of himself as a teacher.

By the preceeding review, it was the intent of the researcher to show a different methodology of examining personality development through perception. This section illustrated a general pattern of the studies that used more objective criteria and relied upon more spontaneity of response from the subject than the studies reported in the Personality Characteristics and Perception section, which were subject to distortion by the subjects because of his willingness to give a free response or by the examiner due to his ability to interpret the results. However, the Field Dependency Personality and Perception unit was of concern because the additional information contributed to the major assumption of this study.

Specific Review of Related Literature

The function of the specific review was to illustrate some of the varied areas and uses of the Gordon Personal Profile and the Minnesota Teachers Attitude Inventory tests which were two of the four instruments used in this study. This was done by selecting a few studies that provided a broad and general perceptual pattern in methodology. Also a brief description of purpose as seen by the designer of the instrument was included. It was not possible to demonstrate the application of the ten-question rating form or the Modified MTAI test because those instruments were designed specifically for this study. Therefore, the review was confined to the first two mentioned measurements which were presented in separate units.

Specific Review--Gordon Personal Profile

The purpose of the Gordon Personal Profile was to provide a simply obtained measure of four aspects of personality which are significant in the daily functioning of a normal person. Specifically, they are ascendency, responsibility, emotional stability, and sociability. Gordon (73:669-70) claimed that the four aspects of personality were relatively independent and psychologically meaningful traits which were important in determining

the adjustment and effectiveness of an individual in many social, educational, and industrial situations.

Gordon (71:407), in the initial development of the instrument, assumed that a primary reason for the low validity of the personality questionnaire was the motivation of a majority of respondents to mark socially acceptable alternatives to items, rather than that which they believed applied to themselves. Using the forced-choice method, Gordon designed a measurement of eighteen items that presented pairs of items that had been equated for preference value but which differentially discriminate on a criterion. This resulted from two 150-item tests which were administered to two groups of students numbering 390 and 282. He found that the correlations on all four factors for both male and female were at least .5 at the .05 level.

Several studies were conducted to test the fakability of the Gordon Personal Profile; two such studies were: Rusmore (132:176) and Gordon and Stapleton (75:258). Rusmore simulated an employment and vocational guidance situation and administered the Profile to eighty-one lower-division students. He concluded that the Gordon Personal Profile was probably less subject to "faking" than inventory type instruments.

Gordon and Stapleton divided the 209 subjects into two groups: one seeking employment immediately

after graduation and one seeking vocational guidance. Each was administered the profile twice, at different times. They reported that the individuals' profile did not change.

In the armed services, researchers made substantial use of the Gordon Personal Profile. The emphases were primarily on personality traits for selection and training. In the area of selection, Anderson and Hertzlea (6:2) used the Gordon Personal Profile to predict the personality profile of 216 SCUBA divers and 185 frogmen trainees as well as 50 graduated frogmen. The most significant factor was found to be emotional stability for the trainees. Anderson, Hertzlea, and Gordon attempted to set some standards for selection of SCUBA divers by administering the Profile to officers and enlisted men on both frogmen and SCUBA units. Little difference was found between the two groups for any of the four factors. In the area of training, Willingham, Wilson, and O'Connor (161:378) investigating flight trainees, concluded that a person might score low on the responsibility factor and still complete a task. They attributed it to group pressure.

Marketing, management, and sales are areas of business that utilized the Gordon Personal Profile to a minimal degree. Tucker and Painter (154:325), in their study Personality and Product Use, examined 133 students

in marketing by administering the Profile, and a Sales and Marketing Personality Index for the purpose of analyzing the relationship between the two. A total of 36 comparisons (9 products x 4 personality characteristics) included 13 significant relationships at the .05 level. They concluded that personality traits are often related to product use.

Researchers in the field of education appeared to have used the Profile more than any other area, especially in conjunction with other instruments. Gordon (72:245-48) conducted a study to determine the degree to which certain personality variables were associated with leadership. The subjects, 168 college women who were freshmen, sophomores, and juniors, were administered the Profile. Three months after the election of corridor leaders, the subjects were asked to rate their corridor mates on five personality factors: sociability, ascendency, responsibility, hypersensitivity, and refinement. The consistency with which responsibility occurred high in the correlation suggested that it may be a general characteristic of leadership. A low positive relationship was found between leadership and the absences of ascendency, hyposensitivity, and intelligence.

In an effort to establish a relationship between self-rating and test scores, Arbuckle (7:292-93) asked 120 college freshmen to rate themselves on Heston's six

traits which were emotional stability, sociability, analytical thinking, confidence, personal relations, and home satisfaction. In addition, two factors from the Profile, ascendency and responsibility, were used. The group was subsequently divided into three groups and the high and low were compared. It was concluded there was a minimal relationship between students' test scores and self-rating.

Another example of the use of the Profile was one done by Lohmann, Zenger, and Weschler (107:28-31). The purpose of the study was to examine and measure the change that occurred in subjects who participated in sensitivity training. Three classes of twenty-four, twenty-two, and nineteen students and three male trainers were administered the profile before and after the experiences. The only significant data reported was that in all cases, the idolization of the trainer diminished; however, other trends, such as students' self-perception scores rose as a result of the training experience, were present.

In no way was the preceeding review intended to be an exhaustive list of the studies which had used the Profile as one of the instruments. However, the purpose was to establish a base for the rationale for selecting the Gordon Personal Profile, utilizing it to measure life style through four broad components of personality which the Profile can do.

Specific Review--Minnesota Teachers Attitude Inventory

The development of the MTAI came at a time when greater emphasis was being placed on the recognition of the need for more understanding of the interpersonal relationship between teacher and student. It was designed to measure those attitudes of a teacher which predict how well he will function in the interpersonal relationships with the student. According to Cook (36:5), close examination of the items, which discriminate sharply between the teachers who have and those who do not have good rapport with students, indicated the inferior teachers were essentially socially insecure while teachers having good rapport were socially secure.

A study by Mitzel, Rabinowitz, and Ostreicher (114:501-15) was undertaken to determine the contribution of the identified response sets to the test score variance of the MTAI and the validity or lack of validity of those responses. After administrators had rated 512 female elementary teachers as superior or inferior, based upon their ability to get along with pupils, 457 completed the MTAI. A raw score difference of 13.86 was reported between the two groups. It was significant at the .01 level. The reliability of the response set was shown to be .851 and .901. Hence, a validation was concluded.

Stein and Hardy (145:321-27) attempted to check the validity of the MTAI in establishing norms for

teacher satisfaction and teacher-pupil rapport in Manitoba. Two groups of student teachers were administered the MTAI test prior to student teaching. After a three-week period of student teaching, "Our Student-Teacher" rating forms were given to the pupils. A correlation of .387 and .507 was reported when the test and rating results were compared. Kearney and Rocchio (94:443-45) conducted a study to determine whether the rating of secondary-school teachers by pupils was related to the teachers' ability to maintain harmonious relations with students. The sophomore and senior classes of ten high schools rated their teachers who had taken the MTAI test. The F value was found to be 8.76, significant at the .01 level. Therefore, Kearney and Rocchio concluded that the MTAI was a useful instrument in predicting the feeling tone of the student for the teacher. A number of other studies, Rocchio (127:77-78), Rocchio and Kearney (126:244-52), and Dodge and Clifton (49:364-71) were undertaken and demonstrated significant findings.

From the examination of some of the studies using the MTAI and the preceding review, it was decided that the instrument could serve as a control factor. It was, therefore, administered to all student teachers for that purpose.

CHAPTER III

PROCEDURES

The study was designed to answer the following questions:

1. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in ascendency?
2. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in responsibility?
3. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in emotional stability?
4. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in sociability?
5. Is there any difference in the spring and fall population, in the post-secondary and high school population, or in the classes of the socially secure teachers versus the classes of

the socially insecure teachers when each of these groups are investigated in relationship to any of the four components of personality?

6. By using the Minnesota Teacher Attitude Inventory, can an instrument be developed that will measure the same four components of personality as the Gordon Personal Profile?

The basic procedures for this study were:

A. Design

B. Defining the Population and Selecting the Sample

C. Instrumentation

D. Collection of Data

Design

In addition to the major hypothesis of this study, there were two sets of hypotheses that were developed one being procedural the other set being substantive. The first set of hypotheses was designed to identify the relationship between perceived effectiveness and four personality characteristics, as well as to determine the similarities between two instruments used to measure identical personality components.

Procedural Hypotheses:

1. There is no significant difference in the rank correlation coefficient of each of the four factors on the Gordon Personal Profile and the Modified MTAI test taken by the students as it relates to a single class or between classes.

2. There is no significant difference in the rank correlation coefficient of each of the four factors on the Gordon Personal Profile test and the Modified MTAI test taken by the student teachers.

3. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' ascendency factor of the Gordon Personal Profile in each class.

4. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' responsibility factor of the Gordon Personal Profile in each class.

5. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' emotional stability factor of the Gordon Personal Profile in each class.

6. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' sociability factor of the Gordon Personal Profile in each class.

The second set of hypotheses was substantive, meaning that they were dependent upon the results of the procedural hypotheses for implimentation.

Substantive Hypotheses:

7. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the ascendency agreement index as compared with the same average weighted correlation of the high school.

8. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the responsibility agreement index as compared with the same average weighted correlation of the high school.

9. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the emotional stability agreement index as compared with the same average weighted correlation of the high school.

10. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the sociability agreement index as compared with the same average weighted correlation of the high school.

11. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' ascendency agreement index as compared with the average weighted correlation of the fall.

12. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' responsibility agreement index as compared with the average weighted correlation of the fall.

13. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' emotional stability agreement index as compared with the average weighted correlation of the fall.

14. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' sociability agreement index as compared with the average weighted correlation of the fall.

15. There is no significant difference in the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

16. There is no significant difference in the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

17. There is no significant difference in the emotional stability average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the emotional stability average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

18. There is no significant difference in the sociability average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the sociability average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

Defining the Population and Selecting of the Samples

It was assumed that in the United States there are approximately thirty-two states that have distributive education programs that are similar not only in teacher education but also at all levels of instructions. Therefore, the population for this study is all the distributive education student teachers and their students from the thirty-two states. Minnesota is one of the thirty-two states. Thus, the sample selected was the distributive education student teachers and their students in Minnesota.

The sample was composed of: (1) twenty-seven available distributive education student teacher coordinators from the four approved Minnesota teacher education programs during the spring and fall quarters of 1971; (2) all distributive education students from the assigned student teaching sites. However, only 22 of the 27 student teachers agreed to participate in the study. In the spring, 14 student teachers and 226 students participated in the research project illustrated in Table 3.1.

During the fall, 8 student teachers and 154 students cooperated with this study, as shown in Table 3.2. Even though 10 student teachers were available from the University of Minnesota, only 5 agreed to participate. Six of the 22 student teaching sites were post-secondary; the others secondary.

TABLE 3.1.--Population for spring 1971

Teacher Education Institution	Number of Student Teachers Available	Number of Student Teachers Participated	Coding	Assigned School	Level of Instruction	Number of Students Available
Moorhead	6	6	GG	Moorhead Tech	P.S.	16
			JJ	Fargo South	H.S.	10
			II	Detroit Lakes		
			NN	Redwood Fall V.C.	H.S.	14
			HH	Fargo North	H.S.	12
			KK	Fergus Falls J.C.	P.S.	13
University of Minnesota	6	6	AA	Bloomington Kennedy	H.S.	17
			FF	Normandale J.C.	P.S.	27
			EE	Anoka Tech.	P.S.	18
			BB	Robbinsdale	H.S.	13
			DD	Minneapolis North	H.S.	18
			CC	Minneapolis Tech.	P.S.	14
Mankato	2	2	MM	Edina	H.S.	16
			LL	Burnsville	H.S.	22
St. Cloud	0	0				
Total	14	14				226

TABLE 3.2.--Population for fall 1971

Teacher Education Institution	Number of Student Teachers Available	Number of Student Teachers Participated	Coding	Assigned School	Level of Instruction	Number of Students Available
Moorhead	0	0	VV	Robbinsdale Cooper	H.S.	32
University of Minnesota	10	5	WW	Robbinsdale Senior	H.S.	15
			XX	Minneapolis South	H.S.	9
			YY	Anoka Tech.	P.S.	12
			ZZ	Bloomington Jefferson	H.S.	15
Mankato	1	1	OO	Mankato	H.S.	19
St. Cloud	2	2	PP	Alexandria Tech.	P.S.	30
			RR	Alexandria	H.S.	22
Total	13	8				154

Since control of the selection of the student teaching location was impossible, and since every willing, available, distributive education student teacher coordinator was utilized, the number and nature of the student population and the instructional level of the student teacher were totally predicated on chance. However, six of the twenty-two student teaching sites were post-secondary.

Distributive education student teacher coordinators were chosen as subjects rather than experienced teacher coordinators. Rationale for this decision stemmed from the concept of familiarity and the possibility of people selecting other individuals with similar personalities. Since distributive education teacher coordinators, at least the majority, had selection rights, and since their personality and/or life styles were known by the students, it was decided to eliminate these potentially contaminating factors.

Instrumentation

The instruments used in the study were the Minnesota Teachers Attitude Inventory (MTAI), the Modified MTAI, the Gordon Personal Profile, and a teacher and student rating form. These are shown in Appendix A.

The MTAI was developed by Cook, Leeds, and Collis and has been used extensively to measure those attitudes of a teacher which predict how well he will get along

with pupils in interpersonal relationships, indirectly, how well satisfied he will be with teaching as a vocation, and to some degree the social security and insecurity of teachers. This instrument has consistently produced reliability coefficients of .93.

Leonard V. Gordon developed the Gordon Personal Profile Test which measures four factors of personality, namely, ascendency, responsibility, emotional stability, and sociability. He also used this instrument in seven of his own research studies. The reliability of this instrument rises sharply when it is used in conjunction with other instruments such as intelligence and aptitude measurements--significant at the .01 level. However, since there has been no previous similar use, it will be necessary to quote its general reliability which is .80.

It was contended that another test, similar to the Gordon Personal Profile Test, could be developed and the unabridged MTAI was an excellent source for acquiring questions. Definitions for the four factors, measured by the Gordon Personal Profile, were established from the Comprehensive Dictionary of Psychological and Psychoanalytical Terms. With the assistance of two clinical psychologists, the questions on the MTAI Test were investigated and categorized into the four factors: ascendency, responsibility, emotional stability, and

sociability. Statements from the MTAI, which were judged ambiguous, were discarded. After the items were categorized into the four factors, six questions, representing each area, were randomly selected. On the Modified MTAI Test, questions 1, 2, 4, 5, 11, and 19 represented ascendency; questions 8, 9, 12, 20, 23, and 24 represented responsibility; questions 3, 6, 7, 10, 18, and 22 represented emotional stability; and questions 13, 14, 15, 16, 17, and 21 represented sociability.

Another instrument used in this study was a teacher and student rating form. Since the project was designed to have both the students and student teachers rate each other for performance and attitude, it became necessary to develop evaluation sheets that would parallel each other. Therefore, a ten-question teacher rating form which had been used extensively throughout the Cincinnati School system was selected because it contained a variety of attitude and performance categories which related significantly to elements of the study. However, it was developed on a three-point scale and had numerous negative selections. It, therefore, became imperative to revise the rating sheet. All positive statements were used and a five-point rating scale adopted: SA - A - U - D - SD, with a numerical scale set from SA - 5 to SD - 1. Five questions on the new rating form were identical; five questions had words changed to fit the operation of the

respondor, such as this example: teaching versus learning (see question 1, Appendix A).

In the light of the aforementioned alteration, the instrument was administered to ten classes to check for understanding and meaning of the statements. In all situations, there were no cases reported in which the students or student teachers were unable to respond due to a lack of understanding concerning the meaning of the statement.

Collection of Data

In February of 1971, the spring-quarter student teachers from each institution were identified and a coding system was devised. Each student teacher was assigned a double letter indicating the school of his student teaching site and the number one for self-identification. The students in each student teachers' class were subsequently identified by the double letter and a chronological numbering system starting with two. Simultaneously with the aforementioned activity, the State Department of Education was contacted and Mr. Ron Strand, then state supervisor of Distributive Education, wrote a letter to each participating school soliciting cooperation. This preceded the researcher's letter to each of the distributive education teacher-coordinators.

At the beginning of March, a meeting was held for each group of student teachers from their respective

institutions. The purpose of this meeting was to explain the testing procedure, define the coding system, and administer the MTAI test to each student teacher. The importance of retaining a roster of students with the identification code of each student was emphasized at the meeting. The Gordon Personal Profile and the Modified MTAI tests were also disseminated with the coding instructions on the envelope.

During the first week of student teaching, the Gordon Personal Profile and the Modified MTAI were taken by the student teacher and each student. The tests were scored. In every class each student's percentile scores for each of the four factors of the Modified MTAI test were ranked and compared with the same student's ranking percentile scores from the identical factor of the Gordon Personal Profile test. The aforementioned operation was processed in an identical manner for all of the student teachers.

The Gordon Personal Profile test, which was the main instrument, performed the principle service of measuring life style. The student teacher's percentile scores for ascendency, responsibility, emotional stability, and sociability on the Gordon Personal Profile were compared with his student's percentile scores for the corresponding factor. The above function provided a column

of differences for each factor: ascendency, responsibility, emotional stability, and sociability in each class; henceforth identified as agreement index A, R, ES, and S.

After eight weeks of student teaching, the students in each class completed the ten-question teacher rating form on their student teacher. The coding on the teacher rating form was the double letter designating the school and the identically assigned number the student had on his previous tests.

In addition, the student teacher completed a ten-question student rating form on each student in his class. The coding on this form was the double letter representing the school and the student's assigned number; thus enabling the scores from the two rating forms to be compared with each other. This function produced a column of differences, henceforth to be labeled rating agreement index, for the ratings in each class, which was then compared with the Gordon Personal Profile test score agreement index for each of the four factors in each representative class.

The entire spring process of the study was replicated in the fall.

CHAPTER IV

ANALYSIS OF DATA

This study sought to determine the perceived effectiveness of a student and/or a student teacher when perceived similarities in life style were noted. A second dimension of this study was to determine if any differences in the perceived effectiveness existed between groups such as: high school versus post-secondary, spring versus fall, and socially secure versus socially insecure. The third thrust of this study was to create an instrument that could measure identical personality characteristics such as those measured by the Gordon Personal Profile Test.

The findings of this study were based upon the Minnesota Teachers Attitude Inventory Test, a specially constructed personality test, the Modified Minnesota Teachers Attitude Inventory Test, the Gordon Personal Profile Test, and a revised ten-question student-student teacher rating form. The MTAI, which was used to determine whether the student teacher was socially secure or insecure, was administered just to the student teachers while the other instruments were dispensed to all of the subjects.

The first data of this study were obtained from all willing distributive education student teachers and their assigned distributive education classes in the spring of 1971. The study was replicated in the fall of 1971.

A sufficient variation between high school and post-secondary student teaching placement occurred so that a comparison of the two populations was made. In addition, two other groupings, spring versus fall and socially secure teachers versus socially insecure teachers, were made in order to analyze the population's relationship.

The hypotheses used for analysis of data were previously stated in Chapter III. The ensuing data will be presented in the same order.

Population Elimination

In the spring of 1971, there were 14 Distributive Education student teachers and 226 students from 14 different distributive education programs who participated in this study. However, 2 student teachers, NN and II and their combined classes totaling 30 pupils, were eliminated from the spring population because the student teachers made errors in the coding procedures when they administered the Modified MTAI test and the Gordon Personal Profile test to their students, as illustrated in Table 4.1.

TABLE 4.1.--Population for spring 1971

Teacher Education Institution	Number of Student Teachers Available	Number of Student Teachers Participated	Coding	Assigned School	Level of Instruction	Number of Students Available	Number of Students Participated	
							Phase I	Phase II
Moorhead	6	6	GG	Moorhead Tech	P.S.	16	16	15
			JJ	Fargo South	H.S.	10	10	9
			II	Detroit Lakes	H.S.	16	0	0
			NN	Redwood Falls V.C.	H.S.	14	0	0
			HH	Fargo North	H.S.	12	12	11
			KK	Fergus Falls J.C.	P.S.	13	13	12
University of Minnesota	6	6	AA	Bloomington Kennedy	H.S.	17	16	15
			FF	Normandale J.C.	P.S.	27	26	25
			EE	Anoka Tech.	P.S.	18	17	17
			BB	Robbinsdale	H.S.	13	12	11
			DD	Minneapolis North	H.S.	18	17	16
			CC	Minneapolis Tech.	P.S.	14	13	12
Mankato	2	2	MM	Edina	H.S.	16	16	15
			LL	Burnsville	H.S.	22	22	21
St. Cloud	0	0						
Total	14	14				226	190	179

For the purposes of comparison and analysis, it was necessary that the student was assigned corresponding numbers on both the Modified MTAI and the Gordon Personal Profile tests, as well as a student identification list retained by the teacher. In this case, student teachers NN and II failed to assign those corresponding numbers to each student and make a student identification list, thereby negating any correlations. Also, one student from AA, one from FF, one from EE, one from BB, one from DD, and one from CC were excluded as subjects from the population applicable to Hypothesis I because of either improper or incomplete test marking.

In addition, one student from class GG, one student from JJ, one student from HH, one student from AA, one student from FF, one student from BB, one student from DD, one student from CC, and one student from MM were excluded as subjects from the population for Hypotheses III to XVIII because of absenteeism on the scheduled testing days, as illustrated in Table 4.1.

In the fall of 1971, there were 13 possible student teacher participants. Only 8 student teachers and their classes, consisting of 154 pupils, agreed to cooperate in the study.

The student teacher in YY class failed to administer the Modified MTAI test to the students, which eliminated those subjects from data pertaining to the

first two hypotheses. However, these subjects did take the Gordon Personal Profile test and an accurate student identification list was kept. Thus, the data obtained from YY subjects was included in Hypotheses III to XVIII.

In addition, nine students from VV, one from WW, one from ZZ, one from OO, and one from RR were eliminated as subjects because of incomplete or improperly marked MTAI tests.

Four students from class VV, two from WW, one from XX, one from ZZ, two from OO, and two from RR were excluded as subjects for Hypotheses III to XVIII because of absenteeism on the scheduled testing days, as illustrated in Table 4.2.

Analysis of Data

Rank correlation, which is the product-moment correlation obtained from two sets of ranks, was the statistical tool used to analyze the first two hypotheses. The percentile scores for each class obtained from the Gordon Personal Profile and the Modified MTAI tests were ranked, which is the arrangement of objects in order according to the degree of some possessed characteristic. Numbers of 1 to n were assigned to both the Gordon Personal Profile and Modified MTAI test scores in each class, with 1 assigned to the highest value and n to the lowest. Ties in ranking were averaged and the correction

TABLE 4.2.--Population for fall 1971

Teacher Education Institution	Number of Student Teachers Available	Number of Student Teachers Participated	Coding	Assigned School	Level of Instruction	Number of Students Available	Number of Students Participated	
							Phase I	Phase II
Moorhead	0	0	VV	Robbinsdale Cooper	H.S.	32	23	28
University of Minnesota	10	5	WW	Robbinsdale Senior	H.S.	15	14	13
			XX	Minneapolis South	H.S.	9	9	8
			YY	Anoka Tech.	P.S.	12	0	12
			ZZ	Bloomington Jefferson	H.S.	15	14	14
Mankato	1	1	OO	Mankato	H.S.	19	18	17
St. Cloud	2	2	PP	Alexandria Tech.	P.S.	30	30	29
			RR	Alexandria	H.S.	22	21	20
Total	13	8				154	129	141

factor for ties was not used because it was contended that an insufficient number of ties would occur.

Hypotheses 1 and 2 and the alternatives restated symbolically were:

1) $H_1 : p' = {}_t0$ 2) $H_2\ p' = 0$

$H_a : p' \neq 0$ $H_a\ p' \neq 0$

Expressions H_1 and H_2 meant that the covariance, which is the sum of the product of x and y, is equal to the geometric mean which is the square root of the product of x^2 and y^2 sums. In the above statement x represented the difference between the actual score on the Gordon Personal Profile test and the mean; y the difference between the actual score on the Modified MTAI test and its mean; x^2 and y^2 is the square of those differences. The alternative hypotheses implied that the covariance and geometric mean bore little ratio. However, the common formula for correlation was not used because it was not appropriate for completing rank correlation. Through algebraic substitution the following notation was derived and utilized:

$$r' = 1 - \frac{6 \quad D^2}{n\ (n^2-1)}$$

Where the expression indicates:

r' = the rank correlation coefficient

D = the difference between a pair of ranks

n = the number of pairs of ranks.

Both Hypotheses 1 and 2 were judged to be significant at the 5 per cent level.

Simple correlation was employed to analyze Hypotheses 3, 4, 5, and 6, symbolically stated as:

$H_3 \quad P_A = 0$

$H_4 \quad P_R = 0$

$H_5 \quad P_{ES} = 0$

$H_6 \quad P_S = 0$

The alternatives were:

$H_3 \quad P_A > 0$

$H_4 \quad P_R > 0$

$H_5 \quad P_{ES} > 0$

$H_6 \quad P_S > 0$

The column of differences A, R, ES, and S individually were correlated with the column of differences RT for each class. The common formula for correlation used was:

$$r = \frac{xy}{\sqrt{x^2 \; y^2}}$$

Where the notation indicates:

r = the correlation coefficient

x = the difference between the column of differences A, R, ES, or S and its mean

y = the difference between the column of difference RF and its mean

x^2 = the square of the x difference

y^2 = the square of the y difference

All four hypotheses were tested with each class. When the correlation coefficient had been determined, the "Value of the correlation coefficient for different levels of significance" table was consulted to find the critical value for the applicable number of degrees of freedom at the .05 and .10 significant levels.

In addition, since the alternative hypotheses were one tailed tests, each correlation was mathematically tested using the equation

$$t = \frac{r\sqrt{n - 2}}{\sqrt{1 - r^2}}$$

where:

t = the ratio with n - 2 degrees of freedom

r = the observed sample value of the correlation coefficient

n = the number of subjects

The computed t values were then compared with the values from the "t" table at the appropriate degrees of freedom for the 10 and 5 per cent level of significance.

The data and results obtained from Hypotheses 3 to 6 were the basic information used in the handling of Hypotheses 7 through 18. Symbolically stated these hypotheses were:

H_7 $w^r_{AH} = w^r_{AP}$

H_8 $w^r_{RH} = w^r_{RP}$

H_9 $w^r_{ESH} = w^r_{ESP}$

H_{10} $w^r_{SH} = w^r_{SP}$

H_{11} $w^r_{ASP} = w^r_{AF}$

H_{12} $w^r_{RSP} = w^r_{RF}$

H_{13} $w^r_{ESSP} = w^r_{ESF}$

H_{14} $w^r_{SSP} = w^r_{SF}$

H_{15} $w^r_{ad} = w^r_{ag}$

H_{16} $w^r_{rd} = w^r_{rg}$

H_{17} $w^r_{esd} = w^r_{esg}$

H_{18} $w^r_{sd} = w^r_{sg}$

And the alternative hypotheses were:

H_7 $w^rAH \neq w^rAP$

H_8 $w^rRH \neq w^rRP$

H_9 $w^rESH \neq w^rESP$

H_{10} $w^rSH \neq w^rSP$

H_{11} $w^rASP \neq w^rAF$

H_{12} $w^rRSP \neq w^rRF$

H_{13} $w^rESSP \neq w^rESF$

H_{14} $w^rSSP \neq w^rSF$

H_{15} $w^rad \neq w^rag$

H_{16} $w^rrd \neq w^rrg$

H_{17} $w^resd \neq w^resg$

H_{18} $w^rsd \neq w^rsg$

Where the expressions indicate the following:

r = the correlation coefficient

subscript w = weighted average correlation coefficient

subscript a = ascendency

subscript r = responsibility

subscript es = emotional stability

subscript s = sociability

h = high school

p = post secondary

sp = spring

f = fall

d = teachers judged socially secure from the unabridged MTAI

g = teachers judged socially insecure from the unabridged MTAI

The weighted average correlation was devised by multiplying each applicable correlation by the degrees of freedom and dividing the product by the total number of subjects. At this point the z transformation was used to test for the significance of the difference between two sample correlation coefficients at the .05 level. From the "z" transformation table, corresponding z values were found for the weighted average correlation coefficient and inserted into the following formula:

$$z = \frac{(z_1 - z_2)}{\sqrt{\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3}}}$$

Where the notation indicates:

z = z transformation table value of r

n_1 = number of subjects

The basic statistical tools used in analyzing the hypotheses previously presented were rank correlation, simple correlation, and Fisher's z transformation.

Hypothesis 1: Students' GPP Versus Students' Modified MTAI

There is no significant difference in the rank correlation coefficients of each of the four factors on the Gordon Personal Profile and the Modified MTAI tests taken by the students as it relates to a single class or among all of the classes.

The null hypothesis, $P' = 0$, was accepted and the alternative hypothesis, $P' \neq 0$ was rejected at the .05 level. Therefore the Modified MTAI was not a substitute for the Gordon Personal Profile in this situation.

Supporting Data

The data for Hypothesis 1 were obtained from the results of the Gordon Personal Profile and Modified MTAI tests, which were administered to each student in every cooperating distributive education program. For each class, the students' percentile scores for each of the four factors from the Gordon Personal Profile and the Modified MTAI tests were ranked, all of which were illustrated in Appendix B.

From the preceding results, a rank correlation for each test factor in each class was performed using the formula,

$$r = 1 - \frac{6 \ D^2}{n \ (n^2 - 1)}$$

For example, using the Gordon Personal Profile's and the Modified MTAI test's sociability factor for class AA and substituting the differences squared in the formula, the following resulted:

$$r = 1 - \frac{6\ (437.50)}{16\ (16^2 - 1)}$$

$$r = 1 - \frac{2625}{16\ (255)}$$

$$r = 1 - \frac{2625}{4080}$$

$$r = 1 - .643$$

which yielded a rank correlation coefficient of .357.

The data for the above computation was shown in Table 4.3.

The rank correlation coefficient was computed for the test factors; ascendency, responsibility, emotional stability, and sociability for each class. The results for this mathematical process were shown in Table 4.4.

Using the t table at the .05 level, it was observed that only four positive correlations, shown by an asterisk in Table 4.4, were significant and one negative correlation, shown in Table 4.4 by a double asterisk, was significant.

TABLE 4.3.--Rank and differences for sociability, Class AA

Student Number	Modified MTAI Rank	GPP Rank	Difference	Difference Squared
1	3.50	3.00	.5	.25
2	12.00	5.00	7.0	49.00
3	15.00	8.00	7.0	49.00
4	10.00	13.50	-3.5	12.25
5	12.00	5.50	6.50	42.25
6	15.00	11.00	4.00	16.00
7	15.00	12.00	3.00	9.00
8	3.50	4.00	- .50	.25
9	1.50	7.00	-5.50	30.25
10	1.50	2.00	- .50	.25
11	7.00	9.50	-2.50	6.25
12	7.00	1.00	6.00	36.00
13	7.00	16.00	-9.00	81.00
14	12.00	9.50	2.50	6.25
15	7.00	13.50	-6.50	42.25
16	7.00	15.00	-8.00	64.00
Total			-2.00	437.50

n = 16

TABLE 4.4.--Rank correlations of the Gordon Personal Profile--Modified MTAI four test factors for each class

Class	Ascendency	Responsibility	Emotional Stability	Sociability
AA	-.010	-.123	.360	.357
BB	-.098	-.168	-.091	-.215
CC	-.146	.394	-.253	.007
DD	.219	.104	.113	-.055
EE	.135	.029	.297	.136
FF	.013	-.063	-.276	.192
GG	-.339	.578*	.052	.346
HH	-.524	-.012	.495	-.059
JJ	-.342	.058	.415	-.400
KK	.349	.622*	-.331	.037
LL	-.150	.174	.513*	.028
MM	.379	-.041	.031	.698*
OO	-.176	.142	.324	-.368
PP	-.258	.045	-.166	-.045
RR	-.197	.243	-.235	-.268
VV	.125	.304	-.045	.118
WW	-.022	.262	.179	.086
XX	-.221	-.454	.146	.329
ZZ	.238	-.218	-.541**	.110

There were seventy-six rank correlations viewing each of the four factors for each class as a single correlation. Therefore, at the 5 per cent level, by chance, there should be three to four significant correlations: 76 x .05 = 3.8. As noted in Table 4.4, only four positive rank correlations occurred.

Hypothesis 2: Student Teachers' GPP Versus Student Teachers' Modified MTAI

> There is no significant difference in the rank correlation coefficients of each of the four factors on the Gordon Personal Profile test and the Modified MTAI test taken by the student teachers.

The null hypothesis $P' = 0$ was accepted, and the alternative hypothesis, $P' \neq 0$, was rejected at the .05 level. Therefore, the Modified MTAI was not a substitute for the Gordon Personal Profile in this situation.

Supporting Data

Each student teacher was administered the Gordon Personal Profile and the Modified MTAI tests. The percentile scores for each factor were ranked, and a rank correlation coefficient was computed on each factor using the formula:

$$r - 1 = \frac{6 \quad D^2}{n \ (n^2 - 1)}$$

The supporting data for percentile scores and the ranks were reported in Appendix B.

The computed rank correlation for each of the four factors of the Gordon Personal Profile and Modified MTAI tests taken by the student teachers was shown in Table 4.5.

TABLE 4.5.--Rank correlations of the Gordon Personal Profile-Modified MTAI four test factors for student teachers

Number of Student Teachers	Ascendency	Responsibility	Emotional Stability	Sociability
19	.088	.188	.333	.005

Using the t table at the .05 per cent level, it was observed that none of the rank correlations was significant.

Hypothesis 3: Rating Agreement Index and the Ascendency Factor

> There is no significant correlation between the agreement index of the student--student teachers' rating and the agreement index of the student--student teachers' ascendency factor of the Gordon Personal Profile in each class.

It was observed that classes AA and FF were significant at .10 and that classes BB, HH, KK, PP, VV, YY, and ZZ were significant at .05. The null hypothesis, $P_a = 0$, was rejected for the aforementioned classes and the alternative hypothesis $P_a > 0$, was accepted. However, for

classes CC, DD, EE, GG, LL, MM, OO, RR, WW, and XX the null hypothesis $P_a = 0$, was accepted and the alternative hypothesis $P_a > 0$, rejected.

Supporting Data

At the beginning of the student teaching assignments, each student teacher was administered the Gordon Personal Profile test. At the completion of the experience, the students in each class individually rated their student teacher and the student teacher rated each student in his class.

In each class, the student teacher's score for the ascendency factor on the Gordon Personal Profile test was used as the point of origin. Then the students' scores for the same factor were compared with the student teacher's score and the difference was determined, which was shown in Appendix C. The rating agreement index for each class was computed from the differences of the ratings by the students of the student teacher and the student teacher of the students. These data, by class, were reported in Appendix C.

Using the ascendency agreement index and the rating agreement index, a correlation coefficient was computed for each class by utilizing the formula:

$$r = \frac{xy}{\sqrt{x^2 \; y^2}}$$

An example of this procedure for Class AA was illustrated in Table 4.6. The result of the mathematical computation yielded a correlation coefficient of .403248.

After a correlation coefficient for the ascendency factor for each class was computed, the formula,

$$t = \frac{r\sqrt{n - 2}}{\sqrt{1 - r^2}}$$

was used to determine the computed value of t, which was compared to the "t" Table's value for the corresponding degrees of freedom at the 5 per cent and 10 per cent level of significance, illustrated in Table 4.7.

Hypothesis 4: Rating Agreement Index and the Responsibility Factor

> There is no significant correlation between the agreement index of the student--student teacher's rating and the agreement index of the student--student teacher's responsibility factor of the Gordon Personal Profile test in each class.

It was noted that classes BB, OO, and YY were significant at .10 and classes AA, DD, FF, JJ, PP, and ZZ were significant at .05. Thus, for the previously stated classes, the null hypothesis, $P_r = 0$, was rejected and the alternative, $P_r > 0$, was accepted. The null hypothesis, $P_r = 0$, for classes CC, EE, GG, HH, KK, LL, MM. RR, VV, WW, and XX was accepted and the alternative, $P_r > 0$, was rejected.

TABLE 4.6.--Computation of the quantities for fitting a correlation class AA ascendency and rating agreement indices

Student	Ascendency Agreement Index X	Rating Agreement Index Y	x	y	x^2	y^2	xy
1	0	11.8	23.07	16.67	532.225	277.889	+384.577
2	-33	-13.2	- 9.93	- 8.33	98.605	69.389	+ 82.717
3	-41	6.8	-17.93	11.67	321.485	136.189	-209.243
4	-26	4.8	- 2.93	9.67	8.585	93.509	- 28.333
5	- 5	-13.2	18.07	- 8.33	326.525	69.389	-150.543
6	-21	-10.2	2.07	- 5.33	4.285	28.409	- 11.033
7	6	.2	29.07	4.67	845.065	21.809	+135.757
8	-28	- 7.2	- 4.93	- 2.38	24.305	5.429	+ 11.487
9	1	- 4.2	24.07	.67	579.365	.449	+ 16.127
10	0	4.8	23.07	9.67	532.225	93.509	+222.887
11	19	- 4.2	42.07	.67	1769.885	.449	+ 28.187
12	-57	- 4.2	-33.93	.67	1151.245	.449	- 22.733
13	-52	-14.2	-28.93	- 9.33	836.945	93.509	+269.917
14	-47	-20.2	-23.93	-15.33	572.645	235.009	+366.847
15	-62	-10.2	-38.93	- 5.33	1515.545	28.409	+207.497
Totals	-346	-66.0	0	0	9198.935	1153.595	1326.815

$\overline{X} = 23.07$

$\overline{Y} = -4.87$

TABLE 4.7.--Comparison of the computed and table t values for the ascendency correlation coefficient per class

Class	Correlation Coefficient	Computed Value of t	Table Value of t at .05	Table Value of t at .10	Number of Subjects	dxf n-2
AA	.403248	1.587*	1.350	1.771	15	13
BB	.888019	5.793**	1.383	1.833	11	9
CC	-.250202	- .816	1.372	1.812	12	10
DD	.049967	.187	1.345	1.761	16	14
EE	-.140413	- .528	1.341	1.753	17	15
FF	.298994	1.503*	1.319	1.714	25	23
GG	-.037656	- .137	1.350	1.771	15	13
HH	.855565	4.967**	1.383	1.833	11	9
JJ	-.611167	-2.042	1.415	1.895	9	7
KK	.710752	3.197**	1.372	1.812	12	10
LL	-.451856	-2.209	1.328	1.729	21	19
MM	.203293	.747	1.350	1.771	15	13
OO	-.050577	- .198	1.341	1.753	17	15
PP	.464961	2.729**	1.314	1.703	29	27
RR	-.391861	-1.808	1.330	1.734	20	18
VV	.337765	1.831**	1.315	1.706	28	26
WW	-.103245	- .343	1.363	1.796	13	11
XX	.310112	.799	1.440	1.943	8	6
YY	.801344	4.231**	1.372	1.812	12	10
ZZ	.544942	2.252**	1.356	1.796	14	12

*significant at .10

**significant at .05

Supporting Data

The second factor on the Gordon Personal Profile test was responsibility. Taking the student teacher's score for that factor and comparing it to the student's score for the identical factor, the responsibility agreement index was derived for each class, which was shown in Appendix C.

Each class' responsibility agreement index was correlated with the rating agreement index for the same class using the formula:

$$r = \frac{xy}{\sqrt{x^2 \; y^2}}$$

A procedural exemplification for Class AA was shown in Table 4.8. The correlation coefficient was .663035.

When the computed correlation coefficient for the responsibility factor was completed for each class, a "t" test, using the formula,

$$t = \frac{r\sqrt{n - z}}{\sqrt{1 - rz}}$$

was employed for each correlation to determine the tabulated value of t. This quantity was compared to the "t" Table's value for the corresponding degrees of freedom at the .05 and .10 level of significance. These results were shown in Table 4.9.

TABLE 4.8.--Computation of the quantities for fitting a correlation class AA responsibility and rating agreement index

Student	Responsibility Agreement Index X	Rating Agreement Index Y	x	y	x^2	y^2	xy
1	32	11.8	45.8	16.67	2097.640	277.889	763.486
2	18	-13.2	31.8	- 8.33	1011.240	63.389	-264.894
3	30	6.8	43.8	11.67	1918.440	136.189	511.146
4	7	4.8	20.8	9.67	432.640	93.509	201.136
5	-62	-13.2	-48.2	- 8.33	2323.240	63.389	401.506
6	-67	-10.2	-53.2	- 5.33	2830.240	28.409	283.556
7	18	- .2	- 4.2	4.67	17.640	21.809	- 19.614
8	- 2	- 7.2	11.8	- 2.33	139.240	5.429	- 27.494
9	-12	- 4.2	1.8	.67	3.240	.449	1.206
10	-10	4.8	3.8	9.67	14.440	93.509	36.746
11	-22	- 4.2	- 8.2	.67	67.240	.449	- 5.494
12	-47	- 4.2	-33.2	.67	1102.240	.449	- 22.244
13	-17	-14.2	- 3.2	- 9.33	10.240	93.509	29.856
14	-59	-20.2	-45.2	-15.33	2043.040	235.009	692.916
15	-14	-10.2	- .2	- 5.33	.040	28.409	1.066
Totals	-207	-73.0			14010.800	1153.595	2582.880

$\bar{X} = -13.8$

$\bar{Y} = -4.87$

TABLE 4.9.--Comparison of the computed and table t values for the responsibility correlation coefficient per class

Class	Number of Subjects	d/f n-z	Correlation Coefficient	Computed Value of t	Table Value of t at .05	Table Value of t at .10
AA	15	13	.663035	3.193**	1.350	1.771
BB	11	9	.477805	1.633*	1.383	1.833
CC	12	10	-.051881	- .165	1.372	1.812
DD	16	14	.454621	1.912**	1.345	1.761
EE	17	15	.230868	.920	1.341	1.753
FF	25	23	.390978	2.037**	1.319	1.714
GG	15	13	-.482362	-1.983	1.350	1.771
HH	11	9	.381637	1.240	1.383	1.833
JJ	9	7	.865376	4.561**	1.415	1.895
KK	12	10	.264654	.799	1.372	1.812
LL	21	19	-.356039	-1.661	1.328	1.729
MM	15	13	-.258208	- .963	1.350	1.771
OO	17	15	.373605	1.562*	1.341	1.753
PP	29	27	.550565	3.431**	1.314	1.703
RR	20	18	.083342	.353	1.330	1.734
VV	28	26	.224113	1.172	1.315	1.706
WW	13	11	-.107351	- .357	1.363	1.796
XX	8	6	-.271851	- .692	1.440	1.943
YY	12	10	.414523	1.442*	1.372	1.812
ZZ	14	12	.708773	3.483**	1.356	1.796

*significant at .10

**significant at .05

Hypothesis 5: Rating Agreement Index and the Emotional Stability Factor

There is no significant correlation between the agreement index of the student--student teacher's rating and the agreement index of the student--student teacher's emotional stability factor of the Gordon Personal Profile test in each class.

Classes EE, JJ, and OO were noted to be significant at the .10 level, while classes FF, HH, KK, PP, RR, and ZZ were significant at the .05 level. Therefore, for the above classes, the null hypothesis, $P_{es} = 0$, was rejected and the alternative hypothesis, $P_{es} > 0$ was accepted. But for classes AA, BB, CC, DD, GG, LL, MM, RR, VV, WW, and XX the null hypothesis was accepted and the alternative hypothesis was rejected.

Supporting Data

Emotional stability was the third factor on the Gordon Personal Profile test. Using the student teacher's percentile score for the emotional stability component of the Gordon Personal Profile test as a point of origin, an emotional stability agreement index for each class was derived by comparing the students' percentile scores for the same factor with the score of the student teacher. The data were reported in Appendix C.

By correlating the emotional stability agreement index with the rating agreement index, a correlation

coefficient for each class was computed. The formula used for this process was:

$$r = \frac{xy}{\sqrt{x^2 \; y^2}}$$

Class AA, noted in Table 4.10, was utilized to illustrate the procedure. A correlation coefficient of .303741 resulted from the mathematical process.

Once the emotional stability's correlation coefficient for each was established, a "t" test was used to test the correlation's significance, using the formula,

$$t = \frac{r\sqrt{n - z}}{\sqrt{1 - r^2}}$$

The computed value of t was compared to the "t" Table value for the corresponding degrees of freedom at the .05 and .10 level of significance. Table 4.11 was used to illustrate the results.

Hypothesis 6: Rating Agreement Index and Sociability Factor

There is no significant correlation between the agreement index of the student--student teacher's rating and the agreement index of the student--student teacher's sociability factor of the Gordon Personal Profile test in each class.

TABLE 4.10.--Computation of the quantities for fitting a correlation class AA emotional stability and rating agreement index

Student	Emotional Stability Agreement Index X	Rating Agreement Index Y	x	y	x^2	y^2	xy
1	3	11.8	11.87	16.67	140.897	277.889	197.873
2	31	-13.2	39.87	- 8.33	1589.617	63.389	-332.117
3	31	6.8	39.87	11.67	1589.617	136.189	465.283
4	-52	4.8	-43.13	9.67	1860.197	93.509	-417.067
5	-46	-13.2	-37.13	- 8.33	1378.637	63.389	309.293
6	-40	-10.2	-31.13	- 5.33	969.077	28.409	165.923
7	27	- .2	35.87	4.67	1286.657	21.809	167.513
8	-40	- 7.2	-31.13	- 2.33	969.077	5.429	72.533
9	-26	- 4.2	-17.13	.67	293.437	.449	- 11.477
10	21	4.8	29.87	9.67	892.217	93.509	288.843
11	- 5	- 4.2	3.87	.67	14.977	.449	2.593
12	2	- 4.2	10.87	.67	118.157	.449	7.283
13	15	-14.2	23.87	- 9.33	569.777	93.509	-222.707
14	-35	-20.2	-26.13	-15.33	682.777	235.009	400.573
15	-19	-10.2	-10.13	- 5.33	102.617	28.409	53.993
Totals	-133	-73.0	0	0	12457.735	1153.595	1148.335

$\overline{X} = -8.87$

$\overline{Y} = -4.87$

TABLE 4.11.--Comparison of the computed and table t values for the emotional stability correlation coefficient per class

Class	Number of Subjects	d/f n-z	Correlation Coefficient	Computed Value of t	Table Value of t at .05	Table Value of t at .10
AA	15	13	.303741	1.151	1.350	1.771
BB	11	9	.417092	1.376	1.383	1.833
CC	12	10	.156853	.503	1.372	1.812
DD	16	14	.066928	.251	1.345	1.761
EE	17	15	.378886	1.586*	1.341	1.753
FF	25	23	.384177	1.995**	1.319	1.714
GG	15	13	-.312167	-1.184	1.350	1.771
HH	11	9	.539054	1.920**	1.383	1.833
JJ	9	7	.572603	1.850*	1.415	1.895
KK	12	10	.536065	2.008**	1.372	1.812
LL	21	19	-.328523	-1.519	1.328	1.729
MM	15	13	.066494	.238	1.350	1.771
OO	17	15	.346735	1.433*	1.341	1.753
PP	29	27	.311454	1.705**	1.314	1.703
RR	20	18	-.028137	- .119	1.330	1.734
VV	28	26	.184157	.955	1.315	1.706
WW	13	11	.294119	1.020	1.363	1.796
XX	8	6	-.368107	- .969	1.440	1.943
YY	12	10	.741002	3.490**	1.372	1.812
ZZ	14	12	.771400	4.194**	1.356	1.796

*significant at .10

**significant at .05

It was observed that classes VV and XX were significant at the .10 level and classes BB, HH, KK, PP, YY, and ZZ were significant at the .05 level. The null hypothesis, $P_s = 0$, was rejected for the aforementioned classes and the alternative hypothesis, $P_s > 0$, was accepted. However, for classes AA, CC, DD, EE, FF, GG, JJ, LL, MM, OO, RR, and WW, the null hypothesis was accepted and the alternative rejected.

Supporting Data

The last of the four factors on the Gordon Personal Profile test to be correlated with the rating agreement index was sociability. The process for deriving the sociability agreement index was identical to the technique used for the other three components of the Gordon Personal Profile test. Using the formula,

$$r = \frac{xy}{\sqrt{x^2 \; y^2}}$$

a correlation was computed for each class and an illustration of the procedure was shown in Table 4.12.

The correlation coefficient for the sociability factor in class AA was .304305.

The "t" test,

$$t = \frac{r\sqrt{n - z}}{\sqrt{1 - r^2}}$$

TABLE 4.12.--Computation of the quantities for fitting a correlation class AA sociability and rating agreement index

Student	Sociability Agreement Index X	Rating Agreement Index Y	x	y	x^2	y^2	xy
1	-24	11.8	17.4	16.67	302.760	277.889	290.058
2	-49	-13.2	- 7.6	- 8.33	57.760	63.389	63.308
3	-62	6.8	-20.6	11.67	424.360	136.189	-240.402
4	-24	4.8	17.4	9.67	302.760	93.509	168.258
5	-55	-13.2	-13.6	- 8.33	184.960	63.389	113.288
6	-57	-10.2	-15.6	- 5.33	243.360	28.409	83.148
7	-17	- .2	24.4	4.67	595.360	21.809	113.948
8	-27	- 7.2	14.4	- 2.33	207.360	5.429	- 33.552
9	11	- 4.2	52.4	.67	2745.760	.449	35.108
10	-52	4.8	10.6	9.67	112.360	93.509	-102.502
11	12	- 4.2	53.4	.67	2851.560	.449	35.778
12	-83	- 4.2	-41.6	.67	1730.560	.449	- 27.872
13	-52	-14.2	-10.2	- 9.33	112.360	93.509	98.898
14	-62	-20.2	-20.6	-15.33	424.360	235.009	315.798
15	-80	-10.2	-38.6	- 5.33	1489.960	28.409	205.738
Totals	-621	-73.0	0	0	11785.600	1153.595	1119.000

$\bar{X} = -41.4$

$\bar{Y} = -4.87$

was computed for each sociability correlation coefficient. The tabulated t value was compared to the "t" Table's quantity with the corresponding degrees of freedom at the .10 and .05 level of significance. The results of the process were shown in Table 4.13.

By combining the computed t value for the four factors, shown in Tables 4.7, 4.9, 4.11, and 4.13, into Table 4.14, the following points were observed:

1. Ascendency, responsibility, and emotional stability factors each had nine significant correlations while sociability had eight.
2. Thirty-five of a possible eighty correlations were significant and twenty-five of them were significant at the .05 level.
3. Fourteen classes, AA, BB, DD, EE, FF, HH, JJ, KK, OO, PP, VV, YY, and ZZ, had one or more significant correlations.
4. Three classes, PP, YY, and ZZ, had significant correlations for all four factors.
5. Four classes, BB, FF, HH, and KK, had three significant correlations, with HH and KK having significant correlations for the same factors, ascendency, emotional stability, and sociability. Classes BB and FF had significant correlations for ascendency and responsibility factors but the correlation for the third factor differed.

TABLE 4.13.--Comparison of the computed and table t values for the sociability correlation coefficient per class

Class	Number of Subjects	d/f n-z	Correlation Coefficient	Computed Value of t	Table Value of t at .05	Table Value of t at .10
AA	15	13	.304305	1.151	1.350	1.771
BB	11	9	.815599	4.235**	1.383	1.833
CC	12	10	-.190339	- .612	1.372	1.812
DD	16	14	-.037571	- .139	1.345	1.761
EE	17	15	-.251832	-1.009	1.341	1.753
FF	25	23	.102779	.497	1.319	1.714
GG	15	13	-.005292	- .018	1.350	1.771
HH	11	9	.670045	2.708**	1.383	1.833
JJ	9	7	-.288079	- .796	1.415	1.895
KK	12	10	.775868	3.891**	1.372	1.812
LL	21	19	-.381211	-1.796	1.328	1.729
MM	15	13	.042185	.152	1.350	1.771
OO	17	15	-.063345	- .244	1.341	1.753
PP	29	27	.314748	1.725**	1.314	1.703
RR	20	18	-.566687	-2.920	1.330	1.734
VV	28	26	.293495	1.563*	1.315	1.706
WW	13	11	.022263	.073	1.363	1.796
XX	8	6	.548761	1.609*	1.440	1.943
YY	12	10	.653552	2.734**	1.372	1.812
ZZ	14	12	.627909	2.795**	1.356	1.796

*significant at .10

**significant at .05

TABLE 4.14.--Computed t values for ascendency, responsibility, emotional stability, and sociability per class

Class	Ascendency	Responsibility	Emotional Stability	Sociability
AA	1.587*	3.193**	1.151	1.151
BB	5.793**	1.633*	1.376	4.235**
CC	- .816	- .165	.503	- .612
DD	.187	1.912**	.251	- .139
EE	- .528	.920	1.586*	-1.009
FF	1.503*	2.037**	1.995**	.497
GG	- .137	-1.983	-1.184	- .018
HH	4.967**	1.240	1.920**	2.708**
JJ	-2.042	4.561**	1.850*	- .796
KK	3.197**	.799	2.008**	3.891
LL	-2.209	-1.661	-1.519	-1.796
MM	.747	- .963	.238	.152
OO	- .198	1.562*	1.433*	- .244
PP	2.729**	3.431**	1.705**	1.725**
RR	-1.808	.353	- .119	-2.920
VV	1.831**	1.172	.955	1.563*
WW	- .343	- .357	1.020	.073
XX	.799	- .692	- .969	1.609*
YY	4.231**	1.442*	3.490**	2.734**
ZZ	2.252**	3.483**	4.194**	2.795**

*significant at .10

**significant at .05

6. Four classes, AA, JJ, OO, and VV, had two significant correlations each, however, JJ and OO had identical factors, responsibility and emotional stability. Class AA had a significant correlation for the responsibility factor, also, but differed for the second factor, while VV's significant correlations were for ascendency and sociability factors.

7. Three classes, DD, EE, and XX, had one significant correlation but each for a different factor.

Hypothesis 7: Ascendency--Secondary Versus Post-Secondary

There is no significant difference between the average weighted correlation of the post-secondary's correlated values of the rating agreement index and the ascendency agreement index as compared with the same average weighted correlation value of the high school.

At the 5 per cent level of significance, the computed value of Z, 1.319, was compared with table quantity, 1.96. The difference was not found to be significant. Therefore the null hypothesis, $_{a}r_{aps} = {}_{a}r_{ahs}$, was accepted and the alternative hypothesis, $_{a}r_{aps} \neq {}_{a}r_{ahs}$, was rejected.

Supporting Data

The computation of the ascendency correlation coefficient for each class provided the basic data used to test Hypothesis 7. The twenty classes were divided

by instructional levels into two groups, post-secondary and high school. Classes CC, EE, FF, GG, KK, PP, and YY were post-secondary, while the remaining classes were high school. An average weighted correlation was computed for both groups by multiplying the ascendency correlation coefficient for each class by the number of its subjects. These products were added and the sum divided by the total number of subjects. The process was shown in Tables 4.15 and 4.16.

TABLE 4.15.--Computation of the average weighted correlation for the ascendency factor at the post-secondary level

Class	Ascendency Correlation Coefficient	Number of Subjects	Weighted Correlation
CC	-.250202	12	-3.002424
EE	-.140143	17	-2.382431
FF	.298994	25	7.474850
GG	-.037658	15	- .564870
KK	.710752	12	8.529024
PP	.464961	29	+13.483869
YY	.801344	12	9.616128
Totals	0	122	33.154146

$_{a}r$ = .271755 (33.154146 ÷ 122)

The average weighted correlation for the post-secondary group was .271755, for the high school .119276. Using the "z value for r" table, the following z value was determined for the post-secondary and high school

correlations, respectively: $z_1 = .273255$ and $z_2 = .120276$. Fisher's z transformation formula,

$$Z = \frac{z_1 - z_2}{\sqrt{\frac{1}{n-3} + \frac{1}{n-3}}}$$

was used to compute Z. Substituting the Z values in the formula, it became

$$Z = \frac{.273255 - .120276}{\sqrt{\frac{1}{(122-3)} + \frac{1}{(198-3)}}}$$

completing the mathematical computation, Z was equal to 1.319.

TABLE 4.16.--Computation of the average weighted correlation for the ascendency factor at the high school level

Class	Ascendency Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.403248	15	6.048720
BB	.888019	11	9.768209
DD	.049967	16	.799472
HH	.855565	11	9.411215
JJ	-.611167	9	-5.500503
LL	-.541856	21	-9.488976
MM	.203293	15	3.049395
OO	-.050577	17	- .859809
RR	-.391861	20	-7.836320
VV	.337765	28	9.457420
WW	-.103245	13	-1.342185
ZZ	.544942	14	7.629188
Totals	0	198	23.616722

$_a r = .119276$ (23.616722 : 198)

Hypothesis 8: Responsibility--Secondary Versus Post-Secondary

There is no significant difference between the average weighted correlation of the post-secondary's correlated values of the rating agreement index and the responsibility agreement index as compared with the same average weighted correlation value of the high school.

Since the computed value of Z was only .213457 and it was less than the table value of 1.96, the null hypothesis, $w^{r}_{rps} = w^{r}_{rps}$, was accepted and the alternate hypothesis was rejected.

Supporting Data

Using the same process as in Hypothesis 7, the average weighted correlation for responsibility at the post-secondary level was found to be .245559 and at the high school level it was .224998. The supporting evidence was shown in Tables 4.17 and 4.18.

Taking the average weighted correlation for the post-secondary, $z_1 = .245559$, and the high school, $z_2 = .224998$, and using the "z value for r table," the value for z_1 was .250559 and z_2 was .225798. Utilizing the Z transformation formula and inserting the z_1 and z_2 values, the expression became:

$$Z = \frac{.250559 - .225798}{\sqrt{\frac{1}{(122-3)} + \frac{1}{(198-3)}}}$$

The value of Z was .213457.

TABLE 4.17.--Computation of the average weighted correlation for the responsibility factor at the post-secondary level

Class	Responsibility Correlation Coefficient	Number of Subjects	Weighted Correlation
CC	-.051881	12	.622572
EE	.230868	17	3.924756
FF	.390978	25	9.774450
GG	-.482362	15	-7.234890
KK	.264654	12	3.175848
PP	.550565	29	15.966385
YY	.414523	12	4.974276
Totals	0	122	29.958253

$_{r}r$ = .245559 (29.958253 ÷ 122)

TABLE 4.18.--Computation of the average weighted correlation for the responsibility factor at the high school level

Class	Responsibility Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.663035	15	9.945525
BB	.477805	11	5.255855
DD	.454621	16	7.273936
HH	.381637	11	4.198007
JJ	.865376	9	7.788384
LL	-.356039	21	-7.476819
MM	-.258208	15	-3.873120
OO	.373605	17	6.351285
RR	.083342	20	1.666840
VV	.224113	28	6.275164
WW	-.107351	13	-1.395563
XX	-.271851	8	-2.174808
ZZ	.708773	14	9.922822
Totals	0	198	43.757508

$_{r}r$ = .224998 (43.757508 ÷ 198)

Hypothesis 9: Emotional Stability-- Secondary Versus Post-Secondary

There is no significant difference between the average weighted correlation of the post-secondarys' correlated values of the rating agreement index and the emotional stability agreement index as compared with the same average weighted correlation value of the high school.

It was observed that 1.090586 was less than 1.96. Thus, the null hypothesis, $_{w}r_{esps} = {}_{w}r_{eshs}$, was accepted and the alternative rejected.

Supporting Data

The emotional stabilitys' average weighted correlation for the post-secondary classes was determined to be .308219, which was illustrated in Table 4.19. For the high school group, the emotional stability's average weighted correlation was .189711 which was shown in Table 4.20.

"The z value for r Table" was used to find the z and z_2 values which were .318219 and .191711. Applying the numerical quantities for both z's to Fisher's formula, the notation was:

$$Z = \frac{.318219 - .191711}{\sqrt{\frac{1}{(122-3)} + \frac{1}{(198-3)}}}$$

The value of Z was calculated to be 1.090586.

TABLE 4.19.--Computation of the average weighted correlation for the emotional stability factor at the post-secondary level

Class	Emotional Stability Correlation Coefficient	Number of Subjects	Weighted Correlation
CC	.156853	12	1.882236
EE	.378886	17	6.441062
FF	.384197	25	9.604925
GG	-.312167	15	-4.682505
KK	.536065	12	6.432780
PP	.311454	29	9.032166
YY	.741002	12	8.892024
Totals	0	122	37.602688

$_{es}r = .308219 \quad (37.602688 \div 122)$

Hypothesis 10: Sociability--Secondary Versus Post-Secondary

There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and sociability agreement index as compared with the same average weighted correlation value of the high school.

Since the tabulated value of Z, .732181, was smaller than the table value of z, 1.96, the null hypothesis, $_{w}r_{sps} = {}_{w}r_{shs}$, was accepted and the alternative hypothesis, $_{x}r \neq {}_{x}r_{shs}$, rejected.

Supporting Data

Table 4.21 and 4.22 were used to demonstrate the computation of the sociability's average weighted correlation for the post-secondary and high school classes respectively.

TABLE 4.20.--Computation of the average weighted correlation for the emotional stability factor at the high school level

Class	Emotional Stability Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.303741	15	4.556115
BB	.417092	11	4.588012
DD	.066928	16	1.070848
HH	.539154	11	5.929594
JJ	.572603	9	5.153427
LL	-.328523	21	-6.898983
MM	.066494	15	.997410
OO	.346735	17	5.894495
RR	-.028137	20	- .562740
VV	.184157	28	5.156396
WW	.294119	13	3.823547
XX	-.368107	8	-2.944856
ZZ	.771400	14	10.799600
Totals	0	198	37.562856

$_{es}r$ = .189711 (37.562856 ÷ 198)

TABLE 4.21.--Computation of the average weighted correlation for the sociability factor at the post-secondary level

Class	Sociability Correlation Coefficient	Number of Subjects	Weighted Correlation
CC	-.190339	12	-2.284068
EE	-.251832	17	-4.281144
FF	.102779	25	2.569475
GG	-.005292	15	- .079380
KK	.775868	12	9.310416
PP	.314748	29	9.127692
YY	.653552	12	7.842624
Totals	0	122	22.205615

$_{s}r$ = .182013 (22.205615 ÷ 122)

The $_{w}r$ values from Tables 4.21 and 4.22 were converted to z values by means of "the z value for r Table." The corresponding numbers were z, .184013 and z_2, .099079. Making the necessary substitution of z, and z_2 in the z transformation formula, the expression became:

$$Z = \frac{.184013 - .099079}{\sqrt{\frac{1}{(122-3)} + \frac{1}{(198-3)}}}$$

Z was computed to be .732181.

Hypothesis 11: Ascendency--Spring Versus Fall

There is no significant difference between the average weighted correlation of the spring classes' correlated values of the rating agreement index and the ascendency agreement index as compared with the same average weighted correlation value of the fall classes.

TABLE 4.22.--Computation of the average weighted correlation for the sociability factor at the high school level

Class	Sociability Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.304305	15	4.564575
BB	.815599	11	8.971589
DD	-.037571	16	- .601136
HH	.670045	11	7.370495
JJ	-.288079	9	-2.592711
LL	-.381211	21	-8.005431
MM	.042185	15	.632775
OO	-.063345	17	-1.076865
RR	-.566687	20	-11.333740
VV	.293495	28	8.217860
WW	.022263	13	.289419
XX	.548761	8	4.390088
ZZ	.627909	14	8.790726
Totals	0	198	19.617644

$$_{s}r = .099079 \quad (19.617644 \div 198)$$

Since the computed value of Z, -.842067, was less than 1.96, the table value, the null hypothesis, $_{w}r_{as} = {}_{w}r_{af}$, was accepted and H_a, $_{w}r_{as} \neq {}_{w}r_{af}$, was rejected.

Supporting Data

Of the twenty classes involved in this study, twelve participated in the spring and eight in the fall of 1971. The purpose of Hypotheses 11 to 14 was to determine if any difference existed between the two populations for any of the four Gordon Personal Profile factors. The correlation coefficient computed in Hypotheses 3 through 7 provided the basic data for testing the hypotheses.

An average weighted correlation was calculated for both the spring and fall groups and for each of the four factors. It was done by multiplying each class' correlation for a given factor by the number of subjects. The products were added and the sum divided by the total number of subjects.

The spring and fall groups' average weighted correlation for the ascendency factor was illustrated in Tables 4.23 and 4.24.

TABLE 4.23.--Computation of the average weighted correlation for the spring group's ascendency factor

Class	Ascendency Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.403248	15	6.048720
BB	.888019	11	9.768209
CC	-.205202	12	-3.002424
DD	.049967	16	.799472
EE	-.140143	17	-2.382431
FF	.298994	25	7.474850
GG	-.037658	15	- .564870
HH	.855565	11	9.411215
JJ	-.611167	9	-5.500503
KK	.710752	12	8.529024
LL	-.451856	21	-9.488976
MM	.203293	15	3.049395
Totals	0	179	24.141681

$$_{w}r_{as} = .134870 \quad (24.141681 : 179)$$

The average weighted correlation for the spring classes was .134870 and fall .231413.

In order to compute the difference between the two populations, Fisher's Z transformation formula,

$$Z = \frac{z_1 - z_2}{\sqrt{\frac{1}{n-3} + \frac{1}{n-3}}}$$

was used. To substitute in the formula, it was necessary to convert $_wr$ to z. Using the "z value for r" table, the average weighted correlation for spring, .134870, was .136870 (z_1) and the average weighted correlation for fall, .231413, was .232613 (z_2). By substituting the Z values in the formula, the following expression resulted:

$$Z = \frac{.136870 - .232613}{\sqrt{\frac{1}{(179-3)} + \frac{1}{(141-3)}}}$$

The calculated value of Z became -.842067.

TABLE 4.24.--Computation of the average weighted correlation for the fall group's ascendency factor

Class	Ascendency Correlation Coefficient	Number of Subjects	Weighted Correlation
OO	-.050577	17	- .859809
PP	.464961	29	+13.483869
RR	-.391861	20	- 7.836320
VV	.337765	28	9.457420
WW	-.103245	13	- 1.342185
XX	.310112	8	2.480896
YY	.801344	12	9.616128
ZZ	.544942	14	7.629188
Totals	0	141	32.629187

$$_wr_{af} = .231413 \quad (32.629187 \div 141)$$

Hypothesis 12: Responsibility--Spring Versus Fall

There is no significant difference between the average weighted correlation of the spring classes' correlated values of the rating agreement index and the responsibility agreement index as compared with the same average weighted correlation value of the fall classes.

The computed Z value, -1.085708, was smaller than the table value of Z, 1.96. Therefore, H_o, $w^r_{rs} = w^r_{rf}$, was accepted and H_A rejected.

Supporting Data

The responsibility's average weighted correlations for both the spring and fall classes were .179494 and .294939, which was shown in Tables 4.25 and 4.26 respectively.

TABLE 4.25.--Computation of the average weighted correlation for the spring group's responsibility factor

Class	Responsibility Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.663035	15	9.945525
BB	.477805	11	5.255855
CC	-.051881	12	- .622572
DD	.454621	16	7.273936
EE	.230868	17	3.924756
FF	.390978	25	9.774450
GG	-.482362	15	-7.234890
HH	.381637	11	4.198007
JJ	.865376	9	7.788384
KK	.264654	12	3.175848
LL	-.356039	21	-7.476819
MM	-.258208	15	-3.873120
Totals	0	179	32.129360

w^r_{rs} = .179494 (32.129360 ÷ 179)

TABLE 4.26.--Computation of the average weighted correlation for the fall group's responsibility factor

Class	Responsibility Correlation Coefficient	Number of Subjects	Weighted Correlation
OO	.373605	17	6.351285
PP	.550565	29	15.966385
RR	.083342	20	1.666840
VV	.224113	28	6.275164
WW	-.107351	13	-1.395563
XX	-.271851	8	-2.174808
YY	.414523	12	4.974276
ZZ	.708773	14	9.922822
Totals	0	141	41.586401

$$_{w}r_{rf} = .294939 \quad (41.586401 \div 141)$$

From the "z value for r" table, z was .181494 and Z_z was .304939. Inserting the z values in Fisher's formula it was expressed as:

$$Z = \frac{.181494 - .304939}{\sqrt{\frac{1}{(179-3)} + \frac{1}{(141-3)}}}$$

Through mathematical computation, Z was determined to be -1.085708.

Hypothesis 13: Emotional Stability--Spring Versus Fall

There is no significant difference between the average weighted correlation of the spring classes' correlated value of the rating agreement index and the emotional stability agreement index as compared with the same average weighted correlation value of the fall classes.

Because the tabulated value of Z, -.854494, is less than the table value of Z, 1.96, H_o, $w^r_{ess} = w^r_{ess}$, was accepted and H_A, $w^r_{ess} \neq w^r_{ess}$, was rejected.

Supporting Data

It was determined that the emotional stability's average weighted correlation for the spring classes was .195949, and for the fall group it was .284705. The process was shown in Tables 4.27 and 4.28.

TABLE 4.27.--Computation of the average weighted correlation for the spring group's emotional stability factor

Class	Emotional Stability Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.303741	15	4.556115
BB	.417092	11	4.588012
CC	.156853	12	1.882236
DD	.066928	16	1.070848
EE	.378886	17	6.441062
FF	.384197	25	9.604925
GG	-.312167	15	-4.682505
HH	.539054	11	5.929594
JJ	.572603	9	5.153429
KK	.536065	12	6.432780
LL	-.328523	21	-6.898983
MM	.066494	15	.997410
Totals	0	179	35.074923

$$w^r_{ess} = .195949 \quad (35.074923 \div 179)$$

The value for z and z_2, obtained from the "z value for r" table, were .196549 and .293705. By substituting .196549 and .293705 in the Z transformation formula, the following notation resulted:

TABLE 4.28.--Computation of the average weighted correlation for the fall group's emotional stability factor

Class	Emotional Stability Correlation Coefficient	Number of Subjects	Weighted Correlation
OO	.346735	17	5.894495
PP	.311454	29	9.032166
RR	-.028137	20	- .562740
VV	.184157	28	5.156396
WW	.294119	13	3.823547
XX	-.368107	8	-2.944856
YY	.741002	12	8.892024
ZZ	.771400	14	10.799600
Totals	0	141	40.143464

$$_{w}r_{ess} = .284705 \quad (40.143464 \div 141)$$

$$Z = \frac{.196549 - .293705}{\sqrt{\frac{1}{(179-3)} + \frac{1}{(141-3)}}}$$

Then, Z was equal to -.854494.

Hypothesis 14: Sociability--Spring Versus Fall

There is no significant difference between the average weighted correlation of the spring classes' correlated values of the rating agreement index and the sociability agreement index as compared with the same average weighted correlation value of the fall classes.

The table value of Z was 1.96, and since the computed Z value, -.875471, was less, the null hypothesis, $_{w}r_{ss} = _{w}r_{sf}$, was accepted and the alternative, $_{w}r_{ss} \neq _{w}r_{sf}$, was rejected.

Supporting Data

Tables 4.29 and 4.30 were used to demonstrate the computation of the sociability's average weighted correlation for the spring and fall classes respectively.

TABLE 4.29.--Computation of the average weighted correlation for the spring group's sociability factor

Class	Sociability Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.304305	15	4.564575
BB	.815599	11	8.971589
CC	-.190339	12	-2.284068
DD	-.037571	16	- .601136
EE	-.251832	17	-4.281144
FF	.102779	25	2.569475
GG	-.005292	15	- .079380
HH	.670045	11	7.370495
JJ	-.288079	9	-2.592711
KK	.775868	12	9.310416
LL	-.381211	21	-8.005431
MM	.042185	15	.632775
Totals	0	179	15.575455

$$_{w}r_{ss} = .087014 \quad (15.575455 : 179)$$

Using the "z value for r" table, the representative values for z, and z^2 were .087014 and .186555. By applying the z values to Fisher's formula, the equation was:

$$Z = \frac{.087014 - .186555}{\sqrt{\frac{1}{(179-3)} + \frac{1}{(141-3)}}}$$

which produced a -.875471 value for Z.

TABLE 4.30.--Computation of the average weighted correlation for the fall group's sociability factor

Class	Sociability Correlation Coefficient	Number of Subjects	Weighted Correlation
OO	-.063345	17	- 1.076865
PP	.314748	29	9.127692
RR	-.566687	20	-11.333740
VV	.293495	28	8.217860
WW	.022263	13	.289419
XX	.548761	8	4.390088
YY	.653552	12	7.842624
ZZ	.627909	14	8.790726
Totals	0	141	26.247804

$$w^{r}_{sf} = .186155 \quad (26.247804 \div 141)$$

Hypothesis 15: Ascendency--Socially Secure Versus Socially Insecure

There is no significant difference between the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the ascendency average weighted correlation of the classes in which the student teacher was judged to be socially insecure by the MTAI test.

At the .05 level of significance, the Z value from the table was 1.96. Since the computed Z value, 4.790765, was greater than the tabular value, the null hypothesis, $w^{r}_{ad} = w^{r}_{ag}$, was rejected and H_A, $w^{r}_{ad} \neq w^{r}_{ag}$, was accepted.

Supporting Data

Prior to the student teaching assignment, every student teacher was administered the MTAI test. According

to the test manual, scores on the MTAI test above 70 represented socially secure teachers; scores below the 70 mark, indicated socially insecure teachers. Table 4.31 illustrated the distribution of scores for the twenty student teachers who were divided into the two groups.

TABLE 4.31.--MTAI test scores of student teachers

Student Teacher	MTAI Test Score	Student Teacher	MTAI Test Score
AA	65	LL	52
BB	74*	MM	9
CC	20	OO	59
DD	35	PP	96*
EE	42	RR	35
FF	46	VV	59
GG	31	WW	19
HH	80*	XX	62
JJ	70*	YY	89*
KK	84*	ZZ	104*

*indicates socially secure

The purpose of Hypotheses 15 through 18 was to determine if any significant difference existed between the two populations for any of the four Gordon Personal Profile factors. The basic data used to test the aforementioned hypotheses were the correlation coefficients computed for Hypotheses 3 through 7.

For both the socially secure and socially insecure teachers' classes, an average weighted correlation was calculated by multiplying each class' correlation for

the representative factor by the number of subjects. The products were added and the sum divided by the total subjects.

Tables 4.32 and 4.33 demonstrated the computation of the ascendency's average weighted correlations for the socially secure and socially insecure teachers' classes.

TABLE 4.32.--Computation of the average weighted correlation for the ascendency factor of the socially secure teachers' classes

Class	Ascendency Correlation Coefficient	Number of Subjects	Weighted Correlation
BB	.888019	11	9.768209
HH	.855565	11	9.411215
JJ	-.611167	9	- 5.500503
KK	.710752	12	8.529024
PP	.464961	29	13.483869
YY	.801344	12	9.616128
ZZ	.544942	14	7.629188
Totals	0	98	52.937130

$$_{w}r_{ad} = .540175 \quad (52.937130 \div 98)$$

Fisher's Z transformation formula,

$$Z = \frac{z_1 - z_2}{\sqrt{\frac{1}{n-3} + \frac{1}{n-3}}}$$

was utilized in order to determine the difference between the two populations. By converting the $_{a}r$ values from

Tables 4.31 and 4.32 to z values, substitutions were made in the formula which produced the following expression:

$$Z = \frac{.605575 - .017269}{\sqrt{\frac{1}{(98-3)} + \frac{1}{(222-3)}}}$$

Mathematically completing the equation, Z was determined to be 4.790765.

TABLE 4.33.--Computation of the average weighted correlation for the ascendency factor of the socially insecure teachers' classes

Class	Ascendency Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.403248	15	6.048720
CC	-.250202	12	-3.002424
DD	.049967	16	.799472
EE	-.140143	17	-2.382431
FF	.298994	25	7.474850
GG	-.037658	15	- .564870
LL	-.451856	21	-9.488976
MM	.203293	15	3.049395
OO	-.050577	17	- .859809
RR	-.391861	20	-7.836320
VV	.337765	28	9.457420
WW	-.103245	13	-1.342185
XX	.310112	8	2.480896
Totals	0	222	3.833738

$$_{w}r_{ag} = .017269 \quad (3.833738 \div 222)$$

Hypothesis 16: Responsibility--Socially Secure Versus Socially Insecure

There is no significant difference between the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

It was observed that the computed value of Z, 3.904121, was greater than the z value from the table, 1.96. Therefore, the null hypothesis, $_{w}r_{rd} = {}_{w}r_{rg}$, was rejected and H_A, $_{w}r_{rd} \neq {}_{w}r_{rg}$, was accepted.

Supporting Data

It was determined that the responsibility's average weighted correlation for the classes of the socially secure teachers was .523281, and for the socially insecure teachers' classes it was .101055. The computations were shown in Tables 4.34 and 4.35, respectively.

TABLE 4.34.--Computation of the average weighted correlation for the responsibility factor of the socially secure teachers' classes

Class	Responsibility Correlation Coefficient	Number of Subjects	Weighted Correlation
BB	.477805	11	5.255855
HH	.381637	11	4.198007
JJ	.865376	9	7.788384
KK	.264654	12	3.175848
PP	.550565	29	15.966385
YY	.414523	12	4.974276
ZZ	.708773	14	9.922822
Totals	0	98	51.281577

$$_{w}r_{rd} = .523281 \quad (51.281577 \div 98)$$

Using the "z value for r" table, the $_{w}r$ quantities were converted to z scores with z equaling .580481 and z_2 .101055. The z values were substituted into Fisher's formula. The expression became:

$$Z = \frac{.580481 - .101055}{\sqrt{\frac{1}{(98-3)} + \frac{1}{(222-3)}}}$$

Culminating the arithmetic process, the Z was equal to 3.904121.

TABLE 4.35.--Computation of the average weighted correlation for the responsibility factor of the socially insecure teachers' classes

Class	Responsibility Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.663035	15	9.945525
CC	-.051881	12	- .622572
DD	.454621	16	7.273936
EE	.230868	17	3.924756
FF	.390978	25	9.774450
GG	-.482362	15	-7.234890
LL	-.356039	21	-7.476819
MM	-.258208	15	-3.873120
OO	.373605	17	6.351285
RR	.083342	20	1.666840
VV	.224113	28	6.275164
WW	-.107351	13	-1.395563
XX	-.271825	8	-2.174808
Totals	0	222	22.434184

$$_{w}r_{rg} = .101055 \quad (22.434184 \div 222)$$

Hypothesis 17: Emotional Stability--Socially Secure Versus Insecure

There is no significant difference between the emotional stability's average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the emotional stability's average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

Since the computed value of Z, 3.790871, was greater than the table value of Z, 1.96, the H_o, $_wr_{ad} = {}_wr_{ag}$, was rejected and H_A, $_wr_{ad} \neq {}_wr_{ag}$ was accepted.

Supporting Data

The emotional stability's average weighted correlation for the socially secure teachers' classes was .518649, and for the classes of the socially insecure teachers it was .109630. The computations for $_wr$ were illustrated in Tables 4.36 and 4.37.

TABLE 4.36.--Computation of the average weighted correlation for the emotional stability factor of the socially secure teachers' classes

Class	Emotional Stability Correlation Coefficient	Number of Subjects	Weighted Correlation
BB	.417092	11	4.588012
HH	.539054	11	5.929594
JJ	.572603	9	5.153427
KK	.536065	12	6.432780
PP	.311454	29	9.032166
RR	.741002	12	8.892024
ZZ	.771400	14	10.799600
Totals	0	98	50.827603

$$_wr_{esd} = .518649 \quad (50.827603 : 98)$$

The corresponding value for z, and z_2, obtained from the "z value for r" table, were .518649 and .109630. By inserting the z values in the z transformation equations, it produced:

$$Z = \frac{.518649 - .109630}{\sqrt{\frac{1}{(98-3)} + \frac{1}{(222-3)}}}$$

The value of Z was calculated to be 3.790871.

TABLE 4.37.--Computation of the average weighted correlation for the emotional stability factor of the socially insecure teachers' classes

Class	Emotional Stability Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.303741	15	4.556115
CC	.156853	12	1.882236
DD	.066928	16	1.070848
EE	.378886	17	6.441062
FF	.384197	25	9.604925
GG	-.312167	15	-4.682505
LL	-.328523	21	-6.898983
MM	.066494	15	.997410
OO	.346735	17	5.894495
RR	-.028137	20	- .562740
VV	.184157	28	5.156396
WW	.294119	13	3.823547
XX	-.368107	8	-2.944856
Totals	0	222	24.337950

$$_{w}r_{esg} = .109630 \quad (24.337950 \div 222)$$

Hypothesis 18: Sociability--Socially Secure Versus Socially Insecure

There is no significant difference between the sociability's average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the sociability's average weighted correlation of the classes in which the student teachers were judged socially insecure by the MTAI test.

The table value of z, 1.96, was less than the tabulated value of Z, 4.716555; therefore, H_o, ${}_w r_{sd} = {}_w r_{sg}$, was rejected and H_A, ${}_w r_{sd} \neq {}_w r_{sg}$, was accepted.

Supporting Data

It was observed that the sociability's average weighted correlation for the socially secure teachers' classes was .498172, which was shown in Table 4.38.

TABLE 4.38.--Computation of the average weighted correlation for the sociability factor of the socially secure teachers' classes

Class	Sociability Correlation Coefficient	Number of Subjects	Weighted Correlation
BB	.815599	11	8.971589
HH	.670045	11	7.370495
JJ	-.288079	9	-2.592711
KK	.775868	12	9.310416
PP	.314748	29	9.127692
YY	.653552	12	7.842624
ZZ	.627909	14	8.790726
Totals	0	98	48.820831

${}_w r_{sd} = .498172 \quad (48.820831 : 98)$

The sociability's average weighted correlation for the classes of the socially insecure teacher was noted to be -.031521. This was illustrated in Table 4.39.

The ${}_w r$ quantities were converted to z values by using the "z value for r" table. This process established the following values for z, and z_2: .547672 and -.031521.

TABLE 4.39.--Computation of the average weighted correlation for the sociability factor of the socially insecure teachers' classes

Class	Sociability Correlation Coefficient	Number of Subjects	Weighted Correlation
AA	.304305	15	4.564575
CC	-.190339	12	- 2.284068
DD	-.037571	16	- .601136
EE	-.251832	17	- 4.281144
FF	.102779	25	2.569475
GG	-.005292	15	- .079380
LL	-.381211	21	- 8.005431
MM	.042185	15	.632775
OO	-.063345	17	- 1.076865
RR	-.566687	20	-11.333740
VV	.293495	28	8.217860
WW	.022263	13	.289419
XX	.548761	8	4.390088
Totals	0	222	- 6.997572

$$_{w}r_{sg} = .031521 \quad (-6.997572 \div 222)$$

By substituting the numerical quantities for z, and z_2 in Fisher's formula, the following equation resulted:

$$Z = \frac{.547672 - (-.031521)}{\sqrt{\frac{1}{(98-3)} + \frac{1}{(222-3)}}}$$

The computed value of Z was 4.716555.

Summary of the Findings

1. The Gordon Personal Profile and the MTAI tests provided the basic data for Hypotheses 1 and 2. For the first hypothesis, the students' scores from each test were ranked and correlated. The

results showed that only four of eighty correlations were significant. The second hypothesis, dealing with the ranking and correlating of the student teachers' scores from the Gordon Personal Profile and MTAI tests, showed no correlations were found to be significant. Thus, both null hypotheses were accepted. Therefore, the Modified MTAI was not a substitute for the Gordon Personal Profile.

2. The four factors from the Gordon Personal Profile test were investigated individually in relationship to the difference in the rating of students and student teachers. It was observed that for the ascendency, responsibility, and emotional stability factors, nine, or 45 per cent, of the twenty classes' correlations were significant at the .10 level for the sociability factor (see below B).

3. In an effort to establish differences between populations, three pairs of groups were analyzed. The groups were post-secondary versus high school, spring versus fall, and socially secure teachers' classes versus socially insecure teachers' classes. For the first two groups, at the .05 level of significance, no differences were noted for any of the four Gordon Personal Profile test

factors. However, in the third set, a highly significant difference occurred for each of the four factors. However, seven correlations for ascendency were significant at the .05 level, while six responsibility and emotional stability correlations were significant at the 5 per cent level. Added to this was the factor that six correlations for the sociability factor were significant at the .05 level. Therefore, it appears that some relationship between observed similarities in the four broad components of personality and perceived effectiveness existed but it is unclear as to just what these relationships were.

CHAPTER V

SUMMARY

This study was conducted to determine the contributory effect that the perceived similarities of four broad components of personality had upon the rating of distributive education students and student teachers in Minnesota. The four components of personality were: ascendency, responsibility, emotional stability, and sociability.

Specifically, the study was undertaken for the following purposes:

(1) To develop an instrument that would measure the same four Gordon Personal Profile test's factors, ascendency, responsibility, emotional stability, and sociability by reconstructing the unabridged Minnesota Teachers Attitude Inventory test into a personality test called the Modified MTAI;

(2) To study the relationship between the students' and student teachers' perceived similarities in personality, which was identified through four broad components of the Gordon Personal Profile

test: ascendency, responsibility, emotional stability, and sociability, and the performance rating that the students and student teachers gave to each other;

(3) To determine if any difference existed between the spring and fall classes;

(4) To detect differences, if any, between the classes at the post-secondary level of instruction and classes at the high school level;

(5) To determine if any difference existed between the classes of the student teachers who were judged socially secure by the Minnesota Teacher Attitude Inventory test and the classes of those student teachers who were judged socially insecure by the same measurement.

The Problem of This Study

The problem of this study was to determine the affect that perceived similarities in the four broad components of personality had on the perceived effectiveness of the distributive education student teachers and their students. The four broad components of personality were: ascendency, responsibility, emotional stability, and sociability. These were defined as:

Ascendency.--Mobility upward, especially in respect to power, prestige, and influence. Tendency to control the behavior of associates.

Responsibility.--Accountability for actions and their consequences. The character trait of carrying out one's agreements or one's duties.

Emotional Stability.--Characteristic of a person who does not react excessively to emotive situations.

Sociability.--Inclination to seek the company of others and to be friendly and agreeable toward them.

It was contended by the researcher that distributive education students and student teachers would have a tendency to perceive each other to be more effective if similarities in personalities were observed. The problem was specified by a major hypothesis:

> There are no differences in the attitude and perceived effectiveness rating made by the student and student teacher of each other, when one perceives similarities in one of the four components of personality as measured by the Gordon Personal Profile.

The hypothesis was first tested by specifying four questions, each isolating a component of personality.

1. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in ascendency?

2. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in responsibility?

3. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in emotional stability?

4. Is there any difference in the perceived effectiveness of the student and student teacher when similarities were observed in sociability?

It was further assumed that if the hypothesis were to be rejected and that if differences were determined, that certain factors in the instructional setting for distributive education should be analyzed to determine if they were causal. These factors were:

(1) time of the school year: spring classes versus fall;

(2) level of instruction: post-secondary versus secondary;

(3) socially secure teachers versus socially insecure teachers.

Another aspect of this study was to devise an instrument called the Modified MTAI that would measure the same four components of personality as the Gordon

Personal Profile. The unabridged Minnesota Teachers Attitude Inventory Test provided the basis for the development of the Modified MTAI.

Outcomes Expected

The outcomes of this study were presumed to be the following:

1. In teacher education programs in distributive education there would be a greater emphasis in the direction of interpersonal relationship skills. This would occur in the preservice teacher education programs as well as the in-service approach.
2. Distributive education materials for training teachers as well as students would in effect have to be redesigned in order to emphasize the interpersonal relationship skills.
3. The selection of students for entry into a distributive education program would assume a new dimension, such as matching life styles against some form of pre-determined testing system.
4. Within a given teacher education program further investigation would be undertaken in an attempt to modify teacher behavioral patterns.
5. The entire process of recruitment for a distributive teacher education program might be significantly changed.

Procedures

In addition to the major hypothesis of this study, there were two sets of hypotheses that were developed one being procedural the other being substantive. The first set of hypotheses was designed to identify the relationship between perceived effectiveness and four personality characteristics, as well as to determine the similarities between two instruments used to measure identical personality components.

Procedural Hypotheses:

1. There is no significant difference in the rank correlation coefficient of each of the four factors on the Gordon Personal Profile and the Modified MTAI test taken by the students as it relates to a single class or between classes.

2. There is no significant difference in the rank correlation coefficient of each of the four factors on the Gordon Personal Profile test and the Modified MTAI test taken by the student teachers.

3. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' ascendency factor of the Gordon Personal Profile in each class.

4. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' responsibility factor of the Gordon Personal Profile in each class.

5. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' emotional stability factor of the Gordon Personal Profile in each class.

6. There is no significant correlation between the agreement index of the student--student teachers' ratings and the agreement index of the student--student teachers' sociability factor of the Gordon Personal Profile in each class.

The second set of hypotheses was substantive, meaning that they were dependent upon the results of the procedural hypotheses for implimentation.

Substantive Hypotheses:

7. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the ascendency agreement index as compared with the same average weighted correlation of the high school.

8. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the responsibility agreement index as compared with the same average weighted correlation of the high school.

9. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the emotional stability agreement index as compared with the same average weighted correlation of the high school.

10. There is no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the sociability agreement index as compared with the same average weighted correlation of the high school.

11. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' ascendency agreement index as compared with the average weighted correlation of the fall.

12. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' responsibility agreement index as compared with the average weighted correlation of the fall.

13. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' emotional stability agreement index as compared with the average weighted correlation of the fall.

14. There is no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' sociability agreement index as compared with the average weighted correlation of the fall.

15. There is no significant difference in the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

16. There is no significant difference in the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

17. There is no significant difference in the emotional stability average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the emotional stability average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

18. There is no significant difference in the sociability average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the sociability average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

The Population and Sample

The population was composed of: (1) twenty-seven available distributive education student teacher coordinators from the four approved Minnesota teacher education programs during the spring and fall quarters of 1971; (2) all distributive education students from the assigned student teaching sites. However, only 22 of the 27 student teachers agreed to participate in the study. In the spring, 14 student teachers and 226 students participated in the research project. During the fall, 8 student teachers and 154 students cooperated with this study. Of the total number of schools involved in the study, 13 were secondary and 7 were post-secondary.

Collection of Data

In February of 1971, the spring quarter student teachers from each institution were identified and a coding system was devised. Each student teacher was assigned a double letter indicating the school of his student teaching site and the number one for self-identification. The students in each student teachers' class were subsequently identified by the double letter and a chronological numbering system starting with two. Simultaneously with the aforementioned activity, the State Department of Education was contacted and Mr. Ron Strand, then state supervisor of Distributive Education, wrote a letter to each participating school soliciting cooperation. This preceded the researcher's letter to each of the distributive education teacher-coordinators.

At the beginning of March, a meeting was held for each group of student teachers from their respective institutions. The purpose of this meeting was to explain the testing procedure, define the coding system, and administer the MTAI test to each student teacher. The importance of retaining a roster of students with the identification code of each student was emphasized at the meeting. The Gordon Personal Profile and the Modified MTAI tests were also disseminated with the coding instructions on the envelope.

During the first week of student teaching, the Gordon Personal Profile and the Modified MTAI were taken by the student teacher and each student. The tests were scored. In every class each student's percentile scores for each of the four factors of the Modified MTAI test were ranked and compared with the same student's ranking percentile scores from the identical factor of the Gordon Personal Profile test. The aforementioned operation was processed in an identical manner for all of the student teachers.

The Gordon Personal Profile test, which was the main instrument, performed the principle service of measuring life style. The student teacher's percentile scores for ascendency, responsibility, emotional stability, and sociability on the Gordon Personal Profile were compared with his student's percentile scores for the corresponding factor. The above function provided a column of differences for each factor: ascendency, responsibility, emotional stability, and sociability in each class; henceforth identified as agreement index A, R, ES, and S.

After eight weeks of student teaching, the students in each class completed the ten-question teacher rating form on their student teacher. The coding on the teacher rating form was the double letter designating the school and the identically assigned number the student had on his previous tests.

In addition, the student teacher completed a ten-question student rating form on each student in his class. The coding on this form was the double letter representing the school and the student's assigned number; thus enabling the scores from the two rating forms to be compared with each other. This function produced a column of differences, henceforth to be labeled rating agreement index, for the ratings in each class, which was then compared with the Gordon Personal Profile test score agreement index for each of the four factors in each representative class.

The entire spring process of the study was replicated in the fall.

Findings

Hypothesis 1, there was no significant difference in the rank correlation coefficient of each of the four factors on the Gordon Personal Profile and Modified MTAI tests taken by the students as it related to a single class or between classes, was accepted because by chance three or four correlations should be significant (76 x .05 = 3.8) and only four correlations were significant.

Since both the Gordon Personal Profile and Modified MTAI tests contained the same four factors, ascendency, responsibility, emotional stability, and sociability, the students' percentile scores for each of

the four test factors were ranked and compared. A rank correlation was used to analyze the relationship between same factors on each instrument in each of the nineteen classes. Seventy-six rank correlations resulted, of which only four factors, class GG responsibility .578, class KK responsibility .622, class LL emotional stability .513, and class MM sociability .698, were significant at the .05 level.

Hypothesis 2, there was no significant difference in the rank correlation coefficient of each of the four factors on the Gordon Personal Profile and Modified MTAI tests taken by the student teachers, was accepted. The nineteen student teachers' percentile scores for the ascendency, responsibility, emotional stability, and sociability factors from both the Gordon Personal Profile and Modified MTAI tests were ranked and compared. To analyze the relationship between the same factor on each instrument a rank correlation was utilized. None of the four resulting rank correlations were significant.

Hypothesis 3, there was no significant correlation between the rating agreement index and the ascendency agreement index for each class, was rejected for nine classes but was accepted for eleven classes. For the ascendency factor, classes BB (.888019), HH (.855565), KK (.710752), PP (.464961), VV (.337765), YY (.801344), and ZZ (.544942) had significant correlations at the

.05 level while the correlations for classes AA (.403248) and FF (.298994) were significant at the .10 level.

Hypothesis 4, there was no significant correlation between the rating agreement index and the responsibility agreement index in each class, was rejected for nine classes and accepted for eleven classes. Of the twenty correlations pertaining to the responsibility factor, six classes, AA (.663035), DD (.454621), FF (.390978), JJ (.865376), PP (.550565), and ZZ (.708773) were significant at the .05 level and three classes BB (.477805), OO (.373605), and CC (.414523) were significant at .10.

Hypothesis 5, there was no significant correlation between the rating agreement index and the emotional stability agreement index in each class, was rejected for nine classes but was accepted for eleven classes. The emotional stability factors' significant correlations at .05 level were classes FF (.384197), HH (.539054), KK (.536065), PP (.311454), YY (.721002), and ZZ (.771400). At the .10 level of significance, the classes were EE (.378886), JJ (.572603), and OO (.346735).

Hypothesis 6, there was no significant correlation between the rating agreement index and the sociability agreement index in each class, was rejected for eight classes and accepted for twelve classes. Of the twenty correlations relating to the sociability factor classes BB (.815599), HH (.670045), KK (.775868), PP (.314748),

YY (.653553), and ZZ (.627909) had significant correlations at the .05 level while classes VV (.293495) and XX (.548761) were significant at the .10 level.

Other pertinent findings concerning Hypotheses 3 through 6 were:

1. Ascendency, responsibility, and emotional stability factors each had nine significant correlations while sociability had eight.
2. Thirty-five of a possible eighty correlations were significant and twenty-five of them were significant at the .05 level.
3. Fourteen classes, AA, BB, DD, EE, FF, HH, JJ, KK, OO, PP, VV, YY, and ZZ, had one or more significant correlations.
4. Three classes, PP, RR, and ZZ, had significant correlations for all four factors.
5. Four classes, BB, FF, HH, and KK had three significant correlations, with HH and KK having significant correlations for the same factors, ascendency, emotional stability, and sociability. Classes BB and FF had significant correlations for ascendency and responsibility factors but the correlation for the third factor differed.
6. Four classes, AA, JJ, OO, and VV, had two significant correlations each, however JJ and OO had

identical factors, responsibility and emotional stability. Class AA had a significant correlation for the responsibility factor also, but differed for the second factor while VV's significant correlation were for ascendency and sociability factors.

Because none of the computed z values exceeded the z table value of 1.96 (i.e., .05 level of significance), all four null hypotheses which follow were accepted:

7. There was no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the ascendency agreement index as compared with the same average weighted correlation of the high school.

8. There was no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the responsibility agreement index as compared with the same average weighted correlation of the high school.

9. There was no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the emotional stability agreement index as compared with the same average weighted correlation of the high school.

10. There was no significant difference between the average weighted correlation of the post-secondaries' correlated values of the rating agreement index and the sociability agreement index as compared with the same average weighted correlation of the high school.

Since twelve distributive education student teachers and their assigned classes participated in the spring of 1971 and eight in the fall, the groups were divided accordingly. An average weighted correlation was computed on each group for each of the four Gordon Personal Profile test factors. Each group's average weighted correlation for the same factor was substituted in Fisher's z transformation formula. The resulting z values were ascendency 1.318706, responsibility .213457, emotional stability 1.090586, and sociability .732181.

None of the computed z values for post-secondary and secondary groups exceeded the z table value of 1.96. Therefore, the null hypotheses which follow were accepted:

11. There was no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' ascendency agreement index as compared with the average weighted correlation of the fall.

12. There was no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' responsibility agreement index as compared with the average weighted correlation of the fall.

13. There was no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' emotional stability agreement index as compared with the average weighted correlation of the fall.

14. There was no significant difference between the average weighted correlation of spring correlated values of the student--student teachers' rating agreement index and the student--student teachers' sociability agreement index as compared with the average weighted correlation of the fall.

There were seven post-secondary and thirteen high school classes for each of the two groups and an average weighted correlation was computed for each of the four Gordon Personal Profile test factors. The average weighted correlations were converted to z values and substituted in the z transformation equation. The z scores were ascendency -.842067, responsibility -1.085708, emotional stability -.854494, and sociability -.875471.

Since the computed z scores for all four factors were greater than the z table value of 1.96, the null hypotheses which follow were rejected:

15. There was no significant difference in the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the ascendency average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

16. There was no significant difference in the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the responsibility average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

17. There was no significant difference in the emotional stability average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the emotional stability average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

18. There was no significant difference in the sociability average weighted correlation of the classes in which the student teachers were judged to be socially secure by the MTAI test and the sociability average weighted correlation of the classes in which the student teachers were judged to be socially insecure by the MTAI test.

The same classes were divided into groups a third time. Prior to the student teaching assignment, every student teacher was administered the Minnesota Teachers Attitude Inventory test. According to the test manual, a test score of seventy or above indicated the student teacher was socially secure; below seventy, the student teacher was judged socially insecure. Seven student teachers, assigned to coded classes BB, HH, JJ, KK, PP, RR, and ZZ, scored seventy or above. The remainder of the twenty classes had student teachers who were judged to be socially insecure.

For each of the two groups, an average weighted correlation was computed by multiplying the factor correlation for each class by the number of subjects in it; adding the products and dividing the sum by the total number of subjects. Each group's average weighted correlation for each factor was converted to z scores and

substituted in Fisher's z transformation formula. The resulting z values were ascendency 4.790765, responsibility 3.904121, emotional stability 3.790871, and sociability 4.716555.

Additional pertinent findings for Hypotheses 15 through 18 were:

1. Twenty-five of the possible twenty-eight correlations for the classes of the seven socially secure teachers or 89 per cent were significant at the .10 level.

2. Five-sevenths of all significant correlations were recorded in the classes of the seven socially secure teachers.

Conclusions

1. The Modified MTAI Test, when given to students, does not measure the same four factors of the Gordon Personal Profile Test. This is based on the finding that only four of a possible seventy-six rank correlations were significant. Inadequate pretesting occurred as evidenced by the fact that no correlation was found between the Modified MTAI and Gordon Personal Profile Tests. The Modified MTAI Test was not a substitute for the Gordon Personal Profile Test. This is evidenced by the fact that only four of a possible eighty

rank correlations, combining the students and student teachers' rank correlations, were significant. It is also contended that it is unknown if the Modified MTAI Test will substitute for the Gordon Personal Profile Test under other conditions.

2. It was unclear as to the relationship that existed between the performance and attitude rating of the distributive education student and student teacher and the perceived similarities in the four components of personality, even though thirty-five of the eighty correlations were significant. It appears something is happening but the implications of the relationship are not known. When each class rating agreement index was compared with each of its four Gordon Personal Profile factor agreement indices, the following major points were observed for the twenty classes:

   (a) Nine or 45 per cent of the correlations for the ascendency, responsibility, and emotional stability factors were significant;

   (b) Eight or 40 per cent of the correlations for the sociability factor were significant;

   (c) Fourteen classes AA, BB, DD, EE, FF, HH, JJ, KK, OO, PP, VV, YY, and ZZ had one or more significant correlations;

(d) Three classes, PP, YY, and ZZ, showed all four factors significantly correlated;

(e) Classes HH and KK had significant correlations for the same three factors, ascendency, emotional stability, and sociability;

(f) Classes BB and FF had three significant correlations; each had the ascendency and responsibility factor, but the third factor differed;

(g) Four classes, AA, JJ, OO, VV, had two significant correlations each; however, JJ and OO had identical factors, responsibility and emotional stability while AA also contained a significant correlation for the responsibility factor;

(h) Classes DD, EE, and XX had one significant correlation but for different factors. Each of the four factors had at least 40 per cent significant correlation, but the significant correlations for each factor was not consistent for each class.

3. The term of the school year had a minimal affect on the performance and attitude rating of student and/or the student teacher. When the spring and fall class groupings were compared, no significant difference was noted.

4. The level of instruction at which a person teaches has a minute affect on the perceived affectiveness of the student and/or the student teacher. When the post-secondary and high school class groupings were compared, no significant differences were observed.

5. In the classes of the socially secure teacher, the perceived similarities in personality of the student and student teacher affects strongly the performance and attitude rating of each other. Even though the primary purpose of the MTAI test was as a control function, it provided the most informative data. When the classes taught by student teachers who were judged socially secure by the MTAI test were compared with the socially insecure teachers' classes, a significance was found in the two groups on each of the four Gordon Personal Profile test factors. It was also observed that the seven socially secure teachers' classes had twenty-five of the thirty-five or five-sevenths of the significant correlations. In addition, in the classes of the socially secure teachers, there was a maximum of twenty-eight possible correlations. This meant that over 89 per cent of the correlations were significant in those classes.

Implications and Recommendations

The purpose of this study was to determine the affect that perceived similarities in personality had upon the performance and attitude rating of students and student teachers. It was recognized that the concept of personality was an ever developing and an enormously encompassing concept which made it extremely difficult, if not impossible, to measure.

Another dilemma in the study was an individual's perception. It was assumed that an individual would be able to perceive the similarities of another's personality in comparison to his own and to decode these perceptions properly. However, it is a known fact that individual's perceptual ability varies not only in what and how much a person sees, but also, in the persons decoding process of the perceived data. Many variables, such as: emotional state, surrounding conditions, fatigue, and many more, can cause increases or decreases in the perceptual ability of an individual. At the time the instruments of this study were administered, it was virtually impossible to determine the perceptual status of the subjects.

In view of the two preceding points, there still was sufficient positive data to support the following implications for Distributive Education.

1. Distributive education teacher education programs should incorporate additional experience that

would assist the aspiring teacher and teacher-coordinator to become socially secure. Greater emphases should be placed on the maturity process and interpersonal relationship skills.

2. In-service programs should be developed for the socially insecure teachers that would maximize the growth potential of the individual in his pursuit of becoming socially secure.

A person's ability to feel secure in social relations and manifest behavior that exhibits that fact is a component of maturity.

It was demonstrated that in the classes of the socially secure teacher, twenty-five of the twenty-eight correlations were significant. This would indicate that the students could more readily identify with the socially secure teacher.

Cook (37:167-72) defined the socially insecure teacher as one who cannot trust people, has little sense of humor, has a dominating or overbearing attitude toward subordinates (students), becomes frustrated in social relations and uses aggression in the form of general hostility toward people, and asserts that if one knows his subject little else matters in teaching. The socially secure teacher is secure in social relations and therefore does not possess the aforementioned traits.

Merrill (113), in Interpersonal Identity Profile, indicates the need for persons to become more versatile in their relationships with others. He claims that the more versatile the person is the more capable he is to recognize and meet the needs of others. If this assertion is true, and if this can be considered another dimension of maturity, then efforts should be made to incorporate activities that would help teachers achieve maturity.

To the researcher, it seems that the first step toward maturity is to become responsible for one's behavior or actions. One way of achieving this is by having the aspiring teacher, with the assistance of the teacher-educator, establish goals, objectives, or a set of goals. The aspiring teacher has made a commitment to the objective and it is the function of the teacher-educator to hold the candidate accountable for its completion. Inherent in this process is the need for flexibility which means a multitude of alternatives available to the candidate, by which his objectives can be met. Through this process, the aspiring teacher now becomes responsible for his actions and thus would develop more self-confidence which in turn would produce a greater sense of security.

The following recommendations for further research are generated as a result of this study:

1. To further validate the findings of this study, a replication of the study should be conducted using a broader geographic area and/or a larger population.

2. A study similar to the present investigation should be conducted using a different or an additional instrument to measure life style.

3. This study should be replicated to include other service areas of vocational education.

4. Research should be undertaken to identify the major characteristics that influence the perception of anothers' life style.

5. A study should be conducted to determine the affect that perceived social life style has upon instructional material, more specifically, projects. Presently, a research project has been initiated to explore the affect.

6. The socially insecure teachers' classes had a very low percentage (19%) of significant correlations. Additional research should be undertaken to examine the reasons.

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APPENDICES

APPENDIX A

TESTING INSTRUMENTS

DO NOT OPEN UNTIL TOLD TO DO SO

MINNESOTA TEACHER ATTITUDE INVENTORY

Form A

WALTER W. COOK
University of Minnesota

CARROLL H. LEEDS
Furman University

ROBERT CALLIS
University of Missouri

DIRECTIONS

This inventory consists of 150 statements designed to sample opinions about teacher-pupil relations. There is considerable disagreement as to what these relations should be; therefore, there are no right or wrong answers. What is wanted is your own individual feeling about the statements. Read each statement and decide how YOU feel about it. Then mark your answer on the space provided on the answer sheet. Do not make any marks on this booklet.

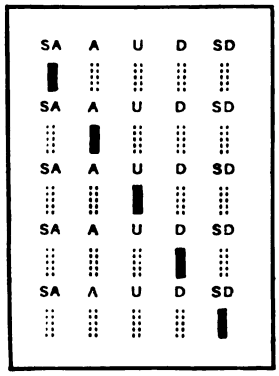
If you **strongly agree,** blacken space under "SA" .....

If you **agree,** blacken space under "A" .....

If you are **undecided** or **uncertain,** blacken space under "U" .....

If you **disagree,** blacken space under "D" .....

If you **strongly disagree,** blacken space under "SD" .....



Think in terms of the general situation rather than specific ones. There is no time limit, but work as rapidly as you can. PLEASE RESPOND TO EVERY ITEM.

The test contained in this booklet has been designed for use with answer forms published or authorized by The Psychological Corporation. If other answer forms are used, The Psychological Corporation takes no responsibility for the meaningfulness of scores.

ted in U.S.A. Copyright 1951. All rights reserved. The Psychological Corporation, 304 East 45th Street, New York 17, N. Y. 64-128TB

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

1. Most children are obedient.

2. Pupils who "act smart" probably have too high an opinion of themselves.

3. Minor disciplinary situations should sometimes be turned into jokes.

4. Shyness is preferable to boldness.

5. Teaching never gets monotonous.

6. Most pupils don't appreciate what a teacher does for them.

7. If the teacher laughs with the pupils in amusing classroom situations, the class tends to get out of control.

. A child's companionships can be too carefully supervised.

A child should be encouraged to keep his likes and dislikes to himself.

It sometimes does a child good to be criticized in the presence of other pupils.

Unquestioning obedience in a child is not desirable.

upils should be required to do more studying home.

e first lesson a child needs to learn is to y the teacher without hesitation.

ng people are difficult to understand these .

e is too great an emphasis upon "keeping " in the classroom.

16. A pupil's failure is seldom the fault of the teacher.

17. There are times when a teacher cannot be blamed for losing patience with a pupil.

18. A teacher should never discuss sex problems with the pupils.

19. Pupils have it too easy in the modern school.

20. A teacher should not be expected to burden himself with a pupil's problems.

21. Pupils expect too much help from the teacher in getting their lessons.

22. A teacher should not be expected to sacrifice an evening of recreation in order to visit a child's home.

23. Most pupils do not make an adequate effort to prepare their lessons.

24. Too many children nowadays are allowed to have their own way.

25. Children's wants are just as important as those of an adult.

26. The teacher is usually to blame when pupils fail to follow directions.

27. A child should be taught to obey an adult without question.

28. The boastful child is usually over-confident of his ability.

29. Children have a natural tendency to be unruly.

30. A teacher cannot place much faith in the statements of pupils.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree.

31. Some children ask too many questions.

32. A pupil should not be required to stand when reciting.

33. The teacher should not be expected to manage a child if the latter's parents are unable to do so.

34. A teacher should never acknowledge his ignorance of a topic in the presence of his pupils.

35. Discipline in the modern school is not as strict as it should be.

36. Most pupils lack productive imagination.

37. Standards of work should vary with the pupil.

38. The majority of children take their responsibilities seriously.

39. To maintain good discipline in the classroom a teacher needs to be "hard-boiled."

40. Success is more motivating than failure.

41. Imaginative tales demand the same punishment as lying.

42. Every pupil in the sixth grade should have sixth grade reading ability.

43. A good motivating device is the critical comparison of a pupil's work with that of other pupils.

44. It is better for a child to be bashful than to be "boy or girl crazy."

45. Course grades should never be lowered as punishment.

46. More "old-fashioned whippings" are needed today.

47. The child must learn that "teacher knows best."

48. Increased freedom in the classroom creates confusion.

49. A teacher should not be expected to be sympathetic toward truants.

50. Teachers should exercise more authority over their pupils than they do.

51. Discipline problems are the teacher's greatest worry.

52. The low achiever probably is not working hard enough and applying himself.

53. There is too much emphasis on grading.

54. Most children lack common courtesy toward adults.

55. Aggressive children are the greatest problems.

56. At times it is necessary that the whole class suffer when the teacher is unable to identify the culprit.

57. Many teachers are not severe enough in their dealings with pupils.

58. Children "should be seen and not heard."

59. A teacher should always have at least a few failures.

60. It is easier to correct discipline problems than it is to prevent them.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree
U—Undecided or uncertain
D—Disagree
SD—Strongly disagree

61. Children are usually too sociable in the classroom.

62. Most pupils are resourceful when left on their own.

63. Too much nonsense goes on in many classrooms these days.

64. The school is often to blame in cases of truancy.

65. Children are too carefree.

66. Pupils who fail to prepare their lessons daily should be kept after school to make this preparation.

67. Pupils who are foreigners usually make the teacher's task more unpleasant.

68. Most children would like to use good English.

69. Assigning additional school work is often an effective means of punishment.

70. Dishonesty as found in cheating is probably one of the most serious of moral offenses.

71. Children should be allowed more freedom in their execution of learning activities.

72. Pupils must learn to respect teachers if for no other reason than that they are teachers.

73. Children need not always understand the reasons for social conduct.

74. Pupils usually are not qualified to select their own topics for themes and reports.

75. No child should rebel against authority.

76. There is too much leniency today in the handling of children.

77. Difficult disciplinary problems are seldom the fault of the teacher.

78. The whims and impulsive desires of children are usually worthy of attention.

79. Children usually have a hard time following instructions.

80. Children nowadays are allowed too much freedom in school.

81. All children should start to read by the age of seven.

82. Universal promotion of pupils lowers achievement standards.

83. Children are unable to reason adequately.

84. A teacher should not tolerate use of slang expressions by his pupils.

85. The child who misbehaves should be made to feel guilty and ashamed of himself.

86. If a child wants to speak or to leave his seat during the class period, he should always get permission from the teacher.

87. Pupils should not respect teachers anymore than any other adults.

88. Throwing of chalk and erasers should always demand severe punishment.

89. Teachers who are liked best probably have a better understanding of their pupils.

90. Most pupils try to make things easier for the teacher.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

91. Most teachers do not give sufficient explanation in their teaching.

92. There are too many activities lacking in academic respectability that are being introduced into the curriculum of the modern school.

93. Children should be given more freedom in the classroom than they usually get.

94. Most pupils are unnecessarily thoughtless relative to the teacher's wishes.

95. Children should not expect talking privileges when adults wish to speak.

96. Pupils are usually slow to "catch on" to new material.

97. Teachers are responsible for knowing the home conditions of every one of their pupils.

98. Pupils can be very boring at times.

99. Children have no business asking questions about sex.

100. Children must be told exactly what to do and how to do it.

101. Most pupils are considerate of their teachers.

102. Whispering should not be tolerated.

103. Shy pupils especially should be required to stand when reciting.

104. Teachers should consider problems of conduct more seriously than they do.

105. A teacher should never leave the class to its own management.

106. A teacher should not be expected to do more work than he is paid for.

107. There is nothing that can be more irritating than some pupils.

108. "Lack of application" is probably one of the most frequent causes for failure.

109. Young people nowadays are too frivolous.

110. As a rule teachers are too lenient with their pupils.

111. Slow pupils certainly try one's patience.

112. Grading is of value because of the competition element.

113. Pupils like to annoy the teacher.

114. Children usually will not think for themselves.

115. Classroom rules and regulations must be considered inviolable.

116. Most pupils have too easy a time of it and do not learn to do real work.

117. Children are so likeable that their shortcomings can usually be overlooked.

118. A pupil found writing obscene notes should be severely punished.

119. A teacher seldom finds children really enjoyable.

120. There is usually one best way to do school work which all pupils should follow.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

121. It isn't practicable to base school work upon children's interests.

122. It is difficult to understand why some children want to come to school so early in the morning before opening time.

123. Children that cannot meet the school standards should be dropped.

124. Children are usually too inquisitive.

125. It is sometimes necessary to break promises made to children.

126. Children today are given too much freedom.

127. One should be able to get along with almost any child.

128. Children are not mature enough to make their own decisions.

129. A child who bites his nails needs to be shamed.

130. Children will think for themselves if permitted.

131. There is no excuse for the extreme sensitivity of some children.

132. Children just cannot be trusted.

133. Children should be given reasons for the restrictions placed upon them.

134. Most pupils are not interested in learning.

135. It is usually the uninteresting and difficult subjects that will do the pupil the most good.

136. A pupil should always be fully aware of what is expected of him.

137. There is too much intermingling of the sexes in extra-curricular activities.

138. The child who stutters should be given the opportunity to recite oftener.

139. The teacher should disregard the complaints of the child who constantly talks about imaginary illnesses.

140. Teachers probably over-emphasize the seriousness of such pupil behavior as the writing of obscene notes.

141. Teachers should not expect pupils to like them.

142. Children act more civilized than do many adults.

143. Aggressive children require the most attention.

144. Teachers can be in the wrong as well as pupils.

145. Young people today are just as good as those of the past generation.

146. Keeping discipline is not the problem that many teachers claim it to be.

147. A pupil has the right to disagree openly with his teachers.

148. Most pupil misbehavior is done to annoy the teacher.

149. One should not expect pupils to enjoy school.

150. In pupil appraisal effort should not be distinguished from scholarship.


THE PSYCHOLOGICAL CORPORATION
INCORPORATED IN 1921

	M	L
a good mixer socially		
lacking in self-confidence		
thorough in any work undertaken		
tends to be somewhat emotional		
	M	L
not interested in being with other people		
free from anxieties or tensions		
quite an unreliable person		
takes the lead in group discussion		
	M	L
acts somewhat jumpy and nervous		
a strong influence on others		
does not like social gatherings		
a very persistent and steady worker		
	M	L
finds it easy to make new acquaintances		
cannot stick to the same task for long		
easily managed by other people		
maintains self-control even when frustrated		
	M	L
able to make important decisions without help		
does not mix easily with new people		
inclined to be tense or high-strung		
sees a job through despite difficulties		
	M	L
not too interested in mixing socially with people		
doesn't take responsibilities seriously		
steady and composed at all times		
takes the lead in group activities		
	M	L
a person who can be relied upon		
easily upset when things go wrong		
not too sure of own opinions		
prefers to be around other people		
	M	L
finds it easy to influence other people		
gets the job done in the face of any obstacle		
limits social relations to a select few		
tends to be a rather nervous person		
	M	L
doesn't make friends very readily		
takes an active part in group affairs		
keeps at routine duties until completed		
not too well-balanced emotionally		

Turn the page and go on

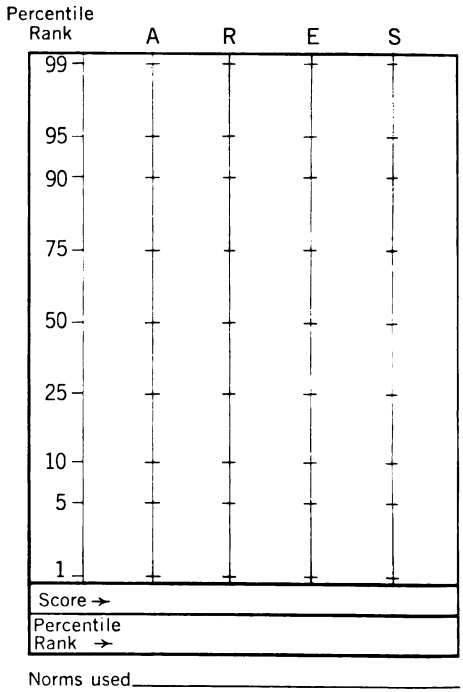
E	S

Mark your answers in column **B** ⟶

	B		A	
	M	L	M	L
assured in relationships with others				
feelings are rather easily hurt				
follows well-developed work habits				
would rather keep to a small group of friends				
	M	L	M	L
becomes irritated somewhat readily				
capable of handling any situation				
does not like to converse with strangers				
thorough in any work performed				
	M	L	M	L
prefers not to argue with other people				
unable to keep to a fixed schedule				
a calm and unexcitable person				
inclined to be highly sociable				
	M	L	M	L
free from worry or care				
lacks a sense of responsibility				
not interested in mixing with the opposite sex				
skillful in handling other people				
	M	L	M	L
finds it easy to be friendly with others				
prefers to let others take the lead in group activity				
seems to have a worrying nature				
sticks to a job despite any difficulty				
	M	L	M	L
able to sway other people's opinions				
lacks interest in joining group activities				
quite a nervous person				
very persistent in any task undertaken				
	M	L	M	L
calm and easygoing in manner				
cannot stick to the task at hand				
enjoys having lots of people around				
not too confident of own abilities				
	M	L	M	L
can be relied upon entirely				
doesn't care for the company of most people				
finds it rather difficult to relax				
takes an active part in group discussion				
	M	L	M	L
doesn't give up easily on a problem				
inclined to be somewhat nervous in manner				
lacking in self-assurance				
prefers to pass the time in the company of others				

A	R	E	S

By Leonard V. Gordon



Norms used _____

Name _____ Age _____ Sex _____

Date _____ Marital Status _____

School *or* Firm _____

Grade *or* Occupation _____

City _____ State _____

Directions:

In this booklet are a number of descriptions of personal characteristics of people. These descriptions are grouped in sets of four. You are to examine each set and find the one description that is *most like you.* Then make a solid black mark between the pair of dotted lines following that statement, in the column headed M (*Most*).

Next examine the other three statements in the set and find the one description that is *least like you;* then make a solid black mark between the pair of dotted lines following that statement, in the column headed L (*Least*). Do *not* make any marks following the two remaining statements.

		M	L
Here is a sample set:	has an excellent appetite	⋮	⋮
	gets sick very often	⋮	▮
	follows a well-balanced diet	⋮	⋮
	doesn't get enough exercise	▮	⋮

Suppose that you have read the four descriptive statements in the sample and have decided that, although several of the statements may apply to you to some degree, "doesn't get enough exercise" is *more like you* than any of the others. You would fill in the space following that statement in the column headed M (*Most*), as shown in the sample.

You would then examine the other three statements to decide which one is *least like you.* Suppose that "gets sick very often" is *less like you* than the other two. You would fill in the space following that statement in the column headed L (*Least*), as shown in the sample above.

For every set you should have *one* and *only one* mark in the M (*Most*) column, and *one* and *only one* mark in the L (*Least*) column. There should be *no* marks following two of the statements.

In some cases it may be difficult to decide which statements you should mark. Make the best decisions you can. Remember, this is not a test; there are no right or wrong answers. You are to mark certain statements in the way in which they most nearly *apply to you.* Be sure to mark *one* statement as being *most like you* and *one* as being *least like you,* leaving two statements unmarked. Do this for every set. Turn the booklet over and begin.

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MODIFIED MTAI

Please read the statement and circle the letter that best expresses your feeling of that statement.

SA--Strongly Agree A--Agree U--Undecided D--Disagree
SD--Strongly Disagree

1. A teacher should never acknowledge his ignorance of a topic in the presence of his pupils. SA A U D SD

2. There is too much leniency today in the handling of children.
SA A U D SD

3. The child who misbehaves should be made to feel guilty and ashamed of himself. SA A U D SD

4. A student should never acknowledge his ignorance of a topic in the presence of his teachers or peers. SA A U D SD

5. There is too much leniency today in the teacher's handling of students.
SA A U D SD

6. There is too much intermingling of the sexes in extra-curricular activities.
SA A U D SD

7. A pupil found writing obscene notes should be severely punished.
SA A U D SD

8. Children should be given more freedom in the classroom than they usually get. SA A U D SD

9. Most pupils are resourceful when left on their own by the teacher.
SA A U D SD

10. Throwing of chalk and erasers should always demand severe punishment.
SA A U D SD

11. The child must learn that "teacher knows best." SA A U D SD

12. The majority of children take their responsibilities seriously.
SA A U D SD

13. Young people today are just as good as those of the past generation.
SA A U D SD

14. Keeping discipline is not the problem that many teachers claim it to be.
SA A U D SD

15. Minor disciplinary situations should sometimes be turned into jokes.
SA A U D SD

16. A teacher seldom finds children really enjoyable. SA A U D SD

17. Young people are difficult to understand these days. SA A U D SD

18. Children have no business asking questions about sex. SA A U D SD

19. Teachers should exercise more authority over their pupils than they do.
SA A U D SD

20. The majority of teachers take their responsibilities seriously.
SA A U D SD

21. Young people nowadays are too frivolous. SA A U D SD

22. It is difficult to understand why some children want to come to school so early in the morning before opening time. SA A U D SD

23. Pupils usually are not qualified to select their own topics for themes and reports. SA A U D SD

24. Most pupils are resourceful when left on their own. SA A U D SD

Please read the statement and circle the letter that best expresses your feeling of that statement.

SA--Strongly Agree A--Agree U--Undecided D--Disagree
SD--Strongly Disagree

He is enthusiastic, seems to enjoy teaching.
SA A U D SD

His explanations are clear and to the point.
SA A U D SD

His examples are clear and illustrate the point.
SA A U D SD

He has great ability to make one think for himself.
SA A U D SD

He appears to be concerned about pupil's welfare and development.
SA A U D SD

He encourages and values reasonable disagreement.
SA A U D SD

He is adequately groomed and pleasing in appearance.
SA A U D SD

He has a positive disposition (attitude).
SA A U D SD

He respects others as individuals with feelings, thoughts, and behaviors of their own.
SA A U D SD

He is generally respected and liked by others.
SA A U D SD

Please read the statement and circle the letter that best expresses your feeling of that statement.

SA--Strongly Agree A--Agree U--Undecided D--Disagree
SD--Strongly Disagree

He is enthusiastic, seems to enjoy learning.
SA A U D SD

His work is well organized and clearly stated.
SA A U D SD

His statements made in class are relevant to the discussion.
SA A U D SD

He has great ability to think for himself.
SA A U D SD

He appears to be concerned about his fellow students.
SA A U D SD

He can tolerate reasonable disagreement.
SA A U D SD

He is adequately groomed and pleasing in appearance.
SA A U D SD

He has a positive disposition (attitude).
SA A U D SD

He respects others as individuals with feelings, thoughts and behaviors of their own.
SA A U D SD

He is generally respected and liked by others.
SA A U D SD

APPENDIX B

CLASS RANKINGS

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class AA

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
77	5.50	67	2.00	67	6.00	33	13.00
78	3.50	50	6.00	99	1.00	50	8.50
44	11.00	50	6.00	85	3.50	25	15.00
36	12.00	25	8.50	97	2.00	50	8.50
51	9.00	58	4.00	74	5.00	58	5.50
72	7.00	17	11.00	5	15.00	33	13.00
56	8.00	0	16.00	0	16.00	50	8.50
83	2.00	17	11.00	85	3.50	33	13.00
49	10.00	8	14.00	65	7.00	67	4.00
78	3.50	8	14.00	53	9.50	83	2.00
77	5.50	17	11.00	57	8.00	58	5.50
96	1.00	67	2.00	45	12.00	92	1.00
20	15.00	25	8.50	20	13.00	43	11.00
25	14.00	67	2.00	50	11.00	75	3.00
30	13.00	8	14.00	8	14.00	50	8.50
15	16.00	50	6.00	53	9.50	17	16.00

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class AA

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
60	8.00	67	11.00	88	3.00	93	3.50
63	6.00	100	2.00	64	5.50	67	12.00
91	1.50	83	8.00	39	8.00	58	15.00
91	1.50	92	5.50	26	13.50	75	10.00
8	16.00	50	14.50	64	5.50	67	12.00
14	15.00	58	12.50	33	11.00	58	15.00
20	13.50	92	5.50	31	12.00	58	15.00
87	3.00	83	8.00	71	4.00	93	3.50
20	13.50	58	12.50	61	7.00	100	1.50
34	11.00	100	2.00	99	2.00	100	1.50
81	4.00	100	2.00	36	9.50	83	7.00
55	9.00	50	14.50	100	1.00	83	7.00
62	7.00	93	4.00	5	16.00	83	7.00
75	5.00	43	16.00	36	9.50	67	12.00
25	12.00	75	10.00	26	13.50	83	7.00
41	10.00	83	8.00	8	15.00	83	7.00

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class BB

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
98	1.00	17	6.50	17	10.00	75	1.00
77	3.50	33	3.50	57	4.50	50	4.00
9	11.00	42	1.00	24	9.00	42	6.50
71	5.00	33	3.50	57	4.50	33	9.00
12	9.50	0	11.50	85	2.00	17	12.00
51	6.00	8	9.00	31	8.00	50	4.00
36	7.00	8	9.00	2	12.00	50	4.00
77	3.50	17	6.50	88	1.00	58	2.00
2	12.00	8	9.00	4	11.00	25	11.00
92	2.00	0	11.50	79	3.00	33	9.00
12	9.50	33	3.50	38	7.00	42	6.50
16	8.00	33	3.50	42	6.00	33	9.00
Emotional Stability				**Sociability**			
33	8.00	92	3.00	98	1.50	75	4.50
86	1.00	58	10.00	22	9.00	50	11.00
14	9.00	83	4.50	28	8.00	83	1.50
75	3.50	75	7.00	98	1.50	67	7.50
76	2.00	75	7.00	19	10.00	67	7.50
3	11.00	75	7.00	82	3.00	50	11.00
5	10.00	100	1.50	31	7.00	75	4.50
69	5.50	83	4.50	80	4.00	58	9.00
0	12.00	58	10.00	15	11.00	75	4.50
75	3.50	100	1.50	55	5.00	50	11.00
41	7.00	58	10.00	3	12.00	75	4.50
69	5.50	42	12.00	42	6.00	83	1.50

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class CC

Ascendency			
Gordon	Rank	MTAI	Rank
71	5.50	8	9.50
58	8.00	50	4.00
92	3.00	17	7.50
44	9.50	0	12.00
44	9.50	0	12.00
88	4.00	67	1.50
99	1.00	0	12.00
31	11.00	25	5.50
30	12.00	25	5.50
71	5.50	67	1.50
94	2.00	17	7.50
16	13.00	58	3.00
64	7.00	8	9.50

Responsibility			
Gordon	Rank	MTAI	Rank
94	1.00	75	2.50
38	10.00	42	12.00
57	7.00	67	5.50
19	12.50	67	5.50
45	9.00	58	8.00
65	4.50	50	9.50
88	2.00	50	9.50
19	12.50	42	12.00
79	3.00	83	1.00
65	4.50	75	2.50
60	6.00	42	12.00
27	11.00	67	5.50
50	8.00	67	5.50

Emotional Stability			
85	1.00	67	12.00
11	12.00	83	8.00
62	5.00	83	8.00
28	8.50	92	4.50
63	4.00	92	4.50
75	2.00	58	13.00
69	3.00	100	2.00
8	13.00	83	8.00
55	6.00	75	11.00
25	10.50	83	8.00
28	8.50	100	2.00
25	10.50	100	2.00
30	7.00	83	8.00

Sociability			
35	12.00	93	1.00
87	3.00	75	7.00
94	1.50	67	10.00
39	10.00	58	11.50
64	7.00	50	13.00
85	4.00	75	7.00
36	11.00	83	4.00
51	9.00	75	7.00
74	5.00	92	2.50
55	8.00	75	7.00
94	1.50	75	7.00
15	13.00	58	11.50
68	6.00	92	2.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class DD

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
71	4.50	0	17.50	26	10.00	67	10.50
42	9.50	25	10.50	57	4.00	33	16.50
20	15.00	50	6.00	5	15.50	83	2.50
51	6.50	67	2.00	14	13.50	58	14.50
20	15.00	0	17.50	53	5.00	66	13.00
3	17.50	8	15.50	19	12.00	33	16.50
83	2.00	41	9.00	45	7.00	58	14.50
42	9.50	58	3.50	92	1.00	83	2.50
25	12.50	50	6.00	72	3.00	83	2.50
30	11.00	25	10.50	3	17.00	75	6.50
44	8.00	58	3.50	5	15.50	67	10.50
20	15.00	8	15.50	88	2.00	67	10.50
88	1.00	17	12.50	50	6.00	75	6.50
71	4.50	75	1.00	27	9.00	75	6.50
51	6.50	50	6.00	14	13.50	75	6.50
25	12.50	16	14.00	34	8.00	83	2.50
77	3.00	17	12.50	21	11.00	25	18.00
3	17.50	42	8.00	1	18.00	67	10.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class DD

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
85	6.00	100	1.50	66	1.00	83	1.50
96	5.00	25	18.00	22	9.50	42	17.00
14	14.00	83	5.50	2	18.00	75	4.50
6	15.50	67	10.50	39	7.00	58	12.50
48	7.00	58	12.50	64	2.00	75	4.50
0	17.50	33	16.50	15	15.00	83	1.50
23	12.00	100	1.50	45	6.00	50	15.50
94	4.50	83	5.50	18	13.00	58	12.50
94	4.50	42	14.50	22	9.50	67	8.50
36	9.00	83	5.50	18	13.00	67	8.50
0	17.50	58	12.50	23	8.00	67	8.50
42	8.00	75	8.50	18	13.00	67	8.50
96	5.00	67	10.50	55	4.00	58	12.50
30	10.00	42	14.50	48	5.00	33	18.00
28	11.00	33	16.50	19	11.00	50	15.50
96	5.00	75	8.50	10	16.00	58	12.50
16	13.00	92	3.00	61	3.00	75	4.50
6	15.50	83	5.50	3	17.00	75	4.50

RANKING of the

FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class EE

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
98	1.00	0	18.00	53	10.00	50	14.00
19	15.00	8	14.00	47	12.00	75	4.50
96	2.00	17	9.50	39	14.00	42	17.00
9	16.50	8	14.00	0	18.00	67	7.50
9	16.50	8	14.00	5	16.00	33	18.00
71	8.00	50	5.00	3	17.00	83	2.00
5	18.00	8	14.00	81	2.00	75	4.50
16	14.00	17	9.50	53	10.00	67	7.50
87	4.50	8	14.00	67	6.00	67	7.50
43	10.50	83	2.50	53	10.00	50	14.00
31	13.00	8	14.00	10	15.00	50	14.00
83	6.00	92	1.00	46	13.00	83	2.00
43	10.50	83	2.50	73	4.00	50	14.00
87	4.50	33	6.00	79	3.00	67	7.50
91	3.00	8	14.00	60	7.00	58	10.50
77	7.00	25	7.50	69	5.00	58	10.50
44	9.00	25	7.50	55	8.00	83	2.00
36	12.00	67	4.00	85	1.00	50	14.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class EE

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
45	10.00	100	1.50	78	3.00	83	6.00
91	2.00	92	5.00	39	11.50	92	1.50
24	15.00	83	11.00	95	1.00	83	6.00
6	18.00	92	5.00	22	15.00	83	6.00
10	16.00	50	18.00	3	18.00	67	12.50
8	17.00	92	5.00	91	2.00	83	6.00
52	8.00	83	11.00	7	17.00	92	1.50
39	12.50	83	11.00	22	15.00	50	17.00
67	6.00	83	11.00	72	4.00	67	12.50
45	10.00	83	11.00	30	13.00	67	12.50
28	14.00	75	15.00	47	9.50	83	6.00
39	12.50	83	11.00	47	9.50	67	12.50
80	4.50	67	16.00	53	7.50	33	18.00
53	7.00	83	11.00	66	5.00	83	6.00
80	4.50	100	1.50	53	7.50	75	10.00
87	3.00	92	5.00	57	6.00	58	15.50
94	1.00	92	5.00	39	11.50	83	6.00
45	10.00	58	17.00	22	15.00	58	15.50

RANKING

OF THE 4 FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class FF

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
91	3.00	0	25.00	60	12.50	40	24.00
5	23.50	33	14.50	33	22.50	33	25.50
43	15.00	25	18.50	98	1.50	42	22.00
12	20.00	25	18.50	55	15.00	83	2.50
71	7.50	25	18.50	94	5.50	100	1.00
6	22.00	50	6.00	33	22.50	50	17.50
57	10.50	50	6.00	79	9.00	50	17.50
2	25.00	42	11.00	4	26.00	50	17.50
71	7.50	25	18.50	47	19.00	50	17.50
82	4.00	42	11.00	46	20.00	58	12.00
77	5.50	42	11.00	55	15.00	67	6.50
22	17.00	58	2.50	53	17.50	58	12.00
52	12.00	67	1.00	98	1.50	50	17.50
99	1.00	33	14.50	21	25.00	67	6.50
44	13.50	50	6.00	94	5.50	83	2.50
57	10.50	58	2.50	53	17.50	67	6.50
19	18.00	17	22.50	27	24.00	67	6.50
31	16.00	25	18.50	73	10.00	42	22.00
7	21.00	42	11.00	55	15.00	58	12.00
65	9.00	25	18.50	40	21.00	67	6.50
14	19.00	42	11.00	96	3.50	58	12.00
44	13.50	50	6.00	91	7.00	33	25.50
0	26.00	17	22.50	60	12.50	50	17.50
77	5.50	50	6.00	96	3.50	58	12.00
5	23.50	0	25.00	85	8.00	67	6.50
92	2.00	0	25.00	69	11.00	42	22.00

RANKING
OF THE 4 FACTORS

RANKING

OF THE 4 FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class FF

Emotional Stability			
Gordon	Rank	MTAI	Rank
60	19.00	100	4.50
72	14.00	67	19.00
80	10.00	75	15.00
91	3.50	92	9.50
80	10.00	100	4.50
13	24.00	83	12.50
60	19.00	42	25.00
3	26.00	83	12.50
94	1.00	83	12.50
67	16.00	58	23.00
72	14.00	67	19.00
92	2.00	33	26.00
78	12.00	67	19.00
28	21.00	100	4.50
91	3.50	50	24.00
60	19.00	67	19.00
83	7.00	83	12.50
85	5.00	92	9.50
83	7.00	67	19.00
19	23.00	100	4.50
12	25.00	100	4.50
66	17.00	67	19.00
20	22.00	100	4.50
83	7.00	67	19.00
80	10.00	100	4.50
72	14.00	100	4.50

Sociability			
Gordon	Rank	MTAI	Rank
83	4.00	83	6.00
20	19.00	50	24.00
66	6.50	67	14.50
11	21.00	75	9.00
53	10.00	67	14.50
7	24.00	67	14.50
66	6.50	67	14.50
26	17.00	100	2.00
81	5.00	50	24.00
41	13.50	67	14.50
93	1.00	67	14.50
3	25.00	50	24.00
64	8.00	83	6.00
88	2.50	83	6.00
51	11.00	67	14.50
88	2.50	50	24.00
9	22.50	58	20.50
47	12.00	67	14.50
9	22.50	50	24.00
57	9.00	67	14.50
30	16.00	100	2.00
14	20.00	83	6.00
2	26.00	58	20.50
39	15.00	83	6.00
41	13.50	100	2.00
24	18.00	67	14.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class GG

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
26	14.00	33	7.50	53	11.00	50	9.50
91	4.00	50	2.50	8	16.00	50	9.50
94	3.00	33	7.50	45	12.00	50	9.50
49	9.00	33	7.50	88	3.00	83	2.50
13	16.00	83	1.00	57	10.00	50	9.50
25	15.00	33	7.50	60	8.50	58	5.50
30	13.00	17	13.50	72	6.50	67	4.00
58	6.00	42	4.50	14	14.00	42	13.50
51	8.00	17	13.50	19	13.00	50	9.50
55	7.00	17	13.50	98	2.00	42	13.50
99	1.00	17	13.50	79	5.00	50	9.50
44	10.50	25	10.00	100	1.00	83	2.50
95	2.00	17	13.50	72	6.50	58	5.50
83	5.00	17	13.50	60	8.50	33	15.00
44	10.50	42	4.50	11	15.00	25	16.00
37	12.00	50	2.50	85	4.00	100	1.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class GG

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
39	11.00	83	4.50	30	13.00	75	4.50
34	12.00	100	1.00	51	8.50	50	13.00
63	5.00	83	4.50	51	8.50	75	4.50
75	3.50	67	11.50	36	12.00	67	8.00
62	6.50	42	15.50	8	16.00	17	16.00
55	9.00	67	11.50	10	15.00	75	4.50
62	6.50	75	8.00	18	14.00	67	8.00
23	14.00	67	11.50	71	4.00	75	4.50
18	15.00	75	8.00	51	8.50	67	8.00
75	3.50	75	8.00	68	5.00	83	10.00
55	9.00	83	4.50	90	10.00	58	11.00
98	1.00	83	4.50	45	11.00	33	15.00
30	13.00	42	15.50	90	10.00	58	11.00
55	9.00	92	2.00	77	3.00	58	11.00
4	16.00	67	11.50	57	6.00	42	14.00
87	2.00	50	14.00	51	8.50	83	10.00

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class HH

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
14	9.00	33	5.00	5	11.00	58	9.00
20	5.00	25	6.50	12	10.00	67	5.50
6	10.50	58	2.00	0	12.00	67	5.50
15	7.00	42	3.50	14	8.50	67	5.50
15	7.00	83	1.00	19	7.00	50	11.50
58	3.00	25	6.50	89	1.00	58	9.00
78	1.00	0	11.50	53	4.00	50	11.50
6	10.50	17	8.50	50	5.00	75	2.00
2	12.00	42	3.50	14	8.50	75	2.00
30	4.00	8	10.00	84	3.00	75	2.00
71	2.00	17	8.50	42	6.00	58	9.00
15	7.00	0	11.50	85	2.00	67	5.50

Emotional Stability				Sociability			
6	11.00	83	4.00	10	8.00	50	11.00
69	4.50	67	9.00	8	9.50	83	3.00
1	12.00	58	11.00	8	9.50	83	3.00
14	9.00	67	9.00	23	7.00	42	12.00
63	6.00	100	1.00	28	6.00	83	3.00
34	8.00	83	4.00	33	4.50	58	9.50
87	1.00	83	4.00	33	4.50	75	6.50
36	7.00	67	9.00	5	12.00	67	8.00
11	10.00	50	12.00	39	3.00	58	9.50
69	4.50	75	6.50	7	11.00	83	3.00
81	2.00	92	2.00	55	2.00	75	6.50
70	3.00	75	6.50	82	1.00	83	3.00

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class JJ

Ascendency			
Gordon	Rank	MTAI	Rank
18	9.00	50	1.50
97	1.50	33	5.50
58	6.00	0	10.00
10	10.00	42	3.50
96	3.00	33	5.50
88	4.50	50	1.50
97	1.50	17	8.00
31	8.00	42	3.50
88	4.50	17	8.00
42	7.00	17	8.00

Responsibility			
Gordon	Rank	MTAI	Rank
99	1.50	67	3.00
6	10.00	50	7.00
99	1.50	50	7.00
50	7.00	50	7.00
45	8.00	92	1.00
21	9.00	58	4.00
84	4.00	75	2.00
80	5.00	50	7.00
92	3.00	50	7.00
72	6.00	17	10.00

Emotional Stability			
95	1.00	75	5.50
25	10.00	67	8.00
91	2.00	100	1.00
42	7.50	58	10.00
70	3.00	67	8.00
42	7.50	67	8.00
36	9.00	83	3.50
48	6.00	75	5.50
62	5.00	92	2.00
69	4.00	83	3.50

Sociability			
22	8.50	83	3.50
74	2.00	75	7.00
51	5.00	92	1.00
10	10.00	83	3.50
64	3.00	75	7.00
31	6.50	75	7.00
85	1.00	50	9.50
57	4.00	83	3.50
22	8.50	83	3.50
31	6.50	50	9.50

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class KK

Ascendency			
Gordon	Rank	MTAI	Rank
87	3.00	17	11.00
36	5.00	25	9.50
9	10.00	33	6.50
36	5.00	83	1.00
31	7.00	67	3.00
2	12.00	0	12.50
4	11.00	33	6.50
20	8.00	25	9.50
12	9.00	75	2.00
97	1.00	33	6.50
0	13.00	0	12.50
88	2.00	58	4.00
36	5.00	33	6.50

Responsibility			
Gordon	Rank	MTAI	Rank
60	4.00	50	6.50
97	1.00	75	2.50
89	2.50	50	6.50
57	5.00	50	6.50
45	6.00	83	1.00
19	9.00	8	13.00
89	2.50	75	2.50
0	13.00	50	6.50
1	12.00	42	10.00
21	7.50	67	4.00
14	10.00	25	12.00
21	7.50	42	10.00
2	11.00	42	10.00

Emotional Stability			
20	8.00	92	2.50
75	2.00	92	2.50
28	7.00	67	8.00
55	3.00	67	8.00
76	1.00	50	12.50
6	10.00	67	8.00
41	5.00	75	4.50
0	12.00	75	4.50
0	12.00	67	8.00
42	4.00	50	12.50
0	12.00	100	1.00
36	6.00	58	11.00
16	9.00	67	8.00

Sociability			
98	1.00	100	1.50
22	9.00	83	3.50
33	6.00	67	7.00
26	8.00	42	10.50
57	4.00	58	8.50
6	12.00	75	5.50
28	7.00	42	10.50
4	13.00	58	8.50
15	11.00	75	5.50
74	2.00	100	1.50
19	10.00	83	3.50
61	3.00	33	12.00
36	5.00	17	13.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class LL

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
69	3.50	86	6.50	85	4.00	86	4.50
62	7.00	92	4.50	8	20.00	92	1.50
5	20.00	75	10.50	12	18.00	86	4.50
0	22.00	67	14.50	68	9.50	50	18.50
81	2.00	100	5.00	68	9.50	67	12.50
62	7.00	100	5.00	26	14.00	67	12.50
30	13.00	75	10.50	74	8.00	75	8.50
49	12.00	42	21.50	18	16.00	58	16.00
62	7.00	75	10.50	8	20.00	67	12.50
55	10.00	75	10.50	85	4.00	86	4.50
4	21.00	67	14.50	82	6.50	58	16.00
14	17.50	86	6.50	6	22.00	67	12.50
55	10.00	100	5.00	82	6.50	50	18.50
55	10.00	58	17.00	45	12.00	58	16.00
18	16.00	58	17.00	87	2.00	75	8.50
82	1.00	75	10.50	8	20.00	86	4.50
8	19.00	42	21.50	15	17.00	33	21.50
63	5.00	58	17.00	57	11.00	75	8.50
69	3.50	92	4.50	85	4.00	33	21.50
14	17.50	75	10.50	19	15.00	75	8.50
25	14.00	50	19.50	90	1.00	92	1.50
23	15.00	50	19.50	39	13.00	42	20.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class LL

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
95	5.00	25	11.50	88	2.00	75	3.00
56	10.00	50	5.00	42	12.50	50	13.50
36	15.00	25	11.50	21	18.50	25	20.50
56	10.00	33	8.00	8	22.00	67	6.50
92	6.50	8	19.00	84	3.50	67	6.50
92	6.50	67	2.50	84	3.50	33	19.00
30	16.00	25	11.50	50	11.00	86	1.50
56	10.00	92	1.00	57	9.50	58	10.50
4	22.00	0	21.50	42	12.50	67	6.50
98	2.50	0	21.50	72	5.00	58	10.50
37	13.50	16	16.00	24	16.50	25	20.50
9	20.00	8	19.00	19	20.50	42	17.00
97	4.00	16	16.00	60	7.00	67	6.50
25	17.50	42	6.50	99	1.00	67	6.50
44	12.00	25	11.50	60	7.00	50	13.50
20	19.00	25	11.50	31	15.00	50	13.50
25	17.50	67	2.50	19	20.50	86	1.50
72	8.00	8	19.00	24	16.50	67	6.50
99	1.00	16	16.00	21	18.50	50	13.50
6	21.00	58	4.00	60	7.00	42	17.00
98	2.50	25	11.50	57	9.50	42	17.00
37	13.50	42	6.50	38	14.00	16	22.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class MM

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
26	9.00	42	2.50	60	2.00	33	14.50
77	5.00	25	6.50	0	14.50	58	3.50
44	6.00	25	6.50	14	8.00	58	3.50
16	12.00	8	8.00	92	1.00	50	7.00
20	10.00	0	12.50	34	7.00	50	7.00
78	4.00	0	12.50	0	14.50	16	16.00
87	2.00	33	4.50	11	10.00	42	11.00
83	3.00	0	12.50	8	11.00	67	1.00
16	12.00	58	1.00	50	5.00	33	14.50
2	16.00	0	12.50	0	14.50	50	7.00
36	7.00	0	12.50	1	12.00	42	11.00
30	8.00	33	4.50	12	9.00	58	3.50
92	1.00	42	2.50	57	3.50	58	3.50
8	14.00	0	12.50	0	14.50	42	11.00
16	12.00	0	12.50	42	6.00	42	11.00
6	15.00	0	12.50	57	3.50	42	11.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class MM

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	**Gordon**	Rank	MTAI	Rank
67	3.00	83	6.00	47	7.00	58	10.00
9	13.00	75	9.50	55	3.50	92	1.50
34	7.00	75	9.50	33	9.00	50	13.00
55	4.00	75	9.50	26	10.00	67	8.50
4	15.00	92	4.00	55	3.50	92	1.50
14	12.00	67	13.00	45	8.00	67	8.50
23	9.00	50	15.00	64	2.00	86	3.00
25	8.00	100	2.00	85	1.00	83	4.00
42	5.00	42	16.00	48	5.50	50	13.00
0	16.00	83	6.00	0	15.50	50	13.00
16	11.00	83	6.00	12	12.00	33	16.00
5	14.00	67	13.00	15	11.00	75	6.00
99	1.00	67	13.00	48	5.50	75	6.00
36	6.00	100	2.00	1	14.00	50	13.00
20	10.00	75	9.50	4	13.00	75	6.00
86	2.00	100	2.00	0	15.50	50	13.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class OO

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
36	14.00	0	16.00	98	5.00	67	5.00
37	13.00	17	9.00	99	3.00	83	1.50
83	3.00	8	11.50	21	17.00	25	17.00
44	9.00	8	11.50	80	9.00	58	7.50
92	1.00	8	11.50	79	10.00	25	17.00
56	6.00	25	7.00	95	7.00	75	3.00
88	2.00	0	16.00	57	13.50	67	5.00
58	4.00	33	4.50	100	1.50	42	13.50
16	16.00	42	2.50	72	12.00	42	13.50
42	11.00	0	16.00	100	1.50	42	13.50
42	11.00	0	16.00	98	5.00	67	5.00
56	6.00	25	7.00	84	8.00	25	17.00
12	17.00	50	1.00	74	11.00	50	10.00
8	18.00	8	11.50	4	18.00	58	7.50
49	8.00	0	16.00	57	13.50	83	1.50
42	11.00	42	2.50	34	16.00	50	10.00
25	15.00	25	7.00	98	5.00	50	10.00
56	6.00	33	4.50	50	15.00	42	13.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class OO

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
89	4.00	100	1.50	35	10.00	75	5.50
55	7.50	50	15.50	45	6.50	58	13.00
16	17.00	67	11.50	61	4.00	50	15.50
34	14.00	92	3.50	87	2.00	75	5.50
25	15.50	75	9.00	68	3.00	42	17.50
86	5.00	33	18.00	31	12.00	67	9.50
55	7.50	92	3.50	98	1.00	58	13.00
48	9.50	83	6.00	45	6.50	58	13.00
42	12.00	42	17.00	26	14.00	42	17.50
81	6.00	83	6.00	42	8.00	92	1.50
98	1.00	75	9.00	31	12.00	75	5.50
91	2.50	100	1.50	10	16.50	92	1.50
48	9.50	83	6.00	23	15.00	83	3.00
12	18.00	50	15.50	10	16.50	67	9.50
42	12.00	58	13.50	8	18.00	67	9.50
42	12.00	75	9.00	31	12.00	67	9.50
91	2.50	67	11.50	36	9.00	75	5.50
25	15.50	58	13.50	48	5.00	50	15.50

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class PP

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
43	10.00	0	28.00	26	19.00	50	16.00
65	5.00	75	1.00	80	2.00	50	16.00
37	13.00	25	15.00	19	23.00	25	27.00
95	1.00	17	21.50	72	4.00	42	19.50
25	17.50	25	15.00	84	1.00	67	8.00
36	14.00	42	6.50	21	21.50	25	27.00
13	24.00	25	15.00	50	5.50	50	16.00
42	11.50	33	10.00	34	11.50	75	4.00
3	29.00	33	10.00	27	15.50	25	27.00
20	21.00	17	21.50	42	8.50	25	27.00
25	17.50	58	3.00	42	8.50	83	2.00
16	22.00	42	6.50	6	28.50	33	22.50
92	2.00	0	28.00	16	24.00	100	1.00
3	29.00	25	15.00	27	15.50	33	22.50
25	17.50	0	28.00	12	26.00	50	16.00
13	24.00	8	25.00	0	30.00	17	30.00
56	8.50	33	10.00	42	8.50	25	27.00
91	3.00	25	15.00	24	20.00	58	12.00
25	17.50	25	15.00	27	15.50	50	16.00
25	17.50	17	21.50	12	26.00	67	8.00
6	26.50	42	6.50	27	15.50	58	12.00
64	6.50	17	21.50	27	15.50	33	22.50
6	26.50	42	6.50	42	8.50	75	4.00
3	29.00	58	3.00	21	21.50	67	8.00
71	4.00	25	15.00	12	26.00	75	4.00
42	11.50	17	21.50	34	11.50	33	22.50
25	17.50	58	3.00	27	15.50	67	8.00
56	8.50	17	21.50	50	5.50	42	19.50
13	24.00	0	28.00	6	28.50	67	8.00
64	6.50	0	28.00	79	3.00	58	12.00

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class PP

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
5	27.00	100	3.00	59	9.00	50	25.00
82	3.00	100	3.00	77	3.00	75	14.50
0	29.50	50	28.50	23	17.00	42	26.50
42	12.00	83	12.50	98	1.00	75	14.50
94	1.00	75	18.50	7	27.50	83	7.50
16	20.50	100	3.00	36	12.50	67	20.50
81	4.00	67	22.50	18	21.00	83	7.50
91	2.00	50	28.50	26	15.50	58	23.50
69	6.00	100	3.00	8	25.00	92	3.50
12	22.50	67	22.50	42	11.00	75	14.50
25	18.50	58	25.50	26	15.50	33	28.50
16	20.50	50	28.50	18	21.00	25	30.00
30	17.00	92	7.00	94	2.00	100	1.50
69	6.00	67	22.50	5	30.00	75	14.50
25	18.50	83	12.50	74	5.00	83	7.50
5	27.00	92	7.00	22	18.50	75	14.50
12	22.50	83	12.50	31	14.00	33	28.50
55	9.00	67	22.50	45	10.00	75	14.50
42	12.00	75	18.50	18	21.00	83	7.50
36	15.50	92	7.00	12	23.00	92	3.50
5	27.00	100	3.00	22	18.50	42	26.50
42	12.00	83	12.50	74	5.00	100	1.50
62	8.00	83	12.50	10	24.00	83	7.50
42	12.00	50	28.50	7	27.50	83	7.50
7	25.00	75	18.50	36	12.50	67	20.50
9	24.00	83	12.50	61	7.50	58	23.50
36	15.50	83	12.50	7	27.50	75	14.50
42	12.00	58	25.50	74	5.00	75	14.50
0	29.50	83	12.50	7	27.50	67	20.50
69	6.00	75	18.50	61	7.50	67	20.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class RR

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
91	5.00	8	18.00	46	15.00	33	17.50
36	16.00	0	20.50	21	19.00	67	8.50
64	11.00	17	13.50	42	16.00	75	4.00
25	19.50	25	8.50	79	6.00	50	14.00
99	1.00	25	8.50	65	9.50	67	8.50
98	2.00	17	13.50	57	12.00	25	19.00
97	3.00	17	13.50	57	12.00	50	14.00
95	4.00	17	13.50	65	9.50	83	1.00
16	21.00	33	4.50	57	12.00	67	8.50
42	15.00	25	8.50	6	20.50	58	11.50
49	14.00	17	13.50	97	1.50	17	20.50
65	9.50	58	1.00	38	17.00	50	14.00
25	19.50	25	8.50	97	1.50	75	4.00
31	17.50	0	20.50	31	18.00	58	11.50
31	17.50	33	4.50	93	3.00	75	4.00
58	12.00	42	2.00	80	5.00	75	4.00
65	9.50	17	13.50	67	8.00	33	17.50
72	7.50	33	4.50	74	7.00	42	16.00
72	7.50	8	18.00	85	4.00	75	4.00
56	13.00	33	4.50	6	20.50	17	20.50
87	6.00	8	18.00	53	14.00	67	8.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class RR

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
67	5.00	100	2.00	66	9.00	83	6.00
30	15.50	83	8.00	68	7.00	75	9.00
30	15.50	100	2.00	85	5.00	83	6.00
91	1.00	50	20.00	55	13.00	67	14.50
49	11.50	58	17.00	98	2.00	67	14.50
55	8.00	83	8.00	94	4.00	67	14.50
55	8.00	58	17.00	68	7.00	67	14.50
25	17.00	67	14.00	98	2.00	58	20.00
49	11.50	83	8.00	68	7.00	58	20.00
2	21.00	75	12.00	26	18.00	75	9.00
55	8.00	67	14.00	18	20.00	67	14.50
48	13.50	58	17.00	39	16.00	58	20.00
76	3.00	83	8.00	45	14.50	67	14.50
11	19.00	100	2.00	23	19.00	92	1.50
14	18.00	83	8.00	57	12.00	92	1.50
76	3.00	50	20.00	64	10.50	83	6.00
48	13.50	67	14.00	15	21.00	75	9.00
55	8.00	50	20.00	64	10.50	92	1.50
55	8.00	92	4.00	98	2.00	67	14.50
7	20.00	83	8.00	36	17.00	67	14.50
76	3.00	83	8.00	45	14.50	92	1.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class VV

Ascendency				Responsibility			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
77	8.50	50	4.50	85	5.00	83	1.50
42	14.00	17	16.00	97	2.00	67	7.50
36	15.00	50	4.50	6	21.00	50	15.50
25	17.00	50	4.50	31	13.50	67	7.50
20	18.50	42	9.00	19	16.00	67	7.50
15	21.00	33	12.50	0	23.00	17	22.50
87	6.00	0	20.50	5	22.00	75	4.00
31	16.00	8	17.00	67	8.00	42	19.00
6	22.00	58	1.50	12	18.00	58	11.50
98	1.00	42	9.00	14	17.00	50	15.50
97	2.00	42	9.00	72	7.00	42	19.00
95	3.50	58	1.50	65	10.00	17	22.50
51	12.00	25	14.50	74	6.00	58	11.50
20	18.50	42	9.00	31	13.50	50	15.50
83	7.00	42	9.00	98	1.00	67	7.50
91	5.00	50	4.50	93	3.00	75	4.00
4	23.00	0	20.50	8	19.50	42	19.00
64	11.00	0	20.50	65	10.00	58	11.50
77	8.50	0	20.50	57	12.00	33	21.00
16	20.00	0	20.50	65	10.00	50	15.50
49	13.00	33	12.50	88	4.00	75	4.00
95	3.50	25	14.50	8	19.50	58	11.50
71	10.00	0	20.50	27	15.00	83	1.50

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class VV

Emotional Stability				Sociability			
Gordon	Rank	MTAI	Rank	Gordon	Rank	MTAI	Rank
45	10.00	75	9.50	78	9.00	100	1.00
69	6.00	75	9.50	55	14.00	67	16.00
9	21.00	75	9.50	36	17.00	83	6.50
34	13.00	50	21.00	8	22.00	50	20.50
11	20.00	67	15.00	51	15.50	92	2.50
0	23.00	50	21.00	10	21.00	42	22.00
28	14.00	75	9.50	96	1.00	83	6.50
76	4.00	58	18.00	64	10.50	83	6.50
16	18.50	92	3.00	26	18.00	83	6.50
63	7.00	75	9.50	91	4.00	67	16.00
25	15.00	100	1.00	94	2.50	67	16.00
96	1.00	67	15.00	85	7.00	67	16.00
23	16.00	58	18.00	94	2.50	50	20.50
41	11.00	42	23.00	51	15.50	67	16.00
82	3.00	50	21.00	57	13.00	33	23.00
70	5.00	75	9.50	64	10.50	75	11.00
2	22.00	83	5.00	12	20.00	67	16.00
62	8.00	75	9.50	85	7.00	83	6.50
55	9.00	67	15.00	85	7.00	92	2.50
20	17.00	92	3.00	7	23.00	83	6.50
91	2.00	92	3.00	22	19.00	75	11.00
16	18.50	58	18.00	90	5.00	75	11.00
36	12.00	75	9.50	61	12.00	67	16.00

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class WW

Ascendency

Gordon	Rank	MTAI	Rank
57	5.00	0	13.50
65	3.50	58	1.00
31	11.00	17	10.00
25	12.00	0	13.50
56	6.50	33	4.00
13	13.00	33	4.00
65	3.50	25	7.00
51	8.50	17	10.00
56	6.50	8	12.00
6	14.00	33	4.00
37	10.00	25	7.00
83	2.00	17	10.00
98	1.00	25	7.00
51	8.50	50	2.00

Responsibility

Gordon	Rank	MTAI	Rank
13	14.00	33	13.00
98	1.00	58	8.00
67	5.50	58	8.00
67	5.50	67	4.00
92	3.00	83	1.00
16	12.00	67	4.00
60	9.00	67	4.00
93	2.00	50	11.00
65	7.50	8	14.00
34	11.00	58	8.00
89	4.00	67	4.00
65	7.50	50	11.00
42	10.00	67	4.00
14	13.00	50	11.00

Emotional Stability

1	13.50	83	7.00
76	2.00	67	10.50
63	4.00	92	4.50
23	11.50	100	7.50
94	1.00	58	13.00
62	5.00	67	10.50
48	7.00	67	10.50
55	6.00	100	7.50
30	9.00	100	7.50
1	13.50	83	7.00
34	8.00	83	7.00
25	10.00	67	10.50
75	3.00	92	4.50
23	11.50	33	14.00

Sociability

66	4.00	83	5.50
57	5.50	83	5.50
33	11.00	75	10.00
57	5.50	83	5.50
36	10.00	92	2.00
3	14.00	100	1.00
39	9.00	75	10.00
45	8.00	83	5.50
55	7.00	75	10.00
22	12.00	67	12.00
91	1.00	58	13.00
68	3.00	83	5.50
90	2.00	83	5.50
15	13.00	50	14.00

RANKING

OF THE FOUR FACTORS

ON THE GORDON PERSONAL PROFILE TEST

and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class XX

Ascendency

Gordon	Rank	MTAI	Rank
95	1.00	0	8.00
78	3.00	67	1.00
6	8.00	17	6.00
36	5.50	42	4.00
1	9.00	58	2.00
36	5.50	33	5.00
16	7.00	0	8.00
64	4.00	50	3.00
87	2.00	0	8.00

Responsibility

Gordon	Rank	MTAI	Rank
69	3.00	67	3.00
80	2.00	33	8.50
42	5.00	50	6.50
95	1.00	33	8.50
0	8.50	67	3.00
0	8.50	67	3.00
16	6.00	50	6.50
50	4.00	83	1.00
11	7.00	58	5.00

Emotional Stability

23	5.00	100	5.00
63	2.00	42	8.50
9	7.00	100	5.00
94	1.00	58	7.00
0	9.00	42	8.50
3	8.00	100	5.00
16	6.00	100	5.00
49	3.00	83	6.00
48	4.00	92	5.00

Sociability

76	3.00	83	1.00
51	5.00	42	8.50
3	8.50	75	2.50
26	7.00	50	7.00
3	8.50	42	8.50
80	2.00	67	5.00
42	6.00	67	5.00
85	1.00	67	5.00
64	4.00	75	2.50

RANKING
OF THE FOUR FACTORS
ON THE GORDON PERSONAL PROFILE TEST
and the MODIFIED MINNESOTA TEACHERS ATTITUDE INVENTORY TEST

Class ZZ

Ascendency

Gordon	Rank	MTAI	Rank
82	3.00	25	7.50
30	12.00	17	10.00
71	6.00	33	4.00
71	6.00	8	11.50
36	10.50	42	2.00
77	4.00	25	7.50
64	9.00	0	13.50
71	6.00	0	13.50
88	1.50	50	1.50
36	10.50	33	4.00
65	8.00	8	11.50
88	1.50	33	1.50
2	14.00	25	7.50
4	13.00	25	7.50

Responsibility

Gordon	Rank	MTAI	Rank
94	2.00	33	13.00
34	9.00	42	10.50
65	8.00	58	7.50
27	10.00	75	4.00
88	4.50	33	13.00
72	7.00	50	9.00
79	6.00	75	4.00
92	3.00	75	4.00
16	11.00	42	10.50
97	1.00	58	7.50
1	14.00	75	4.00
88	4.50	33	13.00
6	12.00	67	5.50
3	13.00	67	5.50

Emotional Stability

24	8.00	92	4.50
20	9.00	83	7.00
5	11.00	67	10.50
9	10.00	100	1.50
69	4.00	58	12.50
98	1.00	42	14.00
62	5.50	75	9.00
75	3.00	58	12.50
4	12.00	83	7.00
62	5.50	100	1.50
34	7.00	67	10.50
86	2.00	83	7.00
2	13.00	93	3.00
1	14.00	92	4.50

Sociability

83	3.00	92	3.00
80	4.50	50	11.00
74	6.50	83	5.50
85	1.50	33	13.00
42	12.00	67	9.00
68	9.00	100	1.00
74	6.50	92	3.00
61	10.50	83	5.50
85	1.50	92	3.00
80	4.50	42	12.00
71	8.00	75	7.50
61	10.50	25	14.00
12	13.50	58	10.00
12	13.50	75	7.50

APPENDIX C

MEAN STANDARD DEVIATIONS AND CORRELATION COEFFICIENTS OF THE FOUR FACTORS OF THE GORDON PERSONAL PROFILE AND RATING FORMS

CLASS AA

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	-23.0667	-13.8000	- 8.86667	-41.4000	4.86667
SD	24.6562	31.6274	28.81870	28.0305	8.74579

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT TEACHERS

Factors for Class AA

Ascendency	1.00000	.060227	.0140859	.7844790	.403248
Responsibility		1.000000	.5614870	.3320960	.663035
Emotional Stability			1.0000000	-.0853511	.303741
Sociability				1.0000000	.304305
Rating					1.000000

CLASS AA

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	0	32	3	-24	11.8
2	-33	18	31	-49	-13.2
3	-41	30	31	-62	6.8
4	-26	7	-52	-24	4.8
5	- 5	-62	-46	-55	-13.2
6	-21	-67	-40	-57	-10.2
7	6	18	27	-17	- .2
8	-28	- 2	-40	-27	- 7.2
9	1	-12	-26	11	- 4.2
10	0	-10	21	-52	4.8
11	19	-22	- 5	12	- 4.2
12	-57	-47	2	-83	- 4.2
13	-52	-17	15	-52	-14.2
14	-47	-59	-35	-62	-20.2
15	-62	-14	-19	-80	-10.1

CLASS BB

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-22	40	53	-76	- 3.5
2	-89	7	-19	-70	- 9.5
3	-27	40	42	0	- .5
4	-86	68	43	-79	-15.5
5	-47	14	-30	-16	- 3.5
6	-62	-15	-28	-67	-12.5
7	-21	71	36	-18	- 2.5
8	-96	-13	-33	-83	-19.5
9	- 6	62	42	-43	- 2.5
10	-86	21	9	-95	-18.5
11	-82	25	36	-57	-11.5

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	-56.7273	29.0909	13.7273	-54.9091	-9.04545
SD	31.6202	28.7701	32.9189	29.8982	6.59702

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class BB				
Ascendency	1.00000	.551894	.509945	.652618	.888019
Responsibility		1.000000	.852023	.334489	.477805
Emotional Stability			1.000000	.178294	.417092
Sociability				1.000000	.815599
Rating					1.000000

CLASS CC

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-13	-56	-74	52	- 8.5
2	21	-37	-23	59	- 4.5
3	-27	-75	-57	4	2.5
4	-27	-49	-22	29	- 2.5
5	17	-29	-10	50	1.5
6	27	- 6	-16	1	- 6.5
7	-40	-75	-77	16	- 6.5
8	-41	-15	-30	39	1.5
9	0	-29	-60	20	- 2.5
10	23	-34	-57	59	1.5
11	-55	-67	-60	-20	3.5
12	- 7	-44	-55	33	- 4.5

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	-10.1667	-43.0000	-43.0833	28.5000	-2.08333
SD	26.9717	21.3931	22.3736	24.0538	3.90424

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class CC					
Ascendency	1.00000	.610042	.441050	.515462	- .2502020
Responsibility		1.000000	.664033	.315950	- .0518814
Emotional Stability			1.000000	.193790	.1568530
Sociability				1.000000	- .1903390
Rating					1.0000000

CLASS DD

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-29	31	11	-44	2.1
2	-20	-12	-79	-27	4.1
3	-51	27	-37	- 2	- 7.9
4	-68	- 7	-85	-51	3.1
5	12	19	-62	-21	6.1
6	-29	66	9	-48	1.1
7	-46	46	9	-44	3.1
8	-41	-23	-49	-48	- 6.9
9	-27	-21	-85	-43	- .9
10	-51	62	-43	-48	8.1
11	17	24	11	-11	- 1.9
12	0	1	-55	-18	1.1
13	-20	-12	-57	-47	-13.9
14	-46	8	11	-56	- .9
15	6	- 5	-69	- 5	- 1.9
16	-68	-25	-79	-63	- 3.9

CLASS DD

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	-28.8125	11.1875	-40.5625	-36.0000	- .58750
SD	25.9331	28.4632	36.7678	18.4662	5.40508

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class DD

Ascendency	1.00000	.00791157	.0711643	.6674340	.0499670
Responsibility		1.00000000	.6881500	.0690869	.4546210
Emotional Stability			1.0000000	-.0466706	.0669280
Sociability				1.0000000	-.0375710
Rating					1.0000000

CLASS EE

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-79	- 6	46	-39	4.3
2	- 2	-14	-21	17	.3
3	-89	-53	-39	-56	- 3.7
4	-89	-48	-35	-75	- 6.7
5	-27	-50	-37	21	-11.7
6	-93	28	7	-71	3.3
7	-72	0	- 6	-56	2.3
8	-11	14	22	- 6	- 3.7
9	-55	0	0	-48	- 4.7
10	-67	-43	-17	-31	- 5.7
11	-16	- 7	- 6	-31	- 3.7
12	-55	20	35	-25	- 7.7
13	-11	26	8	-12	- 5.7
14	- 7	7	35	-25	2.3
15	-21	16	42	-21	- 5.7
16	-54	2	47	-39	- .7
17	-62	32	0	-56	- 8.7

CLASS EE

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociatility	Ratings
MN	-47.6471	- 4.47059	4.76471	-32.5294	-3.28824
SD	31.0046	27.43140	28.35390	26.5177	4.43328

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class EE

Ascendency	1.00000	.248422	.197287	.8160000	-.140143
Responsibility		1.000000	.693755	- .0544418	.230868
Emotional Stability			1.000000	.0293290	.378886
Sociability				1.0000000	-.251832
Rating					1.000000

CLASS FF

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-86	-27	12	-63	- .8
2	-48	38	20	-17	- 1.8
3	-79	- 5	31	-72	-12.8
4	-20	34	20	-30	- 2.8
5	-85	-27	-47	-76	-13.8
6	-34	19	0	-17	- 3.8
7	-89	-56	-57	-57	-11.8
8	-20	-13	34	- 2	- .8
9	- 9	-14	7	-42	1.2
10	-14	- 5	12	10	- 1.8
11	-69	- 7	32	-80	3.2
12	-39	38	18	-19	- 4.8
13	8	-39	-32	5	- 6.8
14	-47	34	31	-22	.2
15	-34	- 7	0	5	9.2
16	-72	-33	23	-74	- 3.8
17	-60	13	25	-36	-10.8
18	-84	- 5	23	-74	- 3.8
19	-26	-20	-41	-26	- 9.8
20	-77	36	-48	-53	- .8
21	-47	31	6	-69	1.2
22	-91	0	-40	-81	- .8
23	-14	36	23	-44	9.2
24	-86	25	20	-42	5.2
25	1	9	12	-59	7.2

CLASS FF

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	-48.8400	2.20000	3.36000	-41.4000	-2.08000
SD	30.9356	26.84030	28.38290	28.4296	6.24513

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class FF

Ascendency	1.00000	.143520	.173001	.6717830	.298994
Responsibility		1.000000	.397172	.1399110	.390978
Emotional Stability			1.000000	.0969917	.384197
Sociability				1.0000000	.102779
Rating					1.000000

CLASS GG

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	65	-45	- 5	21	4.0
2	68	- 8	24	21	4.0
3	23	35	36	6	1.0
4	-13	4	23	-22	- 4.0
5	- 1	7	16	-20	.0
6	4	19	23	-12	1.0
7	32	-39	-16	41	3.0
8	25	-34	-21	21	1.0
9	29	45	36	38	3.0
10	73	26	16	60	- 6.0
11	18	47	59	15	- 1.0
12	69	19	- 9	60	- 2.0
13	57	7	16	47	1.0
14	18	-42	-35	27	8.0
15	11	32	48	21	3.0

CLASS GG

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	31.8667	4.86667	14.0667	21.6000	1.06667
SD	26.9935	30.73510	25.6111	24.9233	3.33600

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class FF

Ascendency	1.00000	-.137911	- .230074	.7916740	-.03765800
Responsibility		1.000000	.847021	-.0232195	-.48236200
Emotional Stability			1.000000	-.2771470	-.31216700
Sociability				1.0000000	-.00529201
Rating					1.00000000

CLASS HH

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	6	7	63	- 2	.2
2	- 8	- 5	- 5	- 2	- .8
3	1	9	8	13	.2
4	1	14	57	18	2.2
5	44	84	28	23	6.2
6	64	48	81	23	7.2
7	- 8	45	30	- 5	- .8
8	-12	9	5	29	1.2
9	16	79	63	- 3	- .8
10	58	37	75	45	9.2
11	1	80	64	72	4.2

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	14.8182	37.0000	42.6364	19.1818	2.56364
SD	26.1944	31.2875	29.0306	22.5543	3.41847

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class HH					
Ascendency	1.00000	.428612	.606260	.264414	.855565
Responsibility		1.000000	.449393	.363035	.381637
Emotional Stability			1.000000	.321244	.539054
Sociability				1.000000	.670045
Rating					1.000000

CLASS JJ

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	79	-93	-70	52	- 8.2
2	40	0	- 4	29	- .2
3	- 8	-49	-53	-12	- 2.2
4	78	-54	-25	42	- 4.2
5	70	-78	-53	9	- 7.2
6	79	-15	-59	63	- 3.2
7	13	-19	-47	35	1.8
8	70	- 7	-33	0	- .2
9	24	-27	-26	9	.8

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	49.4444	-38.0000	-41.1111	25.2222	-2.53333
SD	31.2200	30.5832	19.4448	23.7664	3.29983

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class JJ				
Ascendency	1.00000	- .266138	- .153297	.5531860	- .611167
Responsibility		1.000000	.605738	- .0680255	.865376
Emotional Stability			1.000000	- .2189800	.572603
Sociability				1.0000000	- .288079
Rating					1.000000

CLASS KK

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-51	37	55	-76	- 9.0
2	-78	29	8	-65	-13.0
3	-51	- 3	35	-72	-12.0
4	-56	-19	56	-41	-10.0
5	-85	-41	-14	-92	-16.0
6	-83	29	21	-70	- 3.0
7	-67	-60	-20	-94	-21.0
8	-75	-59	-20	-83	-20.0
9	10	-39	22	-24	- 1.0
10	-87	-46	-20	-79	-21.0
11	1	-39	16	-37	1.0
12	-51	-58	- 4	-62	- 4.0

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	-56.0833	-22.4167	11.2500	- 66.2500	-10.75000
SD	30.5190	34.9701	26.6525	21.0481	7.48471

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class KK				
Ascendency	1.00000	- .153386	.377860	.8093450	.710752
Responsibility		1.000000	.657809	.0412957	.264654
Emotional Stability			1.000000	.5189920	.536065
Sociability				1.0000000	.775868
Rating					1.000000

CLASS LL

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-39	-46	- 7	-77	- 1.1
2	-59	-67	-64	-73	- 4.1
3	-39	-80	-69	-17	1.9
4	- 3	- 4	12	-17	- 6.1
5	- 3	- 4	- 7	-59	- 6.1
6	-65	-38	-39	-11	- 5.1
7	-39	-31	-29	-67	- 6.1
8	-91	-46	- 7	-77	- .1
9	3	-16	-14	0	- 8.1
10	- 8	-64	-65	- 3	- 3.1
11	-86	-69	- 55	-79	- 5.1
12	2	-28	-14	- 3	-16.1
13	-70	11	-14	-40	- 7.1
14	-51	-28	-51	2	- 5.1
15	-75	-57	13	-77	- 4.1
16	-70	-69	-61	-70	- 4.1
17	-23	-64	- 6	-28	- 2.1
18	4	-67	0	0	-12.1
19	-89	-28	-55	-66	- 3.1
20	3	-31	-44	5	- 4.1
21	-58	-50	-46	-46	- 5.1

CLASS LL

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	-40.7619	- 41.7143	-29.6190	-38.2381	-5.05238
SD	33.1043	24.5515	26.3031	31.7159	3.76040

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class LL

Ascendency	1.00000	.214236	.289795	.6889420	- .451856
Responsibility		1.000000	.425304	.1756610	- .356039
Emotional Stability			1.000000	-.0158171	- .328523
Sociability				1.0000000	- .381211
Rating					1.000000

CLASS MM

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	51	-60	-58	12	- 5.4
2	18	-46	-33	-14	6.6
3	-10	32	-12	-21	-15.4
4	- 4	-26	-63	8	6.6
5	52	-60	-53	- 2	1.6
6	61	-49	-44	17	-10.4
7	57	-52	-42	38	3.6
8	-10	-10	-25	1	-11.4
9	-24	-60	-67	-47	2.6
10	10	-59	-51	-35	- 6.4
11	4	-48	-62	-32	1.6
12	66	- 3	32	1	11.6
13	-18	-60	-31	-46	- .4
14	-10	-18	-47	-43	- 1.4
15	-20	- 3	19	-47	- 1.4

CLASS MM

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	14.8667	- 34.8000	-35.8000	-14.0000	- 1.20000
SD	32.0122	27.5468	28.2423	26.1738	7.18517

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class MM

Ascendency	1.00000	- .267267	.0611585	.7688450	.2032930
Responsibility		1.000000	.6763110	-.0804434	-.2582080
Emotional Stability			1.0000000	-.0688125	.0664940
Sociability				1.0000000	.0421844
Rating					1.0000000

CLASS 00

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	1	1	-34	10	- 4.5
2	47	-77	-73	26	.5
3	8	-18	-55	52	- 1.5
4	56	-19	-64	38	- 15.5
5	20	- 3	- 3	- 4	1.5
6	52	-41	-34	63	- 7.5
7	22	2	-41	10	.5
8	-20	-26	-47	- 9	- .5
9	6	2	- 8	7	3.5
10	6	0	9	- 4	2.5
11	20	-14	2	-25	- 10.5
12	-24	-24	-41	-12	- 10.5
13	-28	-94	-77	-25	- 11.5
14	13	-42	-47	-27	4.5
15	5	-64	-47	- 4	- 13.5
16	-11	0	2	1	- .5
17	20	-48	-64	13	- 4.5

CLASS 00

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	11.3529	- 27.3529	-36.5882	6.47059	-3.97059
SD	23.9532	28.7401	26.7671	25.14920	6.17507

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class 00

Ascendency	1.00000	- .00520224	- .108211	.6354110	- .0505768
Responsibility		1.00000000	.730581	.0659065	.3736050
Emotional Stability			1.000000	-.2377060	.3467350
Sociability				1.0000000	- .0633450
Rating					1.0000000

CLASS PP

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	22	54	77	18	- 1.6
2	- 6	- 7	- 5	-36	- 1.6
3	52	46	37	39	5.4
4	-18	58	89	-52	3.4
5	- 7	- 5	11	-23	3.4
6	-30	24	76	-41	2.4
7	- 1	8	86	-33	- 6.6
8	-40	1	64	-51	1.4
9	-23	16	7	-17	.4
10	-18	16	20	-33	4.4
11	-27	-20	11	-41	-13.6
12	49	-10	25	35	- .6
13	-40	1	64	-54	- 7.6
14	-18	14	20	15	-10.6
15	-30	-26	0	-37	-12.6
16	13	16	7	-18	- .6
17	48	- 2	50	-14	3.4
18	-18	1	37	-41	6.4
19	-18	-14	31	-47	- 1.6
20	-37	1	0	-37	- 3.6
21	21	1	37	15	4.4
22	-37	16	57	-49	- 3.6
23	-40	- 5	37	-52	-10.6
24	28	-14	2	-23	1.4
25	- 1	8	4	2	- 6.6
26	-18	1	31	-52	-13.6
27	13	24	37	15	- 4.6
28	-30	-20	- 5	-52	-15.6
29	21	53	64	2	11.4

CLASS PP

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	- 6.55172	7.17241	33.4828	-22.8276	-2.32414
SD	27.65500	22.19830	28.2533	27.9816	6.75633

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class PP				
Ascendency 1.00000	.288647	.036000	.7954940	.464961
Responsibility	1.000000	.613236	.3073940	.550565
Emotional Stability		1.000000	-.0481717	.311454
Sociability			1.0000000	.314748
Rating				1.000000

CLASS RR

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-55	-25	-37	2	6.1
2	-27	- 4	-37	19	-16.9
3	-66	23	24	-11	3.1
4	8	19	-18	32	- 3.9
5	7	11	-12	28	-16.9
6	6	11	-12	2	1.1
7	4	19	-42	32	.1
8	-75	11	-18	2	- 1.9
9	-49	-40	-65	-40	- .9
10	-42	51	-12	-48	8.1
11	-26	- 8	-19	-27	3.1
12	-66	51	9	-21	- 1.9
13	-60	-15	-56	-43	- .9
14	-60	47	-53	- 9	7.1
15	-33	34	9	- 2	.1
16	-26	21	-19	-51	2.1
17	-19	28	-12	- 2	- 4.9
18	-19	39	-12	32	- 9.9
19	-35	-40	-60	-30	- .9
20	- 4	7	9	-21	.1

CLASS RR

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	-31.8500	12.0000	-21.6500	- 7.80000	-1.40000
SD	26.2074	26.6702	24.2967	26.5398	6.54599

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class RR

Ascendency	1.0000	.0233205	.108908	.482820	-.3918610
Responsibility		1.0000000	.596685	.189737	.0833415
Emotional Stability			1.000000	.143651	-.0281366
Sociability				1.000000	-.5666870
Rating					1.0000000

CLASS VV

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-35	12	24	-23	- 6.4
2	-40	-47	-27	-55	- 3.4
3	-41	-79	-36	-42	.6
4	20	-61	25	9	- 8.4
5	-52	-54	-11	-70	-10.4
6	-57	-66	-34	-27	- 3.4
7	10	- 5	46	-14	- 7.4
8	-62	-85	-45	-68	- 9.4
9	10	-80	-17	18	- 3.4
10	-46	-18	31	-14	- 9.4
11	-71	-73	-29	-51	- .4
12	-35	-51	51	-51	- 3.4
13	21	-71	18	13	1.6
14	20	-13	-20	16	- 1.4
15	18	-20	51	7	3.6
16	-26	-11	-22	16	- 3.4
17	-57	-54	- 4	-27	-12.4
18	6	13	37	-21	- 2.4
19	-40	-47	10	-55	- 6.4
20	14	8	25	-14	- 2.4
21	-73	-77	-43	-66	-15.4
22	-13	-20	17	7	.6
23	0	-28	10	7	- 2.4
24	-61	-20	-25	-71	- .4
25	-28	3	46	-56	- 5.4
26	18	-77	-29	12	-11.4
27	- 6	-58	- 9	-17	- 3.4
28	-52	-18	37	-39	- 5.4

CLASS VV

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
MN	-23.5000	-39.1786	2.7500	- 24.1429	-4.68571
SD	31.5159	30.9031	30.6555	29.8541	4.47898

CORRELATIONAL COEFFICIENTS

of the 4 FACTORS ON THE

GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class VV

Ascendency	1.0000	.24655	.410121	.804645	.337765
Responsibility		1.00000	.629302	.159269	.224113
Emotional Stability			1.000000	.222787	.184157
Sociability				1.000000	.293495
Rating					1.000000

CLASS WW

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	8	85	75	- 9	- 4.2
2	-26	54	62	-33	.8
3	-32	54	22	- 9	- .2
4	- 1	79	93	-30	- 2.2
5	-44	3	61	-63	- .2
6	8	47	47	-27	3.8
7	- 6	80	54	-21	- 6.2
8	- 1	52	29	-11	-12.2
9	-51	21	0	-44	- 7.2
10	-20	76	33	25	3.8
11	26	52	24	2	-10.2
12	41	29	74	24	.8
13	- 6	1	22	-51	- .2

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	- 8.00000	48.6923	45.8462	-19.0000	-2.58462
SD	25.36500	27.1191	25.7050	25.5102	4.87598

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class WW				
Ascendency	1.00000	.244789	.373285	.5833430	- .103245
Responsibility		1.000000	.373129	.5158140	- .107351
Emotional Stability			1.000000	.0676865	.294119
Sociability				1.0000000	.022263
Rating					1.000000

CLASS XX

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-17	11	40	-25	- 8.0
2	-89	-27	-20	-73	- 4.0
3	-59	26	71	-50	-28.0
4	-94	-69	-23	-73	-22.0
5	-59	-69	-20	4	- 5.0
6	-79	-53	- 7	-34	- 9.0
7	-31	-19	26	9	- 2.0
8	- 8	-58	26	-12	- 8.0

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	-54.5000	-32.2500	11.6250	-31.7500	-10.75000
SD	30.6431	34.0248	32.1906	29.8234	8.64219

CORRELATIONAL COEFFICIENTS of the 4 FACTORS ON THE GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class					
Ascendency	1.00000	.289893	.615927	.7055060	.310112
Responsibility		1.000000	.817286	-.0871531	-.271851
Emotional Stability			1.000000	.2111580	-.368107
Sociability				1.0000000	.548761
Rating					1.000000

CLASS YY

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-29	-48	-16	16	- 4.0
2	-17	15	17	9	1.0
3	- 3	-19	49	-13	- 1.0
4	-46	-69	-27	- 8	- 3.0
5	5	-48	59	3	3.0
6	38	-61	- 7	- 8	- 1.0
7	39	15	37	22	5.0
8	32	5	- 4	59	2.0
9	18	15	62	16	6.0
10	-46	-12	- 2	-17	- 7.0
11	5	23	30	16	4.0
12	-58	- 4	-20	-31	- 8.0

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	- 5.16667	-15.6667	14.8333	5.33333	- .25000
SD	32.63140	31.4837	30.4106	22.41400	4.38035

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class				
Ascendency	1.00000	.223281	.508199	.629576	.801344
Responsibility		1.000000	.400171	.362969	.414523
Emotional Stability			1.000000	.178943	.741002
Sociability				1.000000	.653552
Rating					1.000000

CLASS ZZ

DIFFERENCE between the

GORDON PERSONAL PROFILE TEST SCORES AND THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Student Number	Ascendency	Responsibility	Emotional Stability	Sociability	Ratings
1	-52	-60	- 4	- 3	- 1.6
2	-11	-29	-19	- 9	- 7.6
3	-11	-67	-15	2	- 1.6
4	-46	- 6	45	-41	9.4
5	- 5	-22	74	-15	7.4
6	-18	-15	38	- 9	6.4
7	-11	- 2	51	-22	2.4
8	-57	-37	-21	-57	- 6.6
9	6	-78	-20	2	- 5.6
10	-46	3	38	- 5	6.4
11	-17	-93	10	-12	.4
12	6	- 6	62	-22	.4
13	-80	-88	-22	-71	-21.6
14	-78	-91	-23	-71	-20.6

FACTORS

OBSERVATIONS - "Means" and "Standard Deviation"

MN	-30.0000	-42.2143	13.8571	-23.7857	- 2.31429
SD	28.2109	34.7464	34.5395	24.8314	9.19960

CORRELATIONAL COEFFICIENTS
of the 4 FACTORS ON THE
GORDON PERSONAL PROFILE TEST SCORES & THE RATINGS OF THE STUDENTS AND STUDENT-TEACHERS

Factors for Class				
Ascendency	1.00000	.314067	.425320	.753424	.544942
Responsibility		1.000000	.749540	.240052	.708773
Emotional Stability			1.000000	.252049	.771400
Sociability				1.000000	.627909
Rating					1.000000

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