STUDENT TEACHER EXPECTATIONS OF THE
LEADERSHIP ROLE OF THE PRINCIPAL

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STUDENT TEACHER EXPECTATIONS OF THE LEADERSHIP ROLE OF THE PRINCIPAL

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF EDUCATION

By

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Denton, Texas
August, 1967
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CHAPTER I

INTRODUCTION

A considerable number of studies in personnel research have given attention to the various aspects of leadership, e.g., the nature of leadership, interactions between leaders and group members, the effectiveness of leadership in terms of group morale, attainment of group goals, efficiency of group processes and group actions, and the various role expectations of leaders and the group members. There is virtually no evidence in the literature, however, that indicates interest in the expectations people have concerning the various behavioral roles within the groups to which they are preparing to become members. It is true that students in college are in a state of preparation, but for what are they preparing? It seems obvious that their preparations will lead to jobs in business, industry, or the professions. It is hoped that they are prepared to function in a variety of roles which include membership in various social, economic, and political groups.

We have traditionally assumed that people who are about to complete their education are prepared to function adequately
as members of various cultural groups within our society. It seems probable that they anticipate keenly their membership in the groups for which they have prepared. They probably have certain expectations about how they should behave as members of these groups. It is also probable that they have certain expectations about how the leaders of these groups should behave in the group setting.

Students are not strangers to group behavior. They have had much experience functioning as members of both formal and informal groups. Some have been leaders in their peer groups. All have been members of groups with peer leaders or adult leaders. The preponderance of the experience of students has been informal. It has resulted from spontaneous interaction among group members rather than from planned action. Mostly by the process of trial and error, partly under adult supervision, students have learned appropriate roles of group behavior. It seems certain that students have some ideas about what they expect of the behavior of group leaders.

Statement of the Problem

The problem of this study was to determine the expectations that student teachers have of the leadership behavior of the principal.
Purposes of the Study

The purposes of this study were to determine student teacher expectations of the behavior of the principal in two dimensions of leadership as measured by the Ohio State Leader Behavior Description Questionnaire (LBDQ) and the extent to which these expectations were related to sex, race, level of preparation, and the eight personality traits measured by the Gordon Personal Profile (GPP) and the Gordon Personal Inventory (GPI).

Hypotheses

In order to achieve the purposes stated in this study, the following hypotheses were investigated:

1. No significant correlations will be found to exist between student teacher expectations of the leader behavior of the principal and the student teachers' personality traits.

   A. No significant correlations will be found to exist between student teacher ratings of the principal in the dimension of Initiating Structure (Str) on the LBDQ and their scores on each of the personality traits on the GPP and the GPI.

   B. No significant correlations will be found to exist between student teacher ratings of the principal in the dimension of Consideration (Cns)
on the LBDQ and their scores on each of the personality traits on the GPP and the GPI.

2. A significantly higher mean will be obtained in the dimension of Initiating Structure (Str) by student teachers who score high (mean plus one-half of one S.D.) in each of the following traits than by student teachers who score low (mean minus one-half of one S.D.).

A. Ascendancy (A)
B. Cautiousness (C)
C. Original Thinking (O)
D. Vigor (V)

3. A significantly higher mean will be obtained in the dimension of Consideration (Cns) by student teachers who score high (mean plus one-half of one S.D.) in each of the following traits than by student teachers who score low (mean minus one-half of one S.D.).

A. Responsibility (R)
B. Emotional Stability (E)
C. Sociability (S)
D. Original Thinking (O)
E. Personal Relations (P)
F. Vigor (V)

4. A significantly lower mean will be obtained in the dimension of Initiating Structure (Str) by student teachers
who score high (mean plus one-half of one S.D.) in each of the following traits than by student teachers who score low (mean minus one-half of one S.D.).

A. Responsibility (R)
B. Emotional Stability (E)
C. Personal Relations (P)

5. A significantly lower mean will be obtained in the dimension of Consideration (Cns) by student teachers who score high (mean plus one-half of one S.D.) in each of the following traits than by student teachers who score low (mean minus one-half of one S.D.).

A. Ascendancy (A)
B. Cautiousness (C)

6. Student teachers who rate the principal high (mean plus one-half of one S.D.) in the dimension of Initiating Structure (Str) will score significantly higher in each of the following traits than will student teachers who rate the principal low (mean minus one-half of one S.D.).

A. Ascendancy (A)
B. Cautiousness (C)
C. Vigor (V)

7. Student teachers who rate the principal high (mean plus one-half of one S.D.) in the dimension of Initiating Structure (Str) will score significantly lower in each of the
following traits than will student teachers who rate the principal low (mean minus one-half of one S.D.).

A. Responsibility (R)
B. Emotional Stability (E)
C. Sociability (S)
D. Original Thinking (O)
E. Personal Relations (P)

8. Student teachers who rate the principal high (mean plus one-half of one S.D.) in the dimension of Consideration (Cns) will score significantly higher in each of the following traits than will student teachers who rate the principal low (mean minus one-half of one S.D.).

A. Responsibility (R)
B. Emotional Stability (E)
C. Sociability (S)
D. Original Thinking (O)
E. Personal Relations (P)

9. Student teachers who rate the principal high (mean plus one-half of one S.D.) in the dimension of Consideration (Cns) will score significantly lower in each of the following traits than will student teachers who rate the principal low (mean minus one-half of one S.D.).

A. Ascendancy (A)
B. Cautiousness (C)
C. Vigor (V)

10. The following significant differences will be found in the subjects' ratings of the principal on the dimension of Initiating Structure (Str) when grouped according to sex, race, and level of preparation.

A. Male student teachers will rate the principal significantly higher than will female student teachers.

B. Student teachers at the secondary level will rate the principal significantly higher than will student teachers at the elementary level.

C. Latin American student teachers will rate the principal significantly higher than will either Negro or Anglo-American student teachers.

D. Negro student teachers will rate the principal significantly higher than will Anglo-American student teachers.

11. The following significant differences will be found in the subjects' ratings of the principal on the dimension of Consideration (Cns) when grouped according to sex, race, and level of preparation.

A. Female student teachers will rate the principal significantly higher than will male student teachers.
B. Elementary level student teachers will rate the principal significantly higher than will secondary level student teachers.

C. Anglo-American student teachers will rate the principal significantly higher than will either Negro or Latin American student teachers.

D. Negro student teachers will rate the principal significantly higher than will Latin American student teachers.

12. The mean of the scores for the entire sample in the dimension of Consideration (Cns) will be significantly higher than the mean of the scores in the dimension of Initiating Structure (Str).

Definition of Terms

For the purpose of clarity, the following terms have been defined:

1. Student teacher expectations of the leader behavior of the principal are the ideas or notions they have about the behavior of the principal in his capacity as the leader of a professional group.

2. Leadership and leader behavior are terms used interchangeably in this study to refer to that behavior of a formally designated leader as he directs the activities of his group.
toward group-determined goals. More specifically, they will refer to the behavior of the principal in directing the activities of his faculty toward predetermined educational goals.

3. **Initiating Structure** (Str) is a dimension of leadership measured by the LBDQ and defined by Halpin and Winer as that behavior of the leader as he defines "the role which he expects each member of the (group) to assume, and endeavors to establish well-defined patterns of organization, channels of communication, and ways of getting jobs done" (18, pp. 42-43).

4. **Consideration** (Cns) is the second of two dimensions of leadership measured by the LBDQ. Halpin and Winer associate this dimension "with behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the (leader) and his (group)" (18, p. 42).

Eight traits of personality were measured for each subject—four by the GPP (31) and four by the GPI (30). These traits are defined in the following paragraphs:

5. **Ascendancy** (A) is possessed by those individuals who assume active roles in their groups, who have self-assurance and assertiveness in relationships with others, and who make decisions independently of others. Conversely, an individual who takes a passive role in the group, who
would rather listen than talk, who lacks confidence in himself, and who is dependent on others for advice is lacking in this trait.

6. Responsibility (R) is indicative of an individual who sticks to an assigned job, who is perservering and determined, and who can be relied upon, whereas irresponsibility is characteristic of one who is flighty and unable to stick to a job that is unpleasant or lacks interest for him.

7. Emotional Stability (E) means well-balanced and free from undue anxieties and nervous tension. Excessive anxiety, hypersensitivity, low frustration tolerance, and nervousness indicate a low level of emotional balance.

8. Sociability (S) is shown by those individuals who are gregarious and who like to be with and work with other people. Restricted social contacts, lack of gregariousness, and actual avoidance of social relationships are indicative of individuals lacking in sociability.

9. Cautiousness (C) is indicated by one who is careful to consider matters before making decisions and does not run risks or take chances. On the other hand, impulsiveness, snap decisions, acting on the spur of the moment, taking chances for thrills, and seeking excitement are characteristic of one who lacks this trait.
10. Original Thinking (O) is characterized by intellectual curiosity, enjoyment of thought-provoking questions and discussions, seeking difficult problems to work on, and thinking about new ideas. One who dislikes working on thought-provoking and complicated problems, who does not enjoy acquiring knowledge, and who is not interested in challenging questions and discussions generally scores low in this trait.

11. Personal Relations (P) is possessed by those individuals who are tolerant, patient and understanding and who have faith in people and trust them. Those who lack this trait have little trust or confidence in people, have a tendency to criticize others, and are irritated and annoyed by the actions of others.

12. Vigor (V) is characteristic of those who act energetically, who work and move rapidly, and who usually accomplish more than others. Those who lack vigor have low vitality or energy levels, tire easily, work and move at a relatively slow pace, and are below average in productivity and output.

Limitations of the Study

The following limitations were inherent in this study:

1. The subjects for this study consisted of 877 student teachers selected from ten colleges and universities in Texas. All were enrolled in student teaching during the spring semester
of the 1966-67 school year or were to be enrolled in student teaching during the fall semester of the 1967-68 school year. Half of the subjects did their student teaching at the elementary level, and the other half did their student teaching at the secondary level.

2. This study was further limited to eight personality traits measured by the GPP and GPI and to measures of the two dimensions of leadership obtained for each subject from the LBDQ.

3. Student teachers were asked to limit their responses on the LBDQ to their expectations of the leader behavior of male principals.

4. The interpretation of the data for this study was limited by the degree of accuracy with which the subjects responded to the questionnaires.

5. Student teachers' expectations were not interpreted as their desires or wants.

Basic Assumptions

There were two major assumptions which were basic to this study.

1. It was assumed that the samples from each of the ten participating schools were representative of the populations from which they were drawn.
2. It was further assumed that the teacher-training programs in the participating schools would not account for any significant differences in student teachers' expectations of the principal's behavior.

Background of the Study

Leadership has long been recognized as a social phenomenon. In every social situation this phenomenon becomes apparent in the acts of someone who, through his own activity, influences the activity of the group toward some desired goal. He may be an officially or formally designated leader, or he may assume this role informally as the need arises.

Researchers for better than half a century have given a great deal of attention to this phenomenon in attempts to describe the nature of leadership, to discover the differences that exist between leaders and members of their groups, and to identify personal traits that are associated with or related to leadership.

In a comprehensive review of the literature, Stogdill (45) found that prior to World War II the emphasis was predominantly upon a personal trait approach to the study of leadership, which by 1940 had virtually reached a stalemate.

Though considerable interest in leadership was maintained during the war years of the forties, little in the
way of scientific research was carried out. Following the war, however, the scientific study of leadership found renewed emphasis. Researchers began to approach the study of leadership from a new tack. This new approach emphasized the behavior of the leader rather than his characteristics. Hemphill (24) typifies this new approach in a rather sophisticated study in which he stresses the situational nature of leadership. Stogdill (46), in his survey of the literature, supports this approach. He states that

The findings suggest that leadership is not a matter of passive status, or of the mere possession of some combination of traits. It appears rather to be a working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion (46, p. 66).

The Ohio State University adopted this behavioral approach to the study of leadership in a ten-year research program involving several disciplines (33). In these studies (41, 42), the behavior of leaders was the point of focus, not whether, in the opinion of the researchers, the leadership was good or bad.

One of the first tasks of the researchers at Ohio State University was to develop an instrument whereby an objective assessment might be made of the behavior of a leader. The initial questionnaire was developed by Hemphill and Coons (25).
This instrument consisted of 150 items which measured nine hypothesized dimensions of leader behavior. Later, Halpin and Winer (18) conducted a factorial study in which two dimensions of leader behavior emerged. These were Initiating Structure (Str) and Consideration (Cns).

The questionnaire, on the basis of this factorial study, was reduced first to 80 items, then to its present 40 items. It was then used in a number of research settings to evaluate these two dimensions of leadership. Halpin (13, 14) used it to investigate the leader behavior of airplane commanders. In another study (15) he compared the actual leader behavior and the leadership ideologies of airplane commanders and school superintendents. In still another study (16) he employed the questionnaire to describe the leader behavior of school superintendents. Fleishman (8, 9, 10, 11, 12), in a number of studies, employed the LBDQ to describe the leader behavior of foremen and supervisors in industrial settings. In other studies employing the LBDQ, Hastings (20) and Hemphill (22) investigated leader behavior in university research teams and among the administrators of the various college departments.

Attempts were made in other studies (2, 26, 28, 34, 44, 52) to examine the effects of leader behavior upon the
conduct, attitudes, morale, and performance of group members. The findings of these studies suggest that leadership can be described not only in terms of Initiating Structure (Str) and Consideration (Cns), but it can be evaluated in terms of its influence upon the behavior of the group. Further studies (3, 6, 16, 41, 42) explored the relationship of leadership to administrative behavior.

A major consensus of these studies was that leader behavior can be described in terms of Initiating Structure (Str) and Consideration (Cns). Regardless of the group setting, these two dimensions are observable to some degree in the behavior of the leader. In different settings (e.g., industrial, educational, military) the behavior of the leader is quite likely to vary considerably in one or both of these dimensions. The research, however, seems to bear out the fact that members of a given group tend to concur in their assessments of their leader.

Most of the studies mentioned thus far were conducted by members of the staff at Ohio State University in cooperation with the Ohio State Leadership Studies. Since its development, the LBDQ has been employed in a number of studies (6, 27, 29, 32, 53, 54) of leader behavior in public schools. There were a number of findings in these studies which might be considered pertinent for educational leaders. Evenson (6, 7) found
that superintendents, principals, and teachers differed significantly in their descriptions of the principal's leader behavior. On the other hand, he found that all three groups of respondents agreed that strong behavior in both Initiating Structure (Str) and Consideration (Cns) is desirable. Luckie (29) concurs with Evenson in that he too found that superintendents, principals, and teachers differed significantly in their descriptions of the principal's leader behavior. Luckie further found that all three groups of respondents indicated a significant preference for Consideration (Cns) over Initiating Structure (Str). Watson (53) upon investigating the effects of the principal's behavior on the behavior of his teachers found that the leader behavior of the principal was significantly related to teacher group cohesiveness.

Significance of the Study

It was quite evident from the research reported in the literature that the expectations of group members significantly influence the behavior of other group members, including the leader. Stogdill (45) suggested that conflicting expectations from group members are apt to cause individuals in the role of leader to become inhibited and indecisive in their behaviors. Teacher expectations are not likely to be satisfied by this type of behavior. Nevertheless, both
Bidwell (1) and Chase (4) concur that a high degree of relationship exists between teaching satisfaction and how well principals meet teacher expectations. Chase, in summing up his studies and others, concluded that

One of the primary concerns of principals and superintendents, therefore, should be to bring about harmony among expectations and between expectations and performance (5, p. 2).

Watson (53) found that the variability of teacher expectations of the principal's behavior increased as the year progressed. She found also that their expectations were closely related to their perceptions of the principal's actual behavior; that is, they expected him to do fairly well what they knew he would do. If this is true, then potential group members would probably have different expectations, since they do not know what kinds of behavior the leader is likely to show. Student teachers, not having had the experience of working with a principal, would probably have different leader-behavior expectations than experienced teachers would have of their principals.

It was anticipated that certain patterns of behavior expectations would be identified from this study, which would give credibility to at least two significant implications. The first implication was for leader preparation. It was expected that the data of this study would enable
those who prepare administrators and supervisors for public schools to describe the kinds of leadership that beginning teachers expect of them.

A second implication was for the preparation of student teachers. It was expected that the data of this study would enable the identification of definite patterns of expectations. Knowledge of these patterns of expectations would be useful in helping student teachers to establish for themselves more realistic patterns of expectations.
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CHAPTER II

A REVIEW OF THE LITERATURE

Leadership has long been recognized to be a phenomenon of group interaction. There are actually two distinct phenomena in any group situation. One is leadership; the other is followership. These phenomena are present in every group action whether it be a tribal ceremony, an informal discussion among peers, or a meeting of the board of regents of a large university. "Whenever two or more persons interact in the pursuit of a common goal," says Gibb, "the relation of leadership and followership soon becomes evident" (13, p. 880). It does not hold, however, that this relationship will always necessarily take the same direction. Normally, the situation will dictate the type of leadership operable. To some extent the situation will dictate who will be the leader.

The Nature of Leadership

It would be difficult to obtain a concensus on the nature of leadership. No one would deny that leadership is necessarily a component in group interaction. It is true that the inexperienced observer could identify the leader of
a group without too much difficulty. But there are few researchers who would agree on one definition of leadership or another. As a result, there have been a number of acceptable definitions formulated. Gibb (13) defined six types of leaders:

1. "The leader as an individual in a given office" (13, p. 880). This simply means any person elected or appointed to a position of leadership is a leader. Shartle and Stogdill (39) adopted this definition initially to guide the Ohio State Leadership Studies. It was assumed that the most likely place to begin the study of leadership would be with officially designated leaders. Since the study of leadership was first directed at military groups and later to the study of foremen and supervisors in industry and administrators of public schools, this definition was apropos. Others in connection with the Ohio State Leadership Studies followed Shartle and Stogdill's lead. Halpin (15, 16) and Halpin and Winer (18, 19) studied the leader behavior of aircraft commanders. Fleishman (10, 11) and Fleishman, Harris and Burtt (12) investigated supervisory behavior in industry. In another study, Halpin (17) compared the leader behavior and leadership ideologies of school superintendents and airplane commanders. In still another study, Hemphill investigated leader behavior among college administrators. In each of
the studies mentioned above, it was the behavior of the officially designated leader which was studied.

2. "The leader as one who engages in leadership behaviors" (13, p. 883). In subsequent studies, the earlier definition of a leader proved to be insufficient. Hemphill (20) found that a more comprehensive definition of leadership was needed. He said that "to lead is to engage in an act which initiates a structure in the interaction of others as part of the process of solving a mutual problem" (20, p. 15). He suggested that leadership is a set of describable acts and that a leader is one who engages in this set of acts. This definition implied that the role of leader may be assumed by other than the formally appointed or designated leader.

3. "The leader as focus for the behavior of group members" (13, p. 881). Redl (32) described what he called the "central person." The term "leader," according to Redl, identifies one of ten emotional relationships which exist between the central person and other members of his group. Gibb described this relationship as that "which is characterized by love of the members for the central person, leading to incorporation of the personality of the central person in the ego ideal of the followers; i.e., they wish to become the kind of person he is" (13, p. 881).
4. *The leader in terms of sociometric choice* (13, p. 881). Jennings (27) found that sociometry was an effective technique for studying the structure of leadership in small groups. Gibb (14) reported a 0.80 correlation coefficient between the sociometric choices of leaders by co-workers and the ratings of trained observers. He concluded from his own and other researches that "there is good evidence that members of a group can identify reliably those persons who exert most influence upon them and that leaders defined this way are closely correlated with leaders identified by external observers and by other criteria" (13, p. 881).

5. *The leader as one who exercises influence over others* (13, p. 882). Seeman and Morris defined leadership acts as "acts by persons which influence other persons in a shared direction" (36, p. 1). The findings of Gibb (14) lend strong support to the idea that the leader identified by sociometric means wields strong influence within the group.

6. *The leader defined in terms of influence upon syntality* (13, p. 883). Cattell (5) defined the term "syntality" as the effectiveness of a group resulting from its total performance as a group. He further (5, p. 175) defined the leader as one who affects a change in group syntality. Thus one may measure leadership and evaluate it in terms of the degree to which group syntality is changed.
Two Historical Approaches to the Study of Leadership

1. The trait-approach is an appropriate classification for leadership studies prior to World War II. For half a century preceding 1940, the major emphasis in the study of leadership was upon its relationship to various personality traits. Researchers attempted to identify certain patterns of traits that would characterize the leader and set him apart from the non-leader. Though a number of traits were found to be related to leadership, no causal relationships could be found. Thus, by the beginning of the fourth decade of the century, the study of leadership had reached an impasse.

The substance of these earlier studies was summarized in a review of the literature by Stogdill (40). He found from his research a number of factors related to leadership, which he classified under five major headings:

1. **Capacity** (intelligence, alertness, verbal facility, originality, judgment),

2. **Achievement** (scholarship, knowledge, athletic accomplishments),

3. **Responsibility** (dependability, initiative, persistence, aggressiveness, self confidence, desire to excel),

4. **Participation** (activity, sociability, cooperation, adaptability, humor),

5. **Status** (socio-economic position, popularity) (40, p. 64).
Stogdill further concluded that the possession of a certain combination of traits does not make one a leader. His findings, however, did support the notion that the traits of both leaders and followers were relatively stable. The major conclusion of his study was that the aspects of leadership were situational, a conclusion further substantiated by Hemphill (23). Stogdill concludes by saying that

The findings suggest that leadership is not a matter of passive status, or of the mere possession of some combination of traits. It appears rather to be a working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion. Significant aspects of this capacity for organizing and expediting cooperative effort appear to be intelligence, alertness to the needs and motives of others, and insight into situations, further reinforced by such habits as responsibility, initiative, persistence, and self confidence (40, p. 66).

2. The situational or behavioral approach to the study of leadership gained considerable popularity as a result of Stogdill's and Hemphill's studies. The emphasis upon the relation of personality traits to leadership waned. According to Gibb (13), there are no consistent patterns of traits which can be said to characterize leaders. The only traits which can be said to be leadership traits are those that enable an individual in any given situation to (a) "contribute significantly to group locomotion in the direction of a recognized
goal, and (b) be perceived as doing so by fellow group members" (13, p. 889).

Following World War II, the Personnel Research Board and the Bureau of Business Research of The Ohio State University cooperatively initiated a ten-year program for the study of leadership. Shartle (37) headed up this program which had as its purpose initially the study of leader behavior in high-level executive positions. Leadership was viewed from the standpoint of the activities involved rather than from the standpoint of its "good" or "bad" connotations. Initial studies were conducted in the armed forces and in industry. The subjects for these studies were presidents, managers, vice presidents, supervisors, commanding officers, etc. Their activities were analyzed by interview, observation, and questionnaire and were classified into fourteen categories, which were reported in a paper by Shartle (38). These categories were as follows:

1. **Inspection of the Organization** - Direct observation and personal inspection of installations, buildings, equipment, facilities, operations, services, or personnel—for the purpose of determining conditions and keeping informed.

2. **Investigation and Research** - Acts involving the accumulation and preparation of information and data. (Usually prepared and presented in the form of written reports.)
3. **Planning** - Preparing for and making decisions which will affect the aims of the organization as to volume or quality of business or service (including thinking, reflection and reading, as well as consultations and conferences with persons relative to short-term and long-range plans).

4. **Preparation of Procedures and Methods** - Acts involving the mapping of procedures and methods for putting new plans into effect, as well as devising new methods for the performance of operations under existing plans.

5. **Coordination** - Acts and decisions designed to integrate and coordinate the activities of units within the organization or of persons within units, so as to achieve maximal over-all efficiency, economy, and control of operations.

6. **Evaluation** - Acts involving the consideration and evaluation of reports, correspondence, data, plans, decisions, or performances in relation to the aims, policies, and standards of the organization.

7. **Interpretation of Plans and Procedures** - Acts involving the interpretation and clarification for assistants and other staff personnel of directives, regulations, practices, and procedures.


9. **Personnel Activities** - Acts involving the selection, training, evaluation, motivation, or disciplining, of individuals, as well as acts designed to affect the morale, motivation, loyalty, or harmonious cooperation of personnel.

10. **Public Relations** - Acts designed to inform outside persons regarding the program and functions of the organization, to obtain information regarding public sentiment, or to create a favorable attitude toward the organization.
11. **Professional Consultation** - Giving professional advice and specialized assistance on problems of a specific or technical nature to persons within or outside the organization (other than technical supervision and guidance of own staff personnel).

12. **Negotiations** - Purchasing, selling, negotiating contracts or agreements, settling claims, etc.

13. **Scheduling, Routing and Dispatching** - Initiating action on determining the time, place, and sequence of operations.

14. **Technical and Professional Operations** - The performance of duties specific to a specialized profession (e.g., practice of medicine, auditing records, operating mechanics or equipment) (38, pp. 375-376).

At the University of Rochester other attempts were made to describe leader behavior in terms of activities rather than traits. Carter (2) reported eleven leadership principles which were adopted by the United States Army as a result of an analysis of the behavior of outstanding leaders in both military and civilian roles. In another study, Carter (1) reported on researches which attempted to analyze leader behavior in small homogeneous groups. Comparisons were made between the behavior of leaders and group members in both emergent and appointed leader situations. He found that there were two categories of behaviors in which the leaders consistently differed from other group members. Leaders consistently (a) diagnosed and interpreted the situation, and (b) gave instructions on how to get things done. This finding supported an earlier tentative conclusion by Carter,
et al. "Leaders are characteristically concerned with (a) getting insight or analyzing the situation, and (b) initiating the action required" (3, p. 595). Carter further concluded from these studies that leadership characterized by one set of behaviors in one situation may not be characterized by that same set of behaviors in another situation.

Hemphill's conclusions (23) regarding the situational nature of leader behavior necessitated redefining leadership as the "behavior of an individual when he is directing the activities of a group toward a shared goal" (19, p. 6). As a basis for investigating leader behavior, Hemphill postulated nine a priori dimensions of leader behavior. These dimensions were described as follows:

1. **Initiation.** The dimension, initiation, is described by the frequency with which a leader originates, facilitates, or resists new ideas and new practices.

2. **Membership.** The dimension, membership, is described by the frequency with which a leader mixes with the group, stresses informal interaction between himself and members, or interchanges personal services with members.

3. **Representation.** The dimension, representation, is described by the frequency with which the leader defends his group against attack, advances the interests of his group and acts in behalf of his group.

4. **Integration.** The dimension, integration, is described by the frequency with which a leader subordinates individual behavior, encourages pleasant group atmosphere, reduces conflict between members, or promotes individual adjustment to the group.
5. **Organization.** The dimension, organization, is described by the frequency with which the leader defines or structures his own work, the work of other members, or the relationships among members in the performance of their work.

6. **Domination.** The dimension, domination, is described by the frequency with which the leader restricts the behavior of individuals or the group in action, decision-making, or expression of opinion.

7. **Communication.** The dimension, communication, is described by the frequency with which a leader provides information to members, seeks information from them, facilitates exchange of information, or shows awareness of affairs pertaining to the group.

8. **Recognition.** The dimension, recognition, is described by the frequency with which a leader engages in behavior which expresses approval or disapproval of group members.

9. **Production.** The dimension, production, is described by the frequency with which a leader sets levels of effort or achievement or prods members for greater effort of achievement (21, pp. 5-6).

Questionnaire scales to measure these *a priori* dimensions were then constructed by Hemphill and Coons (24). These scales were applied to a large number of subjects. Intercorrelations were obtained and a factorial analysis was made. The results indicated that significant interrelationships existed among the nine *a priori* dimensions. Halpin and Winer (19) conducted a more complete factorial analysis of these dimensions. This analysis was made on a slightly modified version of the questionnaire developed by Hemphill and Coons. From this factorial study, Halpin and Winer identified four dimensions of leader
behavior which accounted for the total factor variance. These four dimensions and the percentages of the total variance for which each accounts are as follows:

I. **Consideration** (49.6%). Halpin and Winer associate this dimension of leader behavior "with behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the (leader) and his (group)" (18, p. 42). Gibb defines it as "the extent to which the leader, while carrying out his leader functions, is considerate of the men who are his followers. . . . Individual items indicate that the positive pole of this factor is characterized by warmth of personal relationships, readiness to explain actions, and by willingness to listen to subordinates" (13, p. 891).

II. **Initiating Structure** (33.6%). This is defined by Halpin and Winer as that behavior of the leader as he defines "the role which he expects each member of the (group) to assume, and endeavors to establish well-defined patterns of organization, channels of communication, and ways of getting jobs done" (18, p. 42-43). They further state that "this factor probably represents a basic and unique function of leadership. It is possible that other factors (including Consideration) may represent only facilitating means of accomplishing this end" (19, p. 28).
III. Production Emphasis (9.8%). This dimension represents a set of behaviors which stresses getting the job done. Items of the questionnaire which contribute most to this definition are "stresses being ahead of competing groups," "encourages overtime work," and "schedules work to be done."

IV. Sensitivity (Social Awareness) (7.0%). This dimension characterizes the leader who stresses social acceptability in his interactions with other group members.

In recent revisions of the LBDQ, dimensions III and IV are not measured. Since they accounted for so little of the total factor variance, attempts to measure them were impractical. Some attempts were made to improve the questionnaire by adding more items to measure dimensions III and IV. These too proved fruitless. Thus, the final revision of the LBDQ measures only the dimensions of Consideration and Initiating Structure.

Description and Measurement of Leader Behavior

A considerable number of empirical studies have been conducted for the purpose of describing and measuring leader behavior. It became necessary to enlarge upon the definition of leadership and at the same time delimit it. The definition initially adopted by The Ohio State Leadership Studies was insufficient. In subsequent studies, it was true that the
subjects studied were officially designated leaders; however, Morris and Seeman suggested that

The individual designated as leader behaves in accordance with the demands of many roles in addition to that of leader. Clearly some of his behavior is to be considered as leader behavior and some is not. From one point of view it might be said that whatever the leader does in the execution of his position, or in the fulfilment of his expected role, is leader behavior per se (30, p. 152).

Thus, the Ohio State Leadership Studies tentatively defined leadership as that "behavior of an individual when he is directing the activities of a group toward a shared goal" (19, p. 6).

In one study, Halpin (16) described and evaluated the leader behavior of aircraft commanders. His design involved three kinds of variables: (1) the crew members' descriptions of the aircraft commander's behavior, (2) evaluations of the aircraft commander's behavior by his superiors, and (3) evaluations of the commander's performance by securing sociometric ratings from his crew. He sought to determine the relationships between the descriptions of the commanders' behavior and the two sets of evaluative data. Halpin (16) found significant correlations between the ratings of the commander by his superiors and the Initiating Structure scores, and between the ratings of his crew members and the Consideration scores.
The commanders' superiors desired a high degree of Initiating Structure, with a moderately high degree of Consideration acceptable. For the crews, however, a high degree of Consideration was desirable. If this dimension was prevalent, then a moderately high degree of Initiating Structure was acceptable. Halpin concluded that

Our findings suggest that to select a leader who is likely to satisfy both his crew and his superiors, we do best by choosing an aircraft commander who is above average on both leader behavior dimensions (16).

In another study, Halpin (17) compared the leader behavior and leadership ideology of aircraft commanders and school administrators. He found that administrators showed more Consideration and less Initiating Structure than did aircraft commanders. These differences were assumed to be related to the differences between institutional settings. In education—where goals are broadly defined and less tangible—there may be a tendency for administrators to stress Consideration more than Initiating Structure. The major finding in this study was that "the leader's belief in how he should behave is not strongly associated with how his group members describe his behavior!" (17, p. 30)

Fleishman's studies (10, 11) dealt with supervisory behavior in industry. In the one study (10) no significant findings were reported. The recommendation was advanced,
however, for further empirical studies to be conducted in a number of industrial settings. In the other study (11) he found a correlation of 0.86 between employee attitudes toward their immediate supervisors and the executives' rating of the productivity of the various work groups. The findings supported the conclusion that supervisory behavior as perceived by employees was highly related to group productivity.

Evenson (8, 9), in describing the behavior of high school principals, found them to be defensive in their attitudes toward some aspects of leader behavior. Principals and superintendents generally referred to leadership as being "autocratic" and therefore "bad." Some principals were reluctant to behave in any manner not "democratic." The current terminology applied to leadership behavior is unfortunate because it inhibits otherwise desirable and effective behaviors. Evenson, therefore, found the LBDQ a useful instrument for describing the leader behavior of school administrators because the two dimensions were not found to be incompatible as might be true with terminology such as "autocratic" and "democratic."

The general consensus of the literature dealing with the description and measurement of leader behavior was aptly stated by Shartle. "Leadership behavior can be described reliably and in such terms that behavior differences can be
shown in quantitative terms" (37, p. 14). "A study of leadership therefore becomes a study of leadership acts and the variables which will be related to such acts" (38, p. 373).

Evaluating Leader Behavior

In the preceding section, the dimensions of leader behavior were described as seen by the leaders' work groups and by outside observers. One important aspect of these descriptions came to light when it was found by several researchers that leader behavior descriptions differed depending upon whether they were made by the leaders' administrative superiors or by their subordinates. Other more significant differences were observed when comparisons were made between the observed and ideal leader behavior as described by superiors and subordinates (13, p. 892).

Recent empirical studies have drawn much attention to these differences. Stouffer et al. (42) present considerable evidence to support the fact that the attitudes of officers and privates differ greatly with respect to authority, leaders, and leadership behavior. Perhaps the most enlightening were comparisons of privates, noncommissioned officers, and officers with regard to their attitudes toward the leader behavior of the noncommissioned officers. Other researchers have also explored this problem in other areas. Fleishman (11)
investigated the attitudes of workers, foremen, and plant superintendents in industry toward the leadership behavior of the foremen. In another study, Luckie (28) investigated the attitudes of teachers, directors of instruction, and superintendents toward the leader behavior of the directors of instruction. The findings in all these studies were similar. Privates, workers, and teachers were more likely to approve the behavior of their leaders (a) when the leader was more socially intimate with his subordinates, (b) when he was sympathetically indulgent in his supervisory behavior, and (c) when he minimized, in social and working relations, the status differences between himself and his subordinates. In addition, it was found that superiors approved of more formal and structuring behavior in the leadership activities of the intermediate leaders.

Halpin (16) in a study of the behavior and effectiveness of aircraft commanders found that the aircraft commanders' superiors approved stronger structuring behavior in the commanders' leadership activities, while their crews approved stronger behavior in the dimension of Consideration. It is well to note, however, that among the aircraft commanders' superiors a moderately high rating in Consideration was acceptable as long as the Structure rating was high. Also among the crews a moderately high rating in Structure was
acceptable as long as the Consideration rating was high. The implication here, which has been supported in many other studies, is that a leader is more likely to be successful as a leader if he is rated high in both dimensions of leader behavior by both his superiors and subordinates.

When investigating the leader behavior and the leadership ideologies of school administrators and aircraft commanders, Halpin (17) discovered that the leader behavior and leadership ideologies did not remain static from one vocational or professional setting to another. Aircraft commanders tended to be stronger in Initiating Structure in both their ideal behavior and their behavior as perceived by others, while school administrators tended to be stronger in the dimension of Consideration.

Roff (33) conducted a study of the leader behavior of two groups of leaders. Pilots with the rank of captain or higher were asked to rate the leader behavior of pilots who were their subordinates, while the subordinate pilots were asked to rate their superiors. He found that subordinates rated their superiors significantly lower than the superiors rated their subordinates on such factors as (a) sincerity, (b) impartiality, (c) concern for personal advantage, (d) readiness to mix with subordinates, and (e) readiness to share information with subordinates. The over-all differences
between the descriptions of superiors and subordinates were greatest in the dimensions of Consideration, Membership, and Communication.

Attempts to evaluate leader behavior by comparing the differences in descriptions from above and below were insufficient to describe effective or desirable, as opposed to ineffective or undesirable, behavior. In an effort to find some basis for evaluating leader behavior in terms of "good" or "poor," "effective" or "ineffective," "desirable" or "undesirable," Hemphill, Siegel, and Westie (25) developed a "discrepancy" score by which they could measure the difference between the "ideal" or "expected" leader behavior and the "perceived" or "actual" leader behavior. A high discrepancy score was indicative of poor leader behavior; while a low discrepancy score indicated good leader behavior. Hemphill, Siegel, and Westie were able to show relations between a number of Hemphill's (21) group dimensions and discrepancies between perceived and ideal leader behavior. The group dimensions of Viscidity and Polarization were regarded by these researchers as being the most important indices of the "goodness" of leadership.

Halpin and Winer (19) reported on a study in which fifty-two airplane commanders were evaluated by instructor teams on the dimensions of Consideration and Initiating Structure.
The raters considered Initiating Structure to be more closely associated with effective leadership than was Consideration. Under combat conditions, leadership was found to correlate negatively, though not significantly, with Consideration, while it was found to correlate quite significantly with Initiating Structure in a positive direction.

The majority of the studies, in which the behavior of an intermediate leader is described, point up an interesting dilemma. Gibb describes this dilemma in the following way:

If an intermediate-level officer is to be a real leader, he has a dual role to play. He must accept the norms and values of superior authority, thus serving as an agent of the impersonal and coercive organization of which he is part. To the extent that he does this effectively his superiors regard him highly. At the same time, he must win the willing followership of the men under him, so that he wields over them authority which they have themselves given him. He will be rated highly by the men to the extent that he shows "Consideration" for them and to the extent that he mingles freely with them and represents them against the cold machine which is the overall organization (13, pp. 894-95).

There has been considerable empirical research that bears out the notion that intermediate leaders are faced with a conflict of expectations from above and below. His superiors expect him to rate high in the dimension of Initiating Structure, while his subordinates expect him to rate high in the dimension of Consideration. However, this becomes less of a dilemma when one considers the fact that, as long
as the intermediate leader meets favorably the expectations of either of these groups with respect to the favored dimension, there is a high tolerance for the other dimension. This is to say that the leader who would meet successfully the expectations of both superiors and subordinates should rate high in both of these dimensions of leader behavior.

The evaluation of leader behavior cannot be restricted to the differences by which it is perceived by the various groups associated with the leader. Cattell (4, 5) suggested that leadership be evaluated entirely on the basis of the group's performance as it acts in response to the leader's behavior. Herein lies the implication that leadership cannot be studied without studying it in context. Thus, by studying the performance of the group, we are evaluating the effectiveness of the leadership activities which directed the group's performance.

Evaluation is an important aspect in the study of leader behavior. Gibb says, "It is not enough to know what leadership is, we want to know what 'good' leadership is and how it is differentiated from 'poor' leadership" (13, p. 895).

Leadership and Group Behavior

It has already been suggested that to study leadership one must look at the environment in which the leader performs.
Two kinds of environments were mentioned by Shartle (37). One kind of environment is the small tangible unit of which the leader is a part. The other environment is the larger intangible society or culture of which he and his group are a part. Research studies in leadership have generally been confined to the first of these environments. Four methods for studying group behavior grew out of the Ohio State Leadership Studies. These were

1. Formal organization chart.
2. Sociometric ratings. With whom do the members of the organization work? This is sometimes called the informal organization or interpersonal chart.
4. Group dimensions. What are the basic dimensions of the group or organization? How do groups differ in these dimensions? (37, p. 14)

Group dimensions offered the most practical approach for studying group behavior and its relation to leader behavior. Hemphill and Westie (26) identified fourteen dimensions of group behavior and developed quantitative scales by which the group members themselves and outside observers could describe the performance of the group. The dimensions were identified as

1. Autonomy
2. Control
3. Flexibility
4. Hedonic Tone
5. Homogeneity
6. Intimacy
7. Participation
8. Permeability
9. Polarization
10. Potency
11. Size
12. Stability
13. Stratification
14. Viscidity (26, pp. 325-342)

With the aid of a questionnaire consisting of items which described behaviors in the aforementioned dimensions, group members could indicate their perceptions of their group.

In regard to the study of leadership in the larger society or culture, Seeman suggested that "Leadership-followership patterns of a given institution are related to or are in part functions of the status systems and status ideologies which characterize the larger society in which the given institution functions" (35, p. 48).

Many of the studies dealing with leadership and the behavior of the group indicated that members generally desired a high degree of consideration from their leader. They wanted someone as their leader who would represent them in any conflict that might arise between the group and the higher organization. Pelz (31) suggested that this supposition did not hold true in all work groups. It may well be true of smaller work groups, but he found that in larger white-collar work groups the opposite seemed to be true. White-collar employees expected their immediate supervisor to identify more closely with his superiors. The suggestion
here was that the more closely the supervisor can identify with his superior the more influence he will have with them. This might imply that teachers would expect their principals to identify more with the administrative organization than with the faculty group. According to Evenson (8, 9), Luckie (28) and Watson (43), however, this did not appear to be so. Teachers tended to perceive their principal's behavior as being closely identified with administrative expectations, while they in truth expected him to show more consideration for the group. This may have accounted for Evenson's finding that principals perceived consideration behavior and structuring behavior as being incompatible. There appeared to have been a greater diversity of expectations among teachers with respect to the leader behavior of the principal than seemed to be the case among other work groups. This may again have been due to the nature of the objectives of the organization. It may be that teacher expectations would become more stable if educational objectives became more specific.

The great number of studies conducted under different organizational schemes indicated that leadership expectations varied greatly from one organization to another. But perhaps of greater significance was the fact that expectations of leadership and group behavior varied quite consistently within
the organization itself. Gibb (13) noted that within the organization there was a formal structure and an informal structure. The formal structure embodied those behaviors, rules, and group roles that became traditional as the organization gained longevity and stability. The informal structure consisted of the small cliques and congeniality groups that formed within the formal organization.

The expectations for leadership and group behavior varied from the formal to the informal organization. These expectations sometimes were incompatible. Scott (34), and Stogdill and Koehler (41) indicated in their studies that morale was related to the degree to which these incompatibilities existed. The compatibility of members' expectations depended upon the extent to which they understood the interrelatedness of their respective roles in both the formal and informal organization. Furthermore, the clarity with which members perceived their respective roles was related to the behavior of the intermediate leader or supervisor. These studies implied that the most successful leaders were those who perceived the organization structure and responded readily to the expectations of the members of the organization.

A number of studies based upon the work of Cattell and Wispe (6), and Hemphill (23) dealt with the relatedness of leadership to dimensions of group behavior. Hemphill (23)
originally found leadership to be related to pleasantness of
group membership (the dimension of hedonic tone) and to the
ability of the group to function in unity (viscidity).
Hemphill suggested that the leader's most important task is
to promote membership as a satisfying relationship and to
facilitate group action as opposed to individual action.

Mass (29) suggested that permeability (informality,
activity, membership open to all comers) could affect desir-
able changes in the behavior of leaders. These desirable
changes occurred mostly in social perception.

The dimension of control was found by Hemphill, Seigel
and Westie (25) to be related to the age of the leader. More
organizational control was exhibited by older leaders. They
found also that in older groups and among older leaders there
was less tendency for leaders to engage in informal interaction
with group members. This seemed to indicate that some di-
dimensions of group behavior would be more compatible with one
dimension of leadership than with another. For example, the
group dimension of control would probably be more compatible
with structuring behavior, while permeability would probably
be more compatible with consideration behavior. This could
then indicate that one type of leadership might be more appro-
piate for one group, while another group might find the
other type of leadership more appropriate.
There is a considerable lack of research in the area of educational leadership and teacher-group performance. The findings, however, are significant. Chase (7) found an affective relationship between the leader behavior of the principal and the teachers' satisfaction with their own teaching performance. Watson (43) found an interactive relationship to exist between the principal's expectations of the teachers and the teachers' expectations of the principal. She perceived the elementary school to be a social system in which the expectations of members influenced the behavior of the leader (principal) and the expectations of the leader influenced the behavior of the members (teachers). The dearth of research in educational leadership was pointed out by Evenson (9). He suggested that more studies were needed in the area of educational leadership, specifically in light of teacher satisfaction, teacher confidence in leadership, and teacher morale. Other areas that perhaps need some study would be the areas of teacher-group dimensions, and the identification of pre-group expectations (the expectations people have about the group and its leader prior to becoming a member of the group).
Summary

The literature contains many attempts to define, describe, and to evaluate leadership in the context of the group environment. From these attempts, a number of varied conclusions have been drawn. Some of these conclusions have been quite significant, while others have only been tentative; and still others have appeared to be contradictory. From a survey of the findings reported in the literature, the following four conclusions are quite discernible:

1. Leader behavior can be described and evaluated in quantitative terms;
2. Two major dimensions of leader behavior have been identified as Consideration and Initiating Structure;
3. Leader behavior is determined by the context of the group situation within which the leader functions;
4. Leader behavior affects and is affected by the behavior of the group.
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CHAPTER III

METHODS AND PROCEDURES

The methods and procedures employed in this study for the purpose of testing the hypotheses necessitated four major considerations. The first consideration related to the nature of and the procedures for selecting the sample. The second involved the selection of the instruments to be used for measuring the variables selected for investigation. The third consideration involved the determination of procedures for the collection of the data. The final consideration was the statistical procedures necessary for testing the hypotheses.

Nature and Selection of the Sample

The purpose of the study was to determine the expectations of student teachers toward the leadership role of the principal and to ascertain the relationship which these expectations had to a number of selected variables. Thus, the nature of the sample was determined by the purpose. The sample consisted of 877 student teachers from ten state-supported colleges and universities in Texas. In eight of the schools, all the subjects were seniors and enrolled in student teaching
during the spring semester of the 1966-67 school year. In two of the schools, all of the subjects were either seniors or would be seniors at the end of the semester. Some of these subjects were enrolled in seminars prior to doing their student teaching during the fall semester of the 1967-68 school year. The number of subjects from each of the ten schools was reduced to be proportional to the number of 1965-66 teacher education graduates from each of the ten schools reported in Table I.

The ten schools were selected to represent the various geographic and population areas of Texas. Contacts were made with deans of schools of education, chairmen of divisions of teacher education, or directors of student teaching in each of the selected schools to obtain permission to use in the study data obtained from some of their student teachers. An official of each of thirteen schools was contacted, and ten consented to participate in the study. One person in each of the schools was then contacted and asked to coordinate the testing and collection of data in his respective school.

Instructions (Appendix A) concerning the procedure for selecting the sample were mailed to each school representative. The size of the sample selected and tested, depending upon the size of the school, ranged from 50 to 140 in each of the schools. Each representative was asked to select his sample
in the following manner. The selection was made after the student teachers were assigned to their coordinators or to their seminars. The names of the student teacher coordinators or seminar leaders were selected by random selection until the number of groups were sufficient to provide the suggested number of subjects for the sample. All of the students assigned to the selected coordinator were used in the sample. The number of groups of student teachers selected to provide the sample in each school varied according to the size of the sample requested and the number enrolled in each seminar.

In two schools where departmental specialists were used as student teacher coordinators, a slight variation in the selection procedure was necessitated. Coordinators were selected from each department (e.g., English, social studies, math, etc.). If a department had more than one coordinator, the coordinator was selected at random from among those in his department.

The number of subjects requested from each school was in excess of the number actually needed for the study. The size of each school sample was reduced by randomly selecting those who were to be included in the refined sample. The size of the school sample was the same percentage of the total sample that the number of teacher education graduates of that school was of the total number of teacher education graduates
TABLE I

DISTRIBUTION OF THE SAMPLE AMONG THE PARTICIPATING SCHOOLS
BASED ON 1965-66 TEACHER EDUCATION GRADUATES

<table>
<thead>
<tr>
<th>College or University</th>
<th>1965-66 T. E. Grads</th>
<th>1965-66 Sample</th>
<th>Total in Smp1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elem</td>
<td>%</td>
<td>Sec</td>
</tr>
<tr>
<td>ETSU</td>
<td>180</td>
<td>10.6</td>
<td>307</td>
</tr>
<tr>
<td>NTSU</td>
<td>329</td>
<td>19.3</td>
<td>587</td>
</tr>
<tr>
<td>MU</td>
<td>61</td>
<td>3.6</td>
<td>84</td>
</tr>
<tr>
<td>SHSC</td>
<td>175</td>
<td>10.3</td>
<td>233</td>
</tr>
<tr>
<td>SRSC</td>
<td>82</td>
<td>4.8</td>
<td>127</td>
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<tr>
<td>TCAI</td>
<td>160</td>
<td>9.4</td>
<td>208</td>
</tr>
<tr>
<td>TSU</td>
<td>70</td>
<td>4.1</td>
<td>108</td>
</tr>
<tr>
<td>TTC</td>
<td>213</td>
<td>12.5</td>
<td>442</td>
</tr>
<tr>
<td>UH</td>
<td>167</td>
<td>9.8</td>
<td>356</td>
</tr>
<tr>
<td>UT</td>
<td>268</td>
<td>15.7</td>
<td>776</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1705</td>
<td>100.0</td>
<td>3228</td>
</tr>
</tbody>
</table>
for the ten schools during the 1965-66 school year. The total of all the samples from the participating schools after being reduced consisted of 553 subjects.

Selection and Description of the Instruments

Four instruments were administered to each subject who participated in the study. Each subject completed a Personal Data Sheet (Appendix B), which was used to ascertain among other things three variables—sex, race, and level of preparation. In addition each subject was asked to respond to the Gordon Personal Profile and the Gordon Personal Inventory. These instruments were used to measure eight personality variables. The fourth instrument used in the study was the Leader Behavior Description Questionnaire (Ideal Form). This instrument (Appendix C) was used to determine the expectations that student teachers have concerning the leadership role of the principal.

Personal Data Sheet

This instrument was devised by the researcher for the purpose of collecting biographical data pertinent to the study and to facilitate possible future follow-up studies utilizing the same subjects.
Gordon Personal Profile

The GPP provides easily obtained measures of four aspects of personality. They are Ascendancy (A), Responsibility (R), Emotional Stability (E), and Sociability (S). These four traits, which are essential to the adjustment of individuals in many social, educational, and industrial situations, have been found to be relatively independent and psychologically meaningful. The instrument has been used quite extensively for personnel research in the military and in industry. Though its use in educational research has been limited, it has good possibilities in this area. Because of its utility—ease of administration, scoring and interpretation—and its economy, it was quite desirable for this study.

The GPP consists of eighteen "Tetrads"—sets of four descriptive phrases. In each tetrad, each of the four traits is represented by one of the descriptive phrases. Two of the phrases in each tetrad have high average preference values and two have low average preference values.

The Profile employs the forced-choice technique. The respondent is asked to mark one phrase in each tetrad that is most like himself and one phrase that is least like himself. Two of the phrases are unmarked. In scoring the Profile, items marked most are given a value of two°, unmarked items are given a value of one°, and those marked
least are given no points. The sum of the eighteen scores for each trait constitutes the scale for that trait.

The Profile is available in two editions, the Booklet Edition and IBM Answer Sheet Edition. The IBM Answer Sheet Edition was used in this study. All answer sheets were hand-scored using the IBM Answer Sheet Hand-Scoring Key.

It has already been noted that the utility and economy of the instrument were major factors entering into the decision to use it in this study. It may be further noted that its practicality as a research instrument is supported by reliability and validity data. The reviews in the Sixth Edition of Buros' *Mental Measurements Yearbook* are quite complete. The weaknesses as well as the strengths of the instrument are pointed out. With respect to the reliability and validity of the GPP, Dicken wrote the following:

Reliability estimates based on several populations and computed by several standard methods are satisfactorily high. The validity of the scores in predicting external criteria in more than 20 studies is cited, and low or zero correlations are included as well as higher ones. These data are extensive enough to give the potential user a fair approximation of what he might expect in his own population. Validity correlations with peer ratings of college students are especially impressive, ranging from 0.47 to 0.73, but these subjects appear to be the same on which the item analysis were based (1, p. 23).
Dicken concludes that "Generally, the validity of the Gordon Personal Profile seems as good as usually found in the better inventories of this type" (1, p. 231).

Heilbrun in his review remarked that "Reliability figures suggest that the GPP scales are both internally consistent and stable over time" (1, p. 231). He further suggested, "The validity data bear testimony to the usefulness of the GPP scales. Moderate correlations between them and both counselor and peer ratings of behavior have been demonstrated" (1, p. 232). Both reviewers suggest that the weaknesses in the instrument are not sufficient to inhibit its usefulness to research.

**Gordon Personal Inventory**

The Inventory is a companion instrument to the Profile and similarly measures four aspects of personality. These are Cautiousness (C), Original Thinking (O), Personal Relations (P), and Vigor (V). Each of the traits including those on the Profile have been defined in Chapter I. The format of the GPI is quite similar to that of the GPP. Like the GPP the items of the GPI are arranged in tetrads, each containing two favorable and two unfavorable items. There are twenty tetrads in the Inventory compared to eighteen in
the Profile. The time required for administration is about ten to fifteen minutes.

Such criteria as factor analysis of items, analysis of internal consistency, and the social desirability of the items were employed in the construction of the instrument. The Inventory, like the Profile, employs the forced-choice technique, which the author of the test claims makes the test less susceptible to faking by those motivated to make a good impression.

Dicken (1, p. 227) reports that intercorrelations among the four scales for the Inventory are generally lower than for the Profile. In addition, correlations between the companion instruments are low to moderate, none exceeding 0.47. Concerning the reliabilities and validities of the scales, Dicken remarks,

The reliabilities of the scales are satisfactory, ranging from .77 to .84. There are a variety of norms. Validity studies in several different settings are cited. Validity data are not quite as extensive as for the Profile, and the external validity of the Inventory does not seem as well established by the data available. Omission of empirical item selection in constructing the test may have limited its external validity. Most of the validity correlations do not rise above the .30's (1, p. 228).

Despite the modest reports on the external validity of the instrument, Dicken concludes that "the Inventory seems generally as satisfactory a measure of traits of this type as other self-report devices which are available" (1, p. 228).
Heilbrun generally corroborates Dicken with regard to the reliability evidence on the Inventory; but he is sharply critical of the validity evidence reported in the manual. He states that the reliability "reported in terms of split-half or internal consistency coefficients is reasonably good (around .80) for all scales" (1, p. 228), whereas he quite frankly criticizes the author of the test for assuming that "any significant relationship with a performance criterion represents scale validation" (1, p. 229).

Summarily, Heilbrun remarks,

The GPI falls somewhat short of the Profile with respect to what has been accomplished in its development. In many respects a solid beginning has been made in establishing its usefulness as a brief personality measure, but in other respects . . . questions remain which demand further empirical investigation before the test user should employ the instrument without more than the usual caution (1, p. 229).

The Inventory was selected for this study for the same reasons as for the Profile, in addition to the fact that it is the companion instrument to the Profile.

Leader Behavior Description Questionnaire

There is really no standardized instrument for describing and measuring leader behavior. Most early studies of leadership attempted to get at it in an indirect manner, i.e., by the measuring of other traits that were supposedly related to leadership. The problem here was that the traits were measured
by indirect means. In more recent studies, attempts to measure leadership have begun by describing the behavior of the leader in the act of leading. To date the most sophisticated instrument developed for this purpose is the LBDQ. This instrument is the result of an interdepartmental effort over a period of ten years. No other instrument has been developed under comparable circumstances. This instrument was selected for this study because it fitted the purposes of the study adequately, and it has been proved as a reliable instrument for describing leader behavior.

The LBDQ was developed as one project of the Ohio State Leadership Studies. According to Halpin (13), it provides a technique for describing the leader behavior of the designated leader (appointed or elected) of a formal organization. The responses to the questionnaire are obtained from the members of the leader's work-group. Two dimensions of leader behavior--Initiating Structure (Str) and Consideration (Cns)--are scored. Each item in the questionnaire describes a behavior which may be attributed to a leader. The respondent is asked to indicate how often he perceives the leader engaging in the type of behavior indicated by the item. He responds by marking one of five adverbs: always, often, occasionally, seldom, never. A score in each of the two dimensions is obtained from several members of the leader's
work-group. These scores are then averaged to obtain an index of the leader's behavior in each of the dimensions.

The Ideal Form, which was used in this study, is essentially the same as the basic form described above. The items are identical. The respondent is asked to indicate by marking one of five adverbs (same as above) how often he thinks the leader should engage in the behavior described in the item. Both forms are scored identically.

The original instrument consisting of 150 items was developed by Hemphill and Coons (19). In its initial form, the questionnaire was used to describe leader behavior in nine hypothesized dimensions. The items for the instrument were selected from 1,790 items submitted for the instrument by members of the Personnel Research Board of the Ohio State University and by members of two advanced university classes. The items submitted were to apply to one or more of the nine hypothesized dimensions of leadership.

Each of the nine dimensions was assigned to one of the members of the research staff, and he was to select from the list of submitted items those which were applicable to that dimension for which he was responsible. These selections were then examined by the entire research staff. Those items which did not apply to the hypothesized dimensions or were applicable to more than one dimension were eliminated. The
questionnaire thus refined was administered to 357 individuals. Of these, 205 were members of various groups who described the behavior of their leaders; and 152 of the respondents were leaders of groups and described themselves as leaders. In all, twenty-nine different groups were identified from the 357 respondents.

The completed questionnaires were subjected to an item analysis. Tetrachoric correlation coefficients were computed to determine the relation between responses to the items of the questionnaire and the over-all ratings of the leader's ability as a leader. In addition, an item analysis was used to determine internal consistency. Intercorrelation techniques identified dependent relationships between the several dimensions of leadership. This initial instrument contained many weaknesses, but it did prove to be a useful instrument for gathering data about the behavior of leaders.

In reporting an adaptation of the instrument for Air Force officers, Halpin and Winer (14) identified two fundamental dimensions of leader behavior. These dimensions—Initiating Structure (Str) and Consideration (Cns)—resulted from a factor analysis of the responses of 300 B-29 crew members in describing the leader behavior of their commanders. Of four dimensions identified on the basis of the factor analysis, Initiating Structure (Str) and Consideration (Cns)
accounted for 34 and 50 per cent, respectively, of the common variance. In another study (15) based on a sample of 249 commanders, a correlation coefficient of .38 was found between the scores on the two dimensions.

Halpin defined Initiating Structure (Str) as "the leader's behavior in delineating the relationship between himself and the members of his group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting the job done" (13, p. 1). "Consideration (Cns)" he says, "refers to behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and members of the group" (13, pp. 1-2).

As a result of Halpin and Winer's studies, the questionnaire was refined first to 80 items then to 40 items which measure leader behavior in the dimensions of Initiating Structure (Str) and Consideration (Cns). In the 40-item form of the questionnaire, fifteen items are scored for Initiating Structure (Str), and fifteen are scored for Consideration (Cns). Ten of the items are not scored. When corrected for attenuation, odd-even estimates of reliability are 0.86 for Initiating Structure (Str) and 0.93 for Consideration (Cns).

A "between-vs.-within-group" analysis of variance has been employed in several studies (8, 9, 11,12) to check agreement among respondents in describing their respective leaders.
The F ratios in each case were found to be significant at the .01 level. The findings of the several studies seem to corroborate the notion that followers are generally in agreement in describing the same leader, whereas different leaders are generally described differently.

The LBDQ has been used extensively to study leader behavior in industrial, military, and educational settings. In their studies of the leader behavior of factory foremen, Fleishman (4, 5, 6, 7) and Fleishman, Harris and Burtt (8) found the two dimensions of leader behavior to be useful in describing supervisory behavior in industry and in evaluating the results of supervisory training programs. Halpin (9, 10, 11, 12) studied the leader behavior of both aircraft commanders and school superintendents. In one study (10), he found that the effectiveness of aircraft commanders was related to high ratings in both dimensions of leader behavior. In comparing the leader behavior and leadership ideologies of aircraft commanders and school superintendents, he found (11) that aircraft commanders tended to rate higher in Initiating Structure (Str) while school superintendents rated high in Consideration (Cns).

Other studies pertinent to the development and use of the LBDQ are listed in the bibliography for this chapter.
Procedures for Collecting Data

The subjects for this study were chosen from ten state colleges and universities which prepare teachers. The participating schools represented the various geographic areas of Texas. These schools, listed in Table I, were chosen so as to obtain a proportional representative sample of student teachers in Texas. The instruments were administered to a proportionate number of student teachers in each school, according to the specifications in Table I.

The subjects were each assigned a code number. This code number was entered instead of the subject's name on each questionnaire answer sheet, and all data was tabulated in numerical sequence according to code numbers.

The LBDQ was used to ascertain the subjects' expectations of the principal's leadership behavior with respect to the dimensions of Initiating Structure (Str) and Consideration (Cns). A score was obtained on each of these dimensions for each subject.

In addition, measures of eight personality traits were obtained for each subject from the Gordon Personal Profile and the Gordon Personal Inventory.

The subjects were asked to respond to these questionnaires prior to going to their teaching assignments. This was to insure that their expectations of the principal's
leader behavior would not be influenced by first impressions formed upon meeting the principal in the school to which they were assigned, or by impressions formed as a result of chance conversation about the principal between the cooperating teacher and other teachers in the school. The subjects' responses to the GPP and the GPI were recorded on IBM Answer Sheet Editions of the inventories. Responses to the LBDQ were recorded in the test booklet, and all answer sheets were hand-scored.

Accompanying the three instruments mentioned above was a Personal Data Sheet, which each subject was asked to complete. This form was used to ascertain the sex, race, and level of preparation of each subject.

Procedures for Treating Data

The data for each subject in this study were punched on IBM cards and statistical computations were made at the Computer Center at North Texas State University. Each research hypothesis was restated in the null form for statistical testing. In each case the .05 level of confidence was accepted as the level of statistical significance. The following statistical procedures were carried out.

1. To test Hypothesis 1, the product-moment correlation coefficient was computed for both Initiating Structure and
Consideration and each of the eight selected personality traits. A table of $r$ values was consulted to determine the significance of the correlation.

2. For Hypotheses 2-5, a mean and a standard deviation were computed for the group on each of the eight traits. The score distributions were then divided into three groups:

   (a) The high group (all scores falling more than one-half of one S. D. above the mean).

   (b) The middle group (all scores falling within one-half of one S. D. of the mean).

   (c) The low group (all scores falling more than one-half of one S. D. below the mean).

Comparisons were then made between the means of the scores of the high and low groups on each of the eight traits and the means of their scores on each of the dimensions of Initiating Structure (Str) and Consideration (Cns). In each case, the $t$ test for large group means was employed to test the significance of the difference between the group means.

3. Similarly for Hypotheses 6-9, group means and standard deviations were computed for the scores on each of the dimensions of Initiating Structure (Str) and Consideration (Cns). The score distributions for each of the dimensions were grouped in the manner described above. Comparisons were then made between the means of the high and low groups on
each of the two dimensions and the means of their scores on each of the eight personality traits. The \( t \) for large group means was again employed to test for the significance of the difference between the means of the comparison groups.

4. For Hypotheses 10 and 11, the subjects were grouped by race, sex, and level of preparation. An analysis of variance was computed, and \( F \) ratios were utilized to determine whether there were significant differences. Then \( t \) ratios were employed to determine wherein these differences lay. The results of this analysis of variance were used to compare the groups' scores on the dimensions of Initiating Structure and Consideration.

5. For Hypothesis 12, the mean of the scores for the total sample on Initiating Structure were compared with the mean of the scores on Consideration. The \( t \) test for large group means was used to test the significance of the difference.
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12. ______________, The Leader Behavior of School Superintendents, Columbus, The Ohio State University, 1956.

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CHAPTER IV

ANALYSIS OF THE DATA

The data for this study were analyzed to determine student teachers' expectations for the leader behavior of the principal. The findings of this analysis and the discussion of these findings are presented in this chapter. Each research hypothesis was restated in the null form, and the null hypothesis was tested. The .05 level of confidence was accepted as the level of statistical significance for rejecting the null hypothesis.

Analysis of the Data for Testing Hypothesis 1

It was stated in Hypothesis 1 that no significant correlations would be found between the measured personality traits of student teachers and their expectations of the leader behavior of the principal. In order to test this hypothesis, each variable was correlated with every other variable, and product moment correlation coefficients were obtained. To test the hypothesis, it was necessary to correlate each leadership variable with each of the personality variables. Intercorrelation of all variables, however,
was computed; and the results of this intercorrelation are presented in Table II.

TABLE II

INTERCORRELATIONS AMONG EIGHT MEASURED PERSONALITY VARIABLES AND TWO LEADERSHIP DIMENSIONS
FOR 553 SUBJECTS

<table>
<thead>
<tr>
<th>Variables</th>
<th>A</th>
<th>R</th>
<th>E</th>
<th>S</th>
<th>C</th>
<th>O</th>
<th>P</th>
<th>V</th>
<th>Str</th>
<th>Cns</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>- .06</td>
<td>.10</td>
<td>.65</td>
<td>-.07</td>
<td>.44</td>
<td>.11</td>
<td>.33</td>
<td>-.02</td>
<td>.00</td>
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</tr>
<tr>
<td>R</td>
<td>-.06</td>
<td>.55</td>
<td>-.14</td>
<td>.50</td>
<td>.20</td>
<td>.33</td>
<td>.32</td>
<td>.11</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>.10</td>
<td>.55</td>
<td>-.23</td>
<td>.28</td>
<td>.13</td>
<td>.40</td>
<td>.14</td>
<td>.06</td>
<td>-.07</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>.65</td>
<td>-.14</td>
<td>-.23</td>
<td>-.17</td>
<td>.20</td>
<td>.05</td>
<td>.19</td>
<td>.07</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-.07</td>
<td>.50</td>
<td>.28</td>
<td>-.17</td>
<td>.08</td>
<td>.49</td>
<td>.15</td>
<td>.04</td>
<td>-.06</td>
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<td>O</td>
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<td>P</td>
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<td>.40</td>
<td>.05</td>
<td>.49</td>
<td>.19</td>
<td>.05</td>
<td>.07</td>
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</tr>
<tr>
<td>V</td>
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<tr>
<td>Str</td>
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<td>.07</td>
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<td>.07</td>
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<tr>
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<td>-.08</td>
<td>.07</td>
<td>-.03</td>
<td>.21</td>
<td></td>
</tr>
</tbody>
</table>

For P to equal .05, r must equal .083; For P to equal .01, r must equal .109; For P to equal .001, r must equal .141.

Table II includes intercorrelations for eight personality traits and two leadership dimensions. These variables
are designated by symbols which will be used also in all subsequent tables. Ascendancy is designated by the letter A, Responsibility by R, Emotional Stability by E, Sociability by S, Cautiousness by C, Original Thinking by O, Personal Relations by P, Vigor by V, Initiating Structure by Str, and Consideration by Cns. The first eight variables are personality traits; and the last two, Initiating Structure and Consideration, are dimensions of leadership.

An analysis of Table II reveals no high correlation coefficients for any two variables. A few moderate coefficients are seen, however. For example, a coefficient of .65 was obtained for Ascendancy (A) and Sociability (S); a coefficient of .55 was obtained for Responsibility (R) and Emotional Stability (E); a coefficient of .50 was obtained for Responsibility (R) and Cautiousness (C); a coefficient of .49 was obtained for Cautiousness (C) and Personal Relations (P); a coefficient of .44 was obtained for Ascendancy (A) and Original Thinking (O); and a coefficient of .40 was obtained for Emotional Stability (E) and Personal Relations (P). These are all highly significant coefficients, having reached much better than the .001 level of confidence.

Though most of the obtained coefficients are low, many are significant. The following coefficients (in addition to those already mentioned above are significant at, or at better
than the .001 level of confidence: Ascendancy (A) and Vigor (V) with a coefficient of .33, Responsibility (R) and Original Thinking (O) with a coefficient of .20, Responsibility (R) and Personal Relations (P) with a coefficient of .33, Responsibility (R) and Vigor (V) with a coefficient of .32, Emotional Stability (E) and Sociability (S) with a coefficient of -.23, Emotional Stability (E) and Cautiousness (C) with a coefficient of .28, Sociability (S) and Cautiousness (C) with a coefficient of -.17, Sociability (S) and Original Thinking (O) with a coefficient of .20, Sociability (S) and Vigor (V) with a coefficient of .19, Cautiousness (C) and Vigor (V) with a coefficient of .15, Original Thinking (O) and Personal Relations (P) with a coefficient of .19, and Original Thinking (O) and Vigor (V) with a coefficient of .41.

The following coefficients reached the .01 level of confidence: Ascendancy (A) and Personal Relations (P) with a coefficient of .11, Responsibility (R) and Sociability (S) with a coefficient of -.14, Emotional Stability (E) and Original Thinking (O) with a coefficient of .13, Emotional Stability (E) and Vigor (V) with a coefficient of .14. Ascendancy (A) and Emotional Stability (E) with a coefficient of .10 reached only the .05 level of confidence.

With but one exception, Initiating Structure (Str) and Consideration (Cns) were not found to correlate significantly
with any of the measured personality traits. The one exception, Responsibility (R) was found to correlate significantly with Initiating Structure (Str). A coefficient of .11 was obtained, which was significant at better than the .01 level of confidence. All the other obtained coefficients of correlation are quite low, ranging from .07 to -.08. A low but significant correlation coefficient of .21 was obtained for Initiating Structure (Str) and Consideration (Cns). This was found to be significant at better than the .001 level of confidence.

Though the data do not provide any substantial results bearing upon the hypothesized condition, they do indicate at least one significant relationship—that Initiating Structure (Str) correlates significantly with Responsibility (R). The null hypothesis was rejected for Responsibility, but was accepted for the other seven traits.

Analysis of the Data for Testing Hypotheses 2 and 4

It was stated in Hypothesis 2 that subjects whose scores on Ascendancy (A), Cautiousness (C), Original Thinking (O), and Vigor (V), respectively, are at least one-half standard deviation above the mean would have higher means on Initiating Structure (Str) than would subjects whose scores on these respective traits are at least one-half standard deviation below the mean. In Hypothesis 4, it was stated that subjects
whose scores on Responsibility (R), Emotional Stability (E), and Personal Relations (P), respectively, are one-half standard deviation or more above the mean would have significantly lower means on Initiating Structure (Str) than would subjects whose scores on these respective traits are one-half standard deviation or more below the mean. When restated in the null form, Hypotheses 2 and 4 were stated as one hypothesis. That is, high and low groups for respective personality traits would not have significantly different means for Initiating Structure (Str). The score distribution for each of the measured personality traits was divided into three groups. The high group consisted of those subjects whose scores on the given trait were one-half standard deviation or more above the mean of the distribution. The low group consisted of those subjects whose scores were one-half standard deviation or more below the mean. The middle group was not used in the comparison. Means and standard deviations for scores on Initiating Structure (Str) were computed for each group. The high and low groups for each trait were then compared on the basis of their respective means for Initiating Structure (Str). Fisher's $t$ was then employed to test the significance of the difference between the means. The results of these tests are presented in Table III. In addition, Table III contains the means for Initiating Structure (Str) of the
high and low groups for each of the eight personality traits. The number of subjects in each group is also reported in the table. For example, the high group for the first trait, Ascendancy (A), consisted of 170 subjects. The group had a mean for Initiating Structure (Str) of 45.56. The low group had a mean of 45.96. The \( t \) ratio obtained upon testing for significance was .72, which was not significant.

**TABLE III**

**MEANS, STANDARD DEVIATIONS, AND \( t \) RATIOS FOR SCORES ON INITIATING STRUCTURE BY HIGH AND LOW PERSONALITY GROUPS**

| Traits | High | | | Low | | | | | | | |
|--------|------|---|---|------|---|---|---|---|---|---|---|---|---|---|---|---|
| N | M | SD | N | M | SD | N | M | SD | N | M | SD | N | M | SD | N | M | SD |
| A | 170 | 45.56 | 5.02 | 152 | 45.96 | 4.90 | .72 | NS |
| R | 163 | 46.71 | 4.83 | 152 | 45.55 | 4.98 | -2.14 | .05 |
| E | 214 | 46.21 | 5.10 | 156 | 45.28 | 4.66 | -1.79 | NS |
| S | 178 | 46.06 | 4.79 | 143 | 45.58 | 5.22 | -.85 | NS |
| C | 194 | 46.27 | 5.04 | 148 | 46.09 | 5.01 | -.32 | NS |
| O | 187 | 45.78 | 5.26 | 163 | 46.30 | 4.84 | .95 | NS |
| P | 179 | 46.39 | 5.12 | 165 | 45.67 | 4.77 | -1.34 | NS |
| V | 173 | 46.24 | 5.17 | 161 | 45.54 | 5.11 | 1.24 | NS |

Upon examining Table III, it is noted that only in the case of the high and low Responsibility (R) groups did they differ significantly on their means for Initiating Structure (Str). The difference between means was found to be
significant at better than the .05 level, with the high group having the higher mean. The high group had the higher mean also for Emotional Stability (E), Sociability (S), Cautiousness (C), Personal Relations (P), and Vigor (V). The low group had the higher mean for Ascendancy (A) and Original Thinking (O).

It is noted further from Table III that the high and low groups for Ascendancy (A), Cautiousness (C), Original Thinking (O), and Vigor (V) do not differ significantly in their means for Initiating Structure (Str). Therefore, for Hypothesis 2, the null hypothesis was retained and the research hypothesis rejected.

In Hypothesis 4A, it was stated that the low Responsibility (R) group would have a significantly higher mean for Initiating Structure (Str) than would the high group. It was restated in the null form as follows: the high and low Responsibility (R) will not have significantly different means for Initiating Structure (Str). The results presented in Table III show that the high Responsibility (R) group had a significantly higher mean than the low group. The null hypothesis, therefore, was rejected. Because the direction of difference was the opposite of that hypothesized, the research hypothesis was also rejected.

Since the high and low groups for Emotional Stability (E) and Personal Relations (P) did not differ significantly in
their means for Initiating Structure (Str), the null hypothesis for parts B and C of Hypothesis 4 was retained, and the research hypothesis was rejected.

Analysis of the Data for Testing Hypotheses 3 and 5

It was stated in Hypothesis 3 that subjects whose scores for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), and Vigor (V) are respectively one-half standard deviation or more above the mean would obtain higher means for Consideration (Cns) than would subjects whose respective scores for these traits are one-half standard deviation or more below the mean. This hypothesis was restated in the null form as follows: high and low groups for Ascendancy (A) and Cautiousness (C) will not have significantly different means for Consideration (Cns).

Means and standard deviation for Consideration (Cns) scores were computed for both the high group and the low group on personality traits. To test the null hypothesis of no difference between the high and low group means, t-ratios were obtained, the results of which are found in Table IV.

An examination of Table IV shows no significant differences between the means of the high group and the low
TABLE IV
MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR SCORES ON CONSIDERATION BY HIGH AND LOW PERSONALITY GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High</th>
<th>Low</th>
<th>t</th>
<th>P.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>A</td>
<td>170</td>
<td>48.36</td>
<td>4.26</td>
<td>152</td>
</tr>
<tr>
<td>R</td>
<td>163</td>
<td>48.53</td>
<td>3.89</td>
<td>172</td>
</tr>
<tr>
<td>E</td>
<td>214</td>
<td>48.04</td>
<td>4.13</td>
<td>156</td>
</tr>
<tr>
<td>S</td>
<td>178</td>
<td>48.19</td>
<td>4.15</td>
<td>143</td>
</tr>
<tr>
<td>C</td>
<td>194</td>
<td>48.14</td>
<td>3.85</td>
<td>148</td>
</tr>
<tr>
<td>O</td>
<td>187</td>
<td>47.79</td>
<td>3.91</td>
<td>163</td>
</tr>
<tr>
<td>P</td>
<td>179</td>
<td>47.81</td>
<td>4.18</td>
<td>165</td>
</tr>
<tr>
<td>V</td>
<td>173</td>
<td>48.14</td>
<td>4.20</td>
<td>161</td>
</tr>
</tbody>
</table>

group for any of the personality traits. The difference between the means of the high and low group on Original Thinking (O) approaches significance at the .05 level but does not reach it. It was noted, however, that the low group had noticeably higher means for Emotional Stability (E), Cautiousness (C), Original Thinking (O), and Personal Relations (P). The differences between the means of the high and low groups on Ascendancy (A), Responsibility (R), Sociability (S) and Vigor (V) are quite small. On the strength of the results
presented in Table IV, the null hypothesis for Hypotheses 3 and 5 was retained, and the research hypothesis was rejected.

Analysis of the Data for Testing Hypotheses 6 and 7

Hypothesis 6 stated that subjects whose scores for Initiating Structure (Str) are one-half standard deviation or more above the mean would have significantly higher mean scores on each of the traits, Ascendancy (A), Cautiousness (C), and Vigor (V), than would subjects whose scores for Initiating Structure (Str) are one-half standard deviation or more below the mean. In the null hypothesis form this was restated thus: the high group and the low group on Initiating Structure (Str) will not have significantly different means for Ascendancy (A), Cautiousness (C), or Vigor (V). Hypothesis 7 asserted that subjects whose scores for Initiating Structure (Str) are one-half standard deviation or more above the mean would have significantly lower mean scores respectively for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), and Personal Relations (P) than would subjects whose scores for Initiating Structure (Str) are one-half standard deviation or more below the mean. The null form of the hypothesis stated that the high group and the low group for Initiating Structure
(Str) will not have significantly different means for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), or Personal Relations (P). The high and the low groups were compared on the basis of their respective means on each of the traits. To test the null hypothesis of no significant difference, Fisher's t was employed. The results of this analysis are presented in Table V.

### Table V

**Means, Standard Deviations, and t Ratios for Scores on Personality Traits by High and Low Initiating Structure Groups**

| Traits | High Str  
|        | N = 178 | Low Str  
<p>|        | N = 170 |</p>
<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>22.21</td>
<td>5.56</td>
<td>22.49</td>
<td>5.81</td>
<td>.46</td>
<td>NS</td>
</tr>
<tr>
<td>R</td>
<td>26.17</td>
<td>5.10</td>
<td>25.07</td>
<td>5.26</td>
<td>-1.97</td>
<td>.05</td>
</tr>
<tr>
<td>E</td>
<td>24.58</td>
<td>5.76</td>
<td>23.66</td>
<td>6.17</td>
<td>-1.43</td>
<td>NS</td>
</tr>
<tr>
<td>S</td>
<td>22.96</td>
<td>5.58</td>
<td>22.22</td>
<td>5.94</td>
<td>-1.20</td>
<td>NS</td>
</tr>
<tr>
<td>C</td>
<td>26.07</td>
<td>7.00</td>
<td>25.63</td>
<td>6.33</td>
<td>-.62</td>
<td>NS</td>
</tr>
<tr>
<td>O</td>
<td>24.63</td>
<td>5.93</td>
<td>25.01</td>
<td>5.97</td>
<td>.58</td>
<td>NS</td>
</tr>
<tr>
<td>P</td>
<td>25.85</td>
<td>5.85</td>
<td>24.93</td>
<td>6.33</td>
<td>-1.41</td>
<td>NS</td>
</tr>
<tr>
<td>V</td>
<td>24.53</td>
<td>6.26</td>
<td>24.15</td>
<td>6.11</td>
<td>-.56</td>
<td>NS</td>
</tr>
</tbody>
</table>
An examination of Table V reveals only one significant difference. The high group for Initiating Structure (Str) has a higher mean for Responsibility (R) than does the low group. The difference between the means of these groups on Responsibility (R) is significant at just better than the .05 level of confidence. In none of the other cases are the differences significant. It was noted, however, that the high group had noticeably higher means for Emotional Stability (E), Sociability (S), and Personal Relations (P) than did the low group. On Ascendancy (A), Cautiousness (C), Original Thinking (O), and Vigor (V), the differences between the high group and the low group are quite small.

For Hypothesis 6, the results presented in Table V are not sufficient to warrant rejection of the null hypothesis. Therefore, the null hypothesis was accepted, and the research hypothesis was rejected. It was stated in Hypothesis 7A that the group high on Initiating Structure (Str) would have a significantly lower mean for Responsibility (R) than would the group low on Initiating Structure (Str). Stated in the null form: high and low groups on Initiating Structure (Str) will not have significantly different means for Responsibility (R). Since a significant difference was found, the null hypothesis was rejected. The direction of the difference, however, was opposite to that hypothesized;
thus the research hypothesis was also rejected. In parts B, C, D, and E of Hypothesis 7, no significant differences were found. In each of these cases, therefore, the null hypothesis was accepted and the research hypothesis was rejected.

Analysis of the Data for Testing Hypotheses 8 and 9

It was stated in Hypothesis 8 that subjects whose scores for Consideration (Cns) are one-half standard deviation or more above the mean would have significantly higher means respectively for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), and Personal Relations (P) than would subjects whose scores for Consideration (Cns) are one-half standard deviation or more below the mean. This was stated in the null form as thus: high and low groups on Consideration (Cns) will not have significantly different means for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), or Personal Relations (P).

Hypothesis 9 asserted that subjects whose scores for Consideration (Cns) are one-half standard deviation or more above the mean would have significantly lower means respectively for Ascendancy (A), Cautiousness (C), and Vigor (V) than would subjects whose scores for Consideration (Cns) are one-half standard deviation or more below the mean. In the
null form, it was stated that high and low groups for Consideration (Cns) will not have significantly different means for Ascendancy (A), Cautiousness (C), or Vigor (V).

The group high on Consideration (Cns) was compared with the group low on Consideration on the basis of their respective means for each of the eight personality traits. Fisher's $t$ was then employed to test the null hypothesis of no difference between the mean of the high group and the mean of the low group. The results of these analyses and tests are presented in Table VI.

### Table VI

<table>
<thead>
<tr>
<th>Traits</th>
<th>High Cns N = 169</th>
<th>Low Cns N = 182</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>22.38</td>
<td>5.87</td>
<td>22.45</td>
<td>5.98</td>
</tr>
<tr>
<td>R</td>
<td>25.27</td>
<td>5.60</td>
<td>25.70</td>
<td>4.63</td>
</tr>
<tr>
<td>E</td>
<td>23.40</td>
<td>6.46</td>
<td>24.58</td>
<td>5.50</td>
</tr>
<tr>
<td>S</td>
<td>22.98</td>
<td>5.96</td>
<td>22.60</td>
<td>5.71</td>
</tr>
<tr>
<td>C</td>
<td>25.08</td>
<td>7.02</td>
<td>26.29</td>
<td>6.26</td>
</tr>
<tr>
<td>O</td>
<td>24.26</td>
<td>6.09</td>
<td>25.37</td>
<td>5.82</td>
</tr>
<tr>
<td>P</td>
<td>24.99</td>
<td>6.26</td>
<td>25.69</td>
<td>5.65</td>
</tr>
<tr>
<td>V</td>
<td>24.32</td>
<td>5.85</td>
<td>24.75</td>
<td>5.78</td>
</tr>
</tbody>
</table>
Upon examining Table VI, it is noted that no significant differences were obtained. For Emotional Stability (E), Cautiousness (C), Original Thinking (O), and Personal Relations (P), the low group has noticeably higher means than does the high group. The differences, however, are not significant. For Ascendancy (A), Responsibility (R), Sociability (S), and Vigor (V), the differences between the means of the high groups and the means of the low groups are small.

For both Hypotheses 8 and 9, the data presented in Table VI warranted the acceptance of the null hypothesis and the rejection of the research hypothesis.

Analysis of the Data for Testing
Hypotheses 10A and 11A

For Hypotheses 10 and 12, all 877 subjects were used. It was stated in Hypothesis 10A that male subjects would have significantly higher scores for Initiating Structure (Str) than would female subjects. This was restated in the null hypothesis form as thus: there will be no significant differences in the mean scores for Initiating Structure (Str) attained by male and female student teachers. Hypothesis 11A stated that females would have higher scores for Consideration (Cns) than would male subjects. Restated in the null form, there will be no significant differences in the mean scores on Consideration (Cns) attained by male and female subjects.
Both hypotheses were tested concurrently. Means and standard deviations for scores on Initiating Structure (Str) and Consideration (Cns) were obtained for male and female groups. Fisher's $t$ was employed to test the null hypothesis of no difference. The results of these computations are presented in Table VII.

**TABLE VII**

MEANS, STANDARD DEVIATIONS, AND $t$ RATIOS FOR SCORES ON ALL VARIABLES BY MALE AND FEMALE GROUPS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Male $N = 161$</th>
<th>Female $N = 716$</th>
<th>$t$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>A</td>
<td>23.54</td>
<td>5.47</td>
<td>22.22</td>
<td>5.45</td>
</tr>
<tr>
<td>R</td>
<td>25.07</td>
<td>4.90</td>
<td>25.77</td>
<td>4.96</td>
</tr>
<tr>
<td>E</td>
<td>25.25</td>
<td>5.51</td>
<td>23.71</td>
<td>5.70</td>
</tr>
<tr>
<td>S</td>
<td>21.99</td>
<td>5.79</td>
<td>22.89</td>
<td>5.56</td>
</tr>
<tr>
<td>C</td>
<td>25.58</td>
<td>6.44</td>
<td>25.79</td>
<td>6.50</td>
</tr>
<tr>
<td>O</td>
<td>25.57</td>
<td>5.10</td>
<td>24.65</td>
<td>5.99</td>
</tr>
<tr>
<td>P</td>
<td>25.80</td>
<td>5.66</td>
<td>25.78</td>
<td>5.78</td>
</tr>
<tr>
<td>V</td>
<td>25.18</td>
<td>5.69</td>
<td>24.43</td>
<td>5.90</td>
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<td>Str</td>
<td>45.47</td>
<td>5.66</td>
<td>46.23</td>
<td>4.74</td>
</tr>
<tr>
<td>Cns</td>
<td>47.45</td>
<td>4.21</td>
<td>47.95</td>
<td>4.25</td>
</tr>
</tbody>
</table>
An analysis of Table VII revealed that female subjects had higher means for both Initiating Structure (Str) and Consideration (Cns) than did male subjects. In neither case, however, was the difference between the means significant. On the strength of these findings, the null hypothesis was accepted, and the research hypothesis was rejected.

A further examination of the table revealed some findings that did not bear upon the hypotheses. Generally, male and female subjects did not differ in their mean scores on personality traits. In only two cases did men differ significantly from women. These were in Ascendancy (A) and Emotional Stability (E). Men had significantly higher means for both traits, the difference being in both cases significant at better than the .01 level of confidence. Men also had noticeably higher means for Original Thinking (O) and Vigor (V), while women had noticeably higher means for Responsibility (R) and Sociability (S). For Cautiousness (C) and Personal Relations (P), the difference was small.

Analysis of the Data for Testing Hypotheses 10B and 11B

Hypothesis 10B stated that secondary subjects will have significantly higher scores on Initiating Structure (Str) than will elementary subjects. This was stated in the null hypothesis form as: there will be no significant differences
in the mean scores on Initiating Structure (Str) attained by elementary and secondary student teachers. Hypothesis 11B stated that elementary subjects would have significantly higher scores for Consideration (Cns) than would secondary subjects. It was restated in the null form as: elementary and secondary subjects would not have significantly different scores for Consideration (Cns). Results of the data are presented in Table VIII.

**TABLE VIII**

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR SCORES ON ALL VARIABLES BY SECONDARY AND ELEMENTARY GROUPS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Elementary N = 389</th>
<th>Secondary N = 488</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>21.89</td>
<td>5.25</td>
<td>22.91</td>
<td>5.61</td>
</tr>
<tr>
<td>R</td>
<td>25.99</td>
<td>4.83</td>
<td>25.37</td>
<td>5.03</td>
</tr>
<tr>
<td>E</td>
<td>24.09</td>
<td>5.68</td>
<td>23.91</td>
<td>5.70</td>
</tr>
<tr>
<td>S</td>
<td>22.74</td>
<td>5.70</td>
<td>22.71</td>
<td>5.54</td>
</tr>
<tr>
<td>C</td>
<td>26.15</td>
<td>6.37</td>
<td>25.43</td>
<td>6.57</td>
</tr>
<tr>
<td>O</td>
<td>23.85</td>
<td>5.90</td>
<td>25.59</td>
<td>5.69</td>
</tr>
<tr>
<td>P</td>
<td>26.47</td>
<td>5.59</td>
<td>25.24</td>
<td>5.83</td>
</tr>
<tr>
<td>V</td>
<td>24.17</td>
<td>5.78</td>
<td>24.89</td>
<td>5.91</td>
</tr>
<tr>
<td>Str</td>
<td>46.26</td>
<td>4.83</td>
<td>45.95</td>
<td>5.01</td>
</tr>
<tr>
<td>Cns</td>
<td>48.31</td>
<td>4.29</td>
<td>47.50</td>
<td>4.18</td>
</tr>
</tbody>
</table>

By examining Table VIII, it was noted that the elementary group had a significantly higher mean for Consideration (Cns)
than did the secondary group, the difference being significant at better than the .01 level of confidence. For Initiating Structure (Str), there was only a very small difference between the means of the two groups. For Hypothesis 10B, the data were not sufficient to warrant rejection of the null hypothesis. Therefore, the null hypothesis was accepted, and the research hypothesis was rejected. For Hypothesis 11B, the data did warrant rejection of the null hypothesis. Therefore, the null was rejected, and the research hypothesis was accepted.

Table VIII consisted also of the means of the elementary and secondary groups for each of the eight personality traits. The data in Table VIII indicated that the secondary group had significantly higher means for Ascendancy (A) and Original Thinking (O) than did the elementary group. The $t$ ratio obtained for testing the null hypothesis of no difference for the two groups on Ascendancy (A) was -2.76, which was found to be significant at better than the .01 level. A $t$ ratio of -4.42 was obtained when testing the null hypothesis of no difference for the two groups on Original Thinking (O). This was found to be significant at better than the .001 level of confidence. The data in Table VIII also indicated that the elementary group had a significantly higher mean for Personal Relations (P) than did the secondary group. A $t$ ratio of
3.18 was obtained when testing the null hypothesis of no difference. This was found to be significant at better than the .01 level of confidence.

No other differences were significant; however, the elementary group had noticeably higher means for Responsibility (R) and Cautiousness (C). For Emotional Stability (E) and Sociability (S), the differences between the means of the two groups were quite small.

Analysis of the Data for Testing Hypotheses 10C, 10D, 11C, and 11D

Hypothesis 10C stated that Latin-American subjects will have higher scores for Initiating Structure (Str) than will either Negro or Anglo-American subjects. Hypothesis 10D stated that Negro subjects will have higher Initiating Structure (Str) scores than will Anglo-American subjects. When restated in the null hypothesis form, these two hypotheses were combined into one. The null hypothesis stated that there will be no significant differences in the mean scores on Initiating Structure (Str) attained by Anglo-American, Negro, and Latin-American subjects.

Hypothesis 11C stated that Anglo-American subjects will obtain higher scores for Consideration than will either Negro or Latin-American subjects. Hypothesis 11D stated that Negro subjects will have higher scores for Consideration (Cns) than
will Latin-American subjects. When restated in the null hypothesis form, both these hypotheses were combined into one. The null hypothesis stated that there will be no significant differences in the mean scores on Consideration (Cns) attained by Anglo-American, Negro, and Latin-American subjects. The results of comparing Negro and Latin-American groups are presented in Table IX.

### TABLE IX

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR SCORES ON ALL VARIABLES BY LATIN-AMERICAN AND NEGRO GROUPS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Negro N = 58</th>
<th>Latin-American N = 48</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>23.34 4.34</td>
<td>22.25 4.39</td>
<td>1.02</td>
<td>NS</td>
</tr>
<tr>
<td>R</td>
<td>26.84 3.83</td>
<td>25.54 4.98</td>
<td>1.35</td>
<td>NS</td>
</tr>
<tr>
<td>E</td>
<td>25.86 4.34</td>
<td>24.10 5.59</td>
<td>1.59</td>
<td>NS</td>
</tr>
<tr>
<td>S</td>
<td>22.86 4.80</td>
<td>22.83 5.35</td>
<td>.03</td>
<td>NS</td>
</tr>
<tr>
<td>C</td>
<td>27.45 5.34</td>
<td>25.98 5.91</td>
<td>1.16</td>
<td>NS</td>
</tr>
<tr>
<td>O</td>
<td>25.16 6.30</td>
<td>25.33 5.18</td>
<td>-.16</td>
<td>NS</td>
</tr>
<tr>
<td>P</td>
<td>27.07 4.81</td>
<td>25.63 5.16</td>
<td>1.29</td>
<td>NS</td>
</tr>
<tr>
<td>V</td>
<td>24.47 5.10</td>
<td>24.42 5.32</td>
<td>.04</td>
<td>NS</td>
</tr>
<tr>
<td>Str</td>
<td>47.41 4.69</td>
<td>45.94 6.18</td>
<td>1.54</td>
<td>NS</td>
</tr>
<tr>
<td>Cns</td>
<td>46.59 4.09</td>
<td>48.35 4.80</td>
<td>-2.14</td>
<td>.05</td>
</tr>
</tbody>
</table>
Table IX contains the results of comparing Latin-American and Negro groups on all variables. From an examination of this table, it was found that Latin-American subjects had a significantly higher mean for Consideration (Cns) than did the Negro group. The t ratio obtained from testing the null hypothesis of no significant difference was -2.14, which indicated significance at better than the .05 level of confidence. No other differences were significant, but a study of the table shows that Negro subjects had noticeably higher means for Ascendancy (A), Responsibility (R), Emotional Stability (E), Cautiousness (C), Personal Relations (P), and Initiating Structure (Str). None of these differences reached significance.

Hypothesis 10C stated in part that Latin-American subjects will have significantly higher scores for Initiating Structure (Str) than will Negro subjects. It was restated in the null form as: there will be no significant differences in the mean scores on Initiating Structure (Str) attained by Negro and Latin-American subjects. The results presented in Table IX supported the null hypothesis; therefore, it was accepted, and the research hypothesis was rejected.

Hypothesis 11C stated in part that Negro subjects will have significantly higher scores for Consideration (Cns) than
will Latin-American subjects. This was restated as the null hypothesis of no difference. The data did not support the null hypothesis; therefore it was rejected. The direction of difference, however, was opposite to the hypothesized condition; therefore the research hypothesis was also rejected.

Comparisons between the Anglo-American group and the Latin-American group are shown in Table X.

**TABLE X**

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR SCORES ON ALL VARIABLES BY ANGLO-AMERICAN AND LATIN-AMERICAN GROUPS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Anglo-American</th>
<th>Latin-American</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M = 771</td>
<td>M = 48</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>22.41</td>
<td>5.61</td>
<td>22.25</td>
<td>4.39</td>
</tr>
<tr>
<td>R</td>
<td>25.56</td>
<td>5.01</td>
<td>25.34</td>
<td>4.98</td>
</tr>
<tr>
<td>E</td>
<td>23.84</td>
<td>5.77</td>
<td>24.10</td>
<td>5.59</td>
</tr>
<tr>
<td>S</td>
<td>22.70</td>
<td>5.68</td>
<td>22.83</td>
<td>5.35</td>
</tr>
<tr>
<td>C</td>
<td>25.61</td>
<td>6.59</td>
<td>25.98</td>
<td>5.91</td>
</tr>
<tr>
<td>O</td>
<td>24.76</td>
<td>5.85</td>
<td>25.33</td>
<td>5.18</td>
</tr>
<tr>
<td>P</td>
<td>25.70</td>
<td>5.85</td>
<td>25.63</td>
<td>5.16</td>
</tr>
<tr>
<td>V</td>
<td>24.59</td>
<td>5.95</td>
<td>24.42</td>
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<td>Str</td>
<td>46.00</td>
<td>4.85</td>
<td>45.94</td>
<td>6.18</td>
</tr>
<tr>
<td>Cns</td>
<td>47.92</td>
<td>4.20</td>
<td>48.35</td>
<td>4.80</td>
</tr>
</tbody>
</table>

An examination of Table X shows that no significant differences were found. For all variables, the differences
between the Anglo-American group and the Latin-American group were very small. The data did not warrant rejection of the null hypothesis; therefore, it was accepted. The research hypothesis was rejected.

Table XI presents findings for Negroes and Anglo-Americans.

### TABLE XI

**MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR SCORES ON ALL VARIABLES BY ANGLO-AMERICAN AND NEGRO GROUPS**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Anglo-American</th>
<th>Negro</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 771</td>
<td>N = 58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>22.41</td>
<td>5.61</td>
<td>23.34</td>
<td>4.34</td>
</tr>
<tr>
<td>R</td>
<td>25.56</td>
<td>5.01</td>
<td>26.84</td>
<td>3.83</td>
</tr>
<tr>
<td>E</td>
<td>23.84</td>
<td>5.77</td>
<td>25.86</td>
<td>4.34</td>
</tr>
<tr>
<td>S</td>
<td>22.70</td>
<td>5.68</td>
<td>22.86</td>
<td>4.80</td>
</tr>
<tr>
<td>C</td>
<td>25.61</td>
<td>6.59</td>
<td>27.45</td>
<td>5.34</td>
</tr>
<tr>
<td>O</td>
<td>24.76</td>
<td>5.85</td>
<td>25.16</td>
<td>6.30</td>
</tr>
<tr>
<td>P</td>
<td>25.70</td>
<td>5.85</td>
<td>27.07</td>
<td>4.81</td>
</tr>
<tr>
<td>V</td>
<td>24.59</td>
<td>5.95</td>
<td>24.47</td>
<td>5.10</td>
</tr>
<tr>
<td>Str</td>
<td>46.00</td>
<td>4.85</td>
<td>47.41</td>
<td>4.69</td>
</tr>
<tr>
<td>Cns</td>
<td>47.92</td>
<td>4.20</td>
<td>46.59</td>
<td>4.09</td>
</tr>
</tbody>
</table>

An analysis of Table XI shows that for Initiating Structure (Str) the Negro group had a significantly higher mean than did the Anglo-American group. A t ratio of -2.11 was obtained, which was significant at better than the .05 level of confidence. In addition, for Consideration (Cns),
the Anglo-American group had a significantly higher mean than did the Negro group. Hypothesis 10D stated that Negro subjects will have significantly higher scores for Initiating Structure (Str) than will Anglo-American subjects. It was restated in the null form for the purpose of testing as: there will be no significant differences in the mean scores on Initiating Structure (Str) attained by Negro and Anglo-American subjects. The data did not support the null hypothesis. It was, therefore, rejected; and the research hypothesis was accepted.

Hypothesis 11C stated in part that Anglo-American subjects will have significantly higher scores for Consideration (Cns) than will Negro subjects. This was restated in the null hypothesis form as: there will be no significant differences in the mean scores on Consideration (Cns) attained by Negro and Anglo-American subjects. The data presented in Table XI did not support the null hypothesis, since the Anglo-American group did have a significantly higher mean. The null hypothesis was, therefore, rejected; and the research hypothesis was accepted.

Analysis of the Data for Testing Hypothesis 12

Hypothesis 12 stated that the entire sample will have a significantly higher mean for Consideration (Cns) than for
Initiating Structure (Str). For the purpose of testing, this hypothesis was restated in the null form as: there will be no significant differences in the means scores on Consideration (Cns) and Initiating Structure (Str) attained by the entire sample. Tests were made for the means of the initial sample, consisting of 877 subjects, and for the means of the refined sample, consisting of 553 subjects. Fisher's $t$ was employed to test the null hypothesis of no difference. The results of these computations are shown in Table XII.

**TABLE XII**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Cns</th>
<th>Str</th>
<th>$t$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Initial</td>
<td>877</td>
<td>47.86</td>
<td>4.25</td>
<td>46.09</td>
<td>4.93</td>
</tr>
<tr>
<td>Refined</td>
<td>553</td>
<td>48.17</td>
<td>4.15</td>
<td>45.96</td>
<td>4.98</td>
</tr>
</tbody>
</table>

An examination of Table XII shows that for both the initial and the refined samples the means for Consideration (Cns) were significantly higher than the means for Initiating Structure (Str). The $t$ ratio obtained for the initial sample
is 11.80, and for the refined sample is 11.02. In each case, the level of significance is much better than the .001 level.

It is noted that compared with the standardization groups (1) the means for both dimensions are quite high. A sample of 251 B-29 and B-50 aircraft commanders was rated on Initiating Structure (Str) with an obtained mean of 41.6 and a standard deviation of 4.5. A sample of 144 RB-47 aircraft commanders had an obtained mean of 40.3 and a standard deviation of 6.1. A sample of 64 educational administrators had an obtained mean of 37.9 and a standard deviation of 4.4. For Consideration (Cns), the B-29 and B-50 commanders had a mean of 41.4; the RB-47 commanders had a mean of 44.8; and the educational administrators had a mean of 44.7.

The data presented in Table XII is sufficient to warrant the rejection of the null hypothesis. The research hypothesis was accepted.

Additional Findings

In addition to the findings which are pertinent to this study, there are other findings which were noted. These findings are incidental to the major results obtained in this study.
When the high and low groups for Ascendancy (A) were compared on the basis of their means for each of the other personality traits, the following results (presented in Table XIII) were noted:

**TABLE XIII**

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW ASCENDANCY GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 170</th>
<th>Low N = 152</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>R</td>
<td>23.73</td>
<td>2.20</td>
<td>25.61</td>
<td>5.71</td>
</tr>
<tr>
<td>E</td>
<td>23.62</td>
<td>5.21</td>
<td>23.07</td>
<td>6.93</td>
</tr>
<tr>
<td>S</td>
<td>26.22</td>
<td>3.95</td>
<td>17.49</td>
<td>5.20</td>
</tr>
<tr>
<td>C</td>
<td>24.18</td>
<td>6.27</td>
<td>26.11</td>
<td>7.12</td>
</tr>
<tr>
<td>O</td>
<td>27.21</td>
<td>5.50</td>
<td>20.78</td>
<td>5.67</td>
</tr>
<tr>
<td>P</td>
<td>25.53</td>
<td>5.95</td>
<td>24.34</td>
<td>6.22</td>
</tr>
<tr>
<td>V</td>
<td>25.89</td>
<td>5.66</td>
<td>21.48</td>
<td>5.82</td>
</tr>
</tbody>
</table>

1. The low Ascendancy (A) group had a significantly higher mean score for Responsibility (R) than did the high Ascendancy (A) group. The level of significance exceeded the .001 level of confidence.
2. The high Ascendancy (A) group has a significantly higher mean for Sociability (S) than does the low group. The difference in their group means greatly exceed the .001 confidence level.

3. The low Ascendancy (A) group has a significantly higher mean for Cautiousness (C) than does the high group. The difference in their means is significant at better than the .05 level of confidence.

4. For Original Thinking (O), the high Ascendancy (A) group has a significantly higher mean than does the low group. The level of significance reached is much greater than the .001 level.

5. The high Ascendancy (A) group has a significantly higher mean for Vigor (V) than does the low group. The difference in their means is significant at better than the .001 confidence level.

6. For Emotional Stability (E) and Personal Relations (P), the high Ascendancy (A) group has higher means than does the low group; but the difference between their means does not reach statistical significance.

The group high on Responsibility (R) is compared with the group low on Responsibility (R) on the basis of their respective scores for each of the other traits. The results are presented in Table XIV.
TABLE XIV
MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW RESPONSIBILITY GROUPS

| Traits | High N = 163 | | | Low N = 172 | | | t | P |
|--------|-------------| | | | | | | |
| M | SD | M | SD | | | | | |
| A | 21.08 | 3.87 | 22.45 | 7.41 | 2.09 | .05 |
| E | 26.84 | 4.27 | 19.52 | 5.97 | -12.79 | .001 |
| S | 21.27 | 4.31 | 23.56 | 7.14 | 3.52 | .001 |
| C | 29.50 | 5.40 | 21.76 | 6.53 | -11.76 | .001 |
| O | 25.74 | 5.60 | 23.10 | 6.32 | -4.02 | .001 |
| P | 27.29 | 4.90 | 22.45 | 6.32 | -7.79 | .001 |
| V | 25.82 | 5.14 | 22.51 | 6.21 | -5.27 | .001 |

An examination of Table XIV reveals the following results:

1. For Ascendancy (A), the group low for Responsibility (R) had a higher mean than did the group high for Responsibility (R). The difference in their means surpassed the .05 confidence level.

2. The group high on Responsibility (R) had a significantly higher mean for Emotional Stability (E) than did the group scoring low. The difference in their means was significant at better than the .001 level.
3. The group low on Responsibility (R) has a significantly higher mean for Sociability (S) than does the group scoring high. The difference in their means is found to be significant at better than the .001 level of confidence.

4. For Cautiousness (C), the group scoring high on Responsibility (R) has a significantly higher mean than does the group scoring low. The difference in their means is significant at much better than the .001 level of confidence.

5. The group high on Responsibility (R) has a significantly higher mean for Original Thinking (O) than does the group scoring low. The difference in their means is significant at better than the .001 level of confidence.

6. For Personal Relations (P), the group scoring high on Responsibility (R) has a significantly higher mean than does the group scoring low. The difference in their means is significant at better than the .001 level of confidence.

7. The group high on Responsibility (R) has a significantly higher mean for Vigor (V) than does the group scoring low. The difference in their means reaches much better than the .001 level of statistical significance.

The group scoring high and the group scoring low on Emotional Stability (E) are compared on the basis of their respective means for each of the other personality traits. The results of these comparisons are presented in Table XV.
TABLE XV
MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW EMOTIONAL STABILITY GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 214</th>
<th>Low N = 156</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>22.41</td>
<td>4.61</td>
<td>21.41</td>
<td>6.99</td>
</tr>
<tr>
<td>R</td>
<td>27.72</td>
<td>3.75</td>
<td>21.48</td>
<td>5.25</td>
</tr>
<tr>
<td>S</td>
<td>21.08</td>
<td>4.36</td>
<td>24.31</td>
<td>6.82</td>
</tr>
<tr>
<td>C</td>
<td>27.35</td>
<td>6.41</td>
<td>23.21</td>
<td>7.04</td>
</tr>
<tr>
<td>O</td>
<td>25.03</td>
<td>5.78</td>
<td>23.58</td>
<td>6.08</td>
</tr>
<tr>
<td>P</td>
<td>27.26</td>
<td>5.39</td>
<td>22.11</td>
<td>5.98</td>
</tr>
<tr>
<td>V</td>
<td>24.90</td>
<td>5.53</td>
<td>23.19</td>
<td>6.53</td>
</tr>
</tbody>
</table>

Upon examining Table XV, the following results were noted:

1. The group high on Emotional Stability (E) had a higher mean for Ascendancy (A) than did the group scoring low. The difference in their means did not, however, reach the accepted level of significance.

2. For Responsibility (R), the group scoring high on Emotional Stability (E) had a significantly higher mean than did the group scoring low. The level of significance reached was considerably better than the .001 level.
3. The group scoring low on Emotional Stability (E) has a significantly higher mean for Sociability (S) than does the group scoring high. The difference in their means exceeds the .001 level of significance.

4. The group scoring high on Emotional Stability (E) has a significantly higher mean for Cautiousness (C) than does the group scoring low. The difference in their means is significant at better than the .001 level of confidence.

5. The group scoring high on Emotional Stability (E) has a significantly higher mean for Original Thinking (O) than does the group scoring low. The difference in their means is significant at better than the .001 level of confidence.

6. For Personal Relations (P), the group scoring high on Emotional Stability (E) has a significantly higher mean than does the group scoring low. The level of significance reached is considerably better than the .001 level.

7. For Vigor (V), the group scoring high on Emotional Stability (E) has a significantly higher mean than does the group scoring low. The difference in their means is significant at slightly better than the .01 level of statistical confidence.

The group scoring high and the group scoring low on Sociability (S) are compared on the basis of their respective
means for each of the other personality traits. The results of these comparisons are presented in Table XVI.

### TABLE XVI

**MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW SOCIABILITY GROUPS**

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 178</th>
<th>Low N = 143</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>25.76</td>
<td>3.82</td>
<td>16.80</td>
<td>5.44</td>
</tr>
<tr>
<td>R</td>
<td>23.86</td>
<td>4.73</td>
<td>25.80</td>
<td>5.52</td>
</tr>
<tr>
<td>E</td>
<td>20.97</td>
<td>4.89</td>
<td>24.59</td>
<td>6.26</td>
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<tr>
<td>C</td>
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<td>O</td>
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<td>P</td>
<td>24.73</td>
<td>6.10</td>
<td>24.27</td>
<td>5.79</td>
</tr>
<tr>
<td>V</td>
<td>25.11</td>
<td>5.76</td>
<td>22.71</td>
<td>6.02</td>
</tr>
</tbody>
</table>

An examination of Table XVI reveals the following results:

1. The group scoring high on Sociability (S) had a significantly higher mean for Ascendancy (A) than did the group scoring low. The difference in their means was significant at considerably better than the .001 level of confidence.
2. The group scoring low on Sociability (S) has a significantly higher mean for Responsibility (R) than does the group scoring high. The difference in their means is significant at just slightly better than the .001 level of confidence.

3. The group low on Sociability (S) has a significantly higher mean for Emotional Stability (E) than does the high group. The difference in their means exceeds the .001 level of confidence.

4. For Cautiousness (C), the group low on Sociability (S) has a significantly higher mean than does the group scoring high. The difference in their means is significant at better than the .001 level.

5. For Original Thinking (O), the group high on Sociability (S) has a significantly higher mean than does the low group. The difference in their means is significant at better than the .001 level.

6. The group high on Sociability (S) has a higher mean for Personal Relations (P) than does the low group, but the difference does not reach statistical significance.

7. For Vigor (V), the group high on Sociability (S) has a significantly higher mean than does the low group. The difference between their means is found to be significant at better than the .001 level of confidence.
The group scoring high and the group scoring low on Cautiousness (C) were compared on the basis of their respective means for each of the other personality traits. The results are presented in Table XVII.

### TABLE XVII

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW CAUTIOUSNESS GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 194</th>
<th>Low N = 148</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>21.79</td>
<td>4.77</td>
<td>22.84</td>
<td>6.25</td>
</tr>
<tr>
<td>R</td>
<td>28.26</td>
<td>3.98</td>
<td>22.14</td>
<td>5.23</td>
</tr>
<tr>
<td>E</td>
<td>25.82</td>
<td>3.98</td>
<td>21.79</td>
<td>6.71</td>
</tr>
<tr>
<td>S</td>
<td>21.57</td>
<td>4.81</td>
<td>24.24</td>
<td>6.17</td>
</tr>
<tr>
<td>Q</td>
<td>24.58</td>
<td>4.73</td>
<td>23.62</td>
<td>6.89</td>
</tr>
<tr>
<td>P</td>
<td>28.00</td>
<td>4.67</td>
<td>21.06</td>
<td>6.04</td>
</tr>
<tr>
<td>V</td>
<td>24.42</td>
<td>5.13</td>
<td>22.61</td>
<td>6.54</td>
</tr>
</tbody>
</table>

An analysis of Table XVII reveals the following results:

1. The group low on Cautiousness (C) had a higher mean for Ascendancy (A) than did the high group, but the difference did not reach the accepted level of statistical significance.
2. The group high on Cautiousness (C) has a significantly higher mean for Responsibility (R) than does the low group. The difference between their means is found to exceed greatly the .001 level of significance.

3. For Emotional Stability (E), the group high on Cautiousness (C) has a significantly higher mean than does the low group. The difference between their means is found to exceed the .001 level of confidence.

4. The group low on Cautiousness (C) has a significantly higher mean for Sociability (S) than does the high group. The difference between their means is found to be significant at better than the .001 level of confidence.

5. For Original Thinking (O), the group high on Cautiousness (C) has a higher mean than does the low group; but the difference is not significant.

6. For Personal Relations (P), the group high on Cautiousness (C) has a significantly higher mean than does the low group. The difference between their means is found to be significant at much better than the .001 level.

7. The group high on Cautiousness (C) has a higher mean for Vigor (V) than does the low group. The difference between their means is found to be significant at better than the .01 level.
The group scoring high and the group scoring low on Original Thinking (O) were compared on the basis of their respective means for each of the other personality traits. The results of these comparisons are presented in Table XVIII.

**TABLE XVIII**

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW ORIGINAL THINKING GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 187</th>
<th>Low N = 163</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>R</td>
<td>26.58</td>
<td>4.72</td>
<td>24.01</td>
<td>4.94</td>
</tr>
<tr>
<td>E</td>
<td>24.67</td>
<td>5.19</td>
<td>22.98</td>
<td>6.27</td>
</tr>
<tr>
<td>S</td>
<td>23.82</td>
<td>4.70</td>
<td>21.54</td>
<td>6.59</td>
</tr>
<tr>
<td>C</td>
<td>25.89</td>
<td>5.45</td>
<td>24.33</td>
<td>7.42</td>
</tr>
<tr>
<td>P</td>
<td>26.07</td>
<td>5.10</td>
<td>23.35</td>
<td>6.08</td>
</tr>
<tr>
<td>V</td>
<td>26.59</td>
<td>4.72</td>
<td>21.29</td>
<td>5.70</td>
</tr>
</tbody>
</table>

An analysis of Table XVIII reveals the following results:

1. The group high on Original Thinking (O) had a significantly higher mean for Ascendancy (A) than did the low group. The difference in their means was significant at much better than the .001 level.
2. The group high on Original Thinking (O) has a higher mean for Responsibility (R) than does the low group. The difference between their means is found to be significant at better than the .001 level.

3. The group high on Original Thinking (O) has a higher mean for Emotional Stability (E) than does the low group. The difference between their means is found to exceed the .01 level of statistical significance.

4. The group high on Original Thinking (O) has a higher mean for Sociability (S) than does the low group. The difference between their means is found to be significant at better than the .001 level.

5. For Cautiousness (C), the group high on Original Thinking (O) has a higher mean than does the low group. The difference between their means is found to exceed the .05 level of statistical significance.

6. For Personal Relations (P), the group high on Original Thinking (O) has a higher mean than does the low group. The difference between their means is found to be significant at better than the .001 level.

7. The group scoring high on Original Thinking (O) has a higher mean for Vigor (V) than does the low group. The difference between their means is found to exceed greatly the .001 level of statistical significance.
The group scoring high and the group scoring low on Personal Relations were compared on the basis of their respective means on each of the other personality traits. The results are presented in Table XIX.

**TABLE XIX**

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW PERSONAL RELATIONS GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 179</th>
<th>Low N = 165</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>23.16</td>
<td>4.86</td>
<td>21.37</td>
<td>6.19</td>
</tr>
<tr>
<td>R</td>
<td>27.17</td>
<td>4.14</td>
<td>23.53</td>
<td>5.41</td>
</tr>
<tr>
<td>E</td>
<td>26.30</td>
<td>4.82</td>
<td>21.16</td>
<td>6.41</td>
</tr>
<tr>
<td>S</td>
<td>22.97</td>
<td>4.53</td>
<td>21.98</td>
<td>6.72</td>
</tr>
<tr>
<td>C</td>
<td>28.79</td>
<td>4.87</td>
<td>21.55</td>
<td>6.88</td>
</tr>
<tr>
<td>O</td>
<td>25.75</td>
<td>4.80</td>
<td>22.65</td>
<td>6.90</td>
</tr>
<tr>
<td>V</td>
<td>24.03</td>
<td>4.76</td>
<td>23.39</td>
<td>6.35</td>
</tr>
</tbody>
</table>

An analysis of Table XIX revealed the following results:

1. The group high on Personal Relations (P) had a higher mean for Ascendancy (A) than did the low group. The difference between their means was found to exceed the .01 level of confidence.
2. The group high on Personal Relations (P) has a higher mean for Responsibility (R) than does the low group. The difference between their means exceeds the .001 level.

3. The group high on Personal Relations (P) has a higher mean for Emotional Stability (E) than does the low group. The difference between their means is significant at better than the .001 level.

4. The group high on Personal Relations (P) has a higher mean for Sociability (S) than does the low group, but the difference is not significant.

5. For Cautiousness (C), the group high on Personal Relations (P) has a higher mean than does the low group. The difference between their means is found to exceed the .001 level of significance greatly.

6. The group high on Personal Relations (P) has a higher mean for Original Thinking (O) than does the low group. The difference between their means exceeds the .001 level.

7. The group high on Personal Relations (P) has a higher mean for Vigor (V) than does the group scoring low. The difference between their means, however, does not reach the accepted level of statistical significance.

The group scoring high and the group scoring low on Vigor (V) are compared statistically on the basis of their
respective means for each of the other personality traits. The findings for these statistical comparisons are presented in Table XX.

TABLE XX

MEANS, STANDARD DEVIATIONS, AND t RATIOS FOR TRAIT SCORES OF HIGH AND LOW VIGOR GROUPS

<table>
<thead>
<tr>
<th>Traits</th>
<th>High N = 173</th>
<th>Low N = 161</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>24.31</td>
<td>4.75</td>
<td>19.86</td>
<td>6.39</td>
</tr>
<tr>
<td>R</td>
<td>26.95</td>
<td>4.51</td>
<td>23.19</td>
<td>5.56</td>
</tr>
<tr>
<td>E</td>
<td>24.69</td>
<td>5.31</td>
<td>22.45</td>
<td>6.59</td>
</tr>
<tr>
<td>S</td>
<td>23.62</td>
<td>5.23</td>
<td>21.31</td>
<td>6.17</td>
</tr>
<tr>
<td>C</td>
<td>26.10</td>
<td>5.37</td>
<td>24.43</td>
<td>7.42</td>
</tr>
<tr>
<td>O</td>
<td>27.04</td>
<td>5.08</td>
<td>21.08</td>
<td>6.14</td>
</tr>
<tr>
<td>P</td>
<td>25.05</td>
<td>5.10</td>
<td>24.65</td>
<td>6.22</td>
</tr>
</tbody>
</table>

Upon examining Table XX, the following results were noted:

1. The group high on Vigor (V) had a higher mean for Ascendancy (A) than did the low group. The difference between their means was found to be significant at just better than the .001 level.
2. The group high on Vigor ($V$) has a higher mean for Responsibility ($R$) than does the low group. The difference between their means is found to exceed the .001 level of significance.

3. For Emotional Stability ($E$), the group high on Vigor ($V$) has a higher mean than does the low group. The difference between their means is found to be significant at just better than the .001 level.

4. The group high on Vigor ($V$) has a higher mean for Sociability ($S$) than does the group scoring low. The difference between their means is found to be significant at just better than the .001 level.

5. The group high on Vigor ($V$) has a higher mean for Cautiousness ($C$) than does the low group. The difference between their means is found to be significant at better than the .05 level.

6. The group high on Vigor ($V$) has a higher mean for Original Thinking ($O$) than does the group scoring low. The difference between their means greatly exceeds the .001 level of significance.

7. The group scoring high on Vigor ($V$) has a higher mean for Personal Relations ($P$) than does the low group. The difference between their means does not, however, reach the accepted level of significance.
CHAPTER BIBLIOGRAPHY

1. Halpin, Andrew W., Manual For the Leader Behavior Description Questionnaire, Columbus, The Ohio State University, 1957.
CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS
AND RECOMMENDATIONS

The discussion in this chapter is divided into five general sections. In the first section the purpose and the procedures of the study are summarized. The second section is composed of the findings of the study. In the third section, conclusions are drawn from the findings of the study. Fourth, implications are drawn (to applicable practical situations) from the findings and conclusions. Finally, recommendations for further study are suggested.

Summary

The purpose of this study was to determine the nature of student teacher expectations with respect to the leadership role of the principal, and to determine what relationships existed between these expectations and the student teachers' sex, race, level of preparation (elementary or secondary) and scores on eight personality traits. Their expectations of leadership were measured in two dimensions by the Ohio State Leader Behavior Description Questionnaire (Ideal); these two dimensions were Initiating Structure (Str)...
and Consideration (Cns). The eight personality traits were measured by two instruments. Ascendancy (A), Responsibility (R), Emotional Stability (E), and Sociability (S) were measured by the Gordon Personal Profile. Cautiousness (C), Original Thinking (O), Personal Relations (P), and Vigor (V) were measured by the Gordon Personal Inventory. Sex, race, and level of preparation were ascertained from students' responses on a Personal Data Sheet.

In order to achieve the purpose of the study the following twelve hypotheses were tested:

1. No significant correlations will be found between student teacher expectations on the two measured dimensions of leadership and their measured personality traits.

2. Those subjects whose scores for Ascendancy (A), Cautiousness (C), Original Thinking (O), and Vigor (V) are high will have a significantly higher mean for Initiating Structure (Str) than will subjects whose scores are low on these traits.

3. Those subjects whose scores for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), Personal Relations (P), and Vigor (V) are high will have a significantly higher mean for Consideration (Cns) than will the subjects whose scores are low.
4. Those subjects whose scores for Responsibility (R), Emotional Stability (E), and Personal Relations (P) are high will have a significantly lower mean for Initiating Structure (Str) than will subjects whose scores on these traits are low.

5. Those subjects whose scores for Ascendancy (A), and Cautiousness (C) are high will have a significantly lower mean for Consideration (Cns) than will subjects whose scores for these traits are low.

6. Those subjects whose scores for Initiating Structure (Str) are high will have significantly higher means for Ascendancy (A), Cautiousness (C), and Vigor (V) than will subjects whose scores for Initiating Structure (Str) are low.

7. Those subjects whose scores for Initiating Structure (Str) are high will have significantly higher means for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O) and Personal Relations (P) than will subjects whose scores for Initiating Structure (Str) are low.

8. Those subjects whose scores for Consideration (Cns) are high will have significantly higher means for Responsibility (R), Emotional Stability (E), Sociability (S), Original Thinking (O), and Personal Relations (P) than will subjects whose scores for Consideration (Cns) are low.

9. Those subjects whose scores for Consideration (Cns) are high will have significantly lower means for Ascendancy (A),
Cautiousness (C), and Vigor (V) than will subjects whose scores for Consideration (Cns) are low.

10. Significantly higher scores for Initiating Structure (Str) will be made by (1) males than by females, (2) secondary subjects than by elementary subjects, (3) Latin-American subjects than by either Negro or Anglo-American subjects, (4) Negro subjects than by Anglo-American subjects.

11. Significantly higher scores for Consideration (Cns) will be made by (1) female subjects than by male subjects, (2) elementary subjects than by secondary subjects (3) Anglo-American subjects than by either Negro or Latin-American subjects, (4) Negro subjects than by Latin-American subjects.

12. The entire sample will have a significantly higher mean for Consideration (Cns) than for Initiating Structure (Str).

A total of 877 subjects from ten state colleges and universities throughout the state of Texas participated in this study. All of the subjects were either enrolled in student teaching during the spring semester of the 1966-67 school year or would be enrolled in student teaching during the fall semester of the 1967-68 school year. Each of the subjects responded to the LBDQ, the GPP, the GPI, and a Personal Data Sheet. Their scores for each variable were tabulated and punched into IBM cards at the Computer Center.
at North Texas State University. Statistical computations were made at the Center, and the data were analyzed and reported.

For the purpose of testing Hypotheses 1-9, the sample was randomly reduced to 553 subjects in order that the remaining subjects from each institution represented proportionally the number of teacher education graduates from each school for the year of 1965-66. The entire sample was employed for testing Hypotheses 10-12.

Data were collected and treated for analysis in the following manner:

1. Analysis of the data for testing Hypothesis 1 consisted of obtaining correlation coefficients between the subjects' scores for each of the dimensions of leadership and their scores for each of the eight measured personality traits.

2. Analysis of the data for testing Hypotheses 2-5 consisted of obtaining a mean and standard deviation from the scores for each of the eight measured personality traits. The subjects were then divided into three groups—high, middle, and low—for each of the traits. The high group consisted of those whose scores were one-half of one standard deviation or more above the mean. The low group consisted of those whose scores were one-half of one standard deviation or more below
the mean. The high and low groups were then compared on the basis of their respective means for Initiating Structure (Str) and Consideration (Cns). The significance of the difference between the means was tested by employing Fisher's $t$.

3. Analysis of the data for testing Hypotheses 6-9 consisted of obtaining a mean and standard deviation from the scores for each of the leadership dimensions—Initiating Structure (Str) and Consideration (Cns). The subjects were then divided into high, middle, and low groups, the high group consisting of those whose scores were one-half of one standard deviation or more above the mean and the low group consisting of those whose scores were one-half of one standard deviation or more below the mean. The high and low groups were then compared on the basis of their respective means for each of the eight measured personality traits. The significance of the difference between their means was tested by the use of Fisher's $t$.

4. Analysis of the data for testing Hypotheses 10 and 11 consisted of dividing the subjects into groups based on sex, race, and level of preparation. Means and standard deviations for each of the groups' scores on Initiating Structure (Str) and Consideration (Cns) were then obtained. The following comparisons of scores for both Initiating Structure (Str) and Consideration (Cns) were made: (1) the
mean for the male subjects was compared with the mean for the female subjects; (2) the mean for the secondary subjects was compared with the mean of the elementary subjects; (3) the mean of the Anglo-American subjects was compared with the mean of the Negro subjects; (4) the mean of the Anglo-American subjects was compared with the mean of the Latin-American subjects; (5) the mean of the Negro subjects was compared with the mean of the Latin-American subjects. Fisher's $t$ was employed to test the significance of the difference between means.

5. Analysis of the data for testing Hypothesis 12 consisted of obtaining for the total sample a mean and standard deviation for each of the leadership dimensions. The mean of the scores for Initiating Structure (Str) was compared with the mean of the scores for Consideration (Cns). The significance of the difference between the means was then tested by employing Fisher's $t$.

Findings

This study yielded the following findings:

1. Ascendancy (A) was found to correlate significantly with Emotional Stability (E), Sociability (S), Original Thinking (O), Personal Relations (P), and Vigor (V). Moderate positive correlation coefficients of .65, .44, and .33 were found for Sociability (S), Original Thinking (O), and Vigor (V).
respectively, while low, but significant, correlation coefficients of .10 and .11 were found for Emotional Stability (E) and Personal Relations (P) respectively. Ascendancy (A) was found to correlate negatively with Responsibility (R), Cautiousness (C), and Initiating Structure (Str). None of these were significant, however.

2. Responsibility (R) was found to correlate significantly with Emotional Stability (E), Sociability (S), Original Thinking (O), Cautiousness (C), Personal Relations (P), Vigor (V), and Initiating Structure (Str). Moderate to low positive correlation coefficients of .55, .50, .33, and .32 were found for Emotional Stability (E), Cautiousness (C), Personal Relations (P), and Vigor (V), respectively. A low positive, but significant, correlation coefficient of .11 was found for Responsibility (R) and Initiating Structure (Str). Responsibility (R) was found to correlate negatively with Sociability (S) and Consideration (Cns). Only Sociability (S) was found to correlate significantly with a coefficient of -.14.

3. Emotional Stability (E) was found to correlate significantly with Sociability (S), Cautiousness (C), Original Thinking (O), Personal Relations (P), and Vigor (V) with respective coefficients of -.23, .28, .13, .40 and .14. Initiating Structure (Str) was found to correlate positively
while Consideration (Cns) was found to correlate negatively. Neither, however, was significant.

4. Sociability (S) was found to correlate significantly with Cautiousness (C), Original Thinking (O) and Vigor (V) with coefficients of -.17, .20 and .19 respectively. Sociability (S) correlated positively with Initiating Structure (Str) and Consideration (Cns), but neither was significant.

5. Cautiousness (C) correlated significantly with Original Thinking (O), Personal Relations (P) and Vigor (V) with coefficients of .08, .49 and .15 respectively. Cautiousness (C) correlated with Initiating Structure (Str) positively, and with Consideration (Cns) negatively. Neither, however, was significant.

6. Original Thinking (O) correlated significantly with Personal Relations (P) and Vigor (V) with coefficients of .19 and .41 respectively. Original Thinking (O) correlated negatively with both Initiating Structure (Str) and Consideration (Cns). The coefficient for Consideration (Cns) was .08 which was significant to the .05 level.

7. Vigor (V) correlated positively with Initiating Structure (Str) but negatively with Consideration (Cns). Neither was significant.

8. A significant positive correlation coefficient was found for Initiating Structure (Str) and Consideration (Cns).
Few moderate correlation coefficients were found, but most were low. The fact that they reached significance was due primarily to the size of the sample, which was quite large.

9. The group scoring high on Ascendancy (A) had a higher mean for Consideration (Cns) than did the group scoring low, whereas the group scoring low on Ascendancy (A) had a higher mean for Initiating Structure (Str). In neither case, however, was the difference significant.

10. The group scoring high on Responsibility (R) had a higher mean for both Initiating Structure (Str) and Consideration (Cns) than did the group scoring low. For Initiating Structure (Str), the difference reached better than the .05 level of significance, while in the case of Consideration (Cns), the difference was almost negligible.

11. The group scoring high on Emotional Stability (E) had a higher mean for Initiating Structure (Str) than did the group scoring low, whereas the group scoring low had the higher mean for Consideration (Cns). In neither case, however, was the difference significant.

12. The group scoring high on Sociability (S) had higher means for both Initiating Structure (Str) and Consideration (Cns) than did the group scoring low. In neither case, however, was the difference significant.
13. The group scoring high on Cautiousness (C) had a higher mean for Initiating Structure (Str), while the group scoring low had a higher mean for Consideration (Cns). In neither case was the difference significant.

14. The group scoring high on Original Thinking (O) had lower means for both Initiating Structure (Str) and Consideration (Cns) than did the group scoring low. In neither case was the difference significant.

15. The group scoring high on Personal Relations (P) had a higher mean for Initiating Structure (Str), whereas the group scoring low had a higher mean for Consideration (Cns). In neither case was the difference significant.

16. The group scoring high on Vigor (V) had a higher mean for Initiating Structure (Str) while the group scoring low had a higher mean for Consideration (Cns). In neither case was the difference significant.

17. The group scoring high on Initiating Structure (Str) had higher means for Responsibility (R), Emotional Stability (E), Sociability (S), Cautiousness (C), Personal Relations (P), and Vigor (V) than did the group scoring low. Only in the case of Responsibility (R) did the difference between the means reach significance, and this was significant at slightly better than the .05 level of confidence. The group scoring high also had a higher mean for Consideration (Cns). The
difference was significant at better than the .001 level. The group scoring low on Initiating Structure (Str) had higher means for Ascendancy (A) and Original Thinking (O) than did the group scoring high. The difference in neither case reached the point of significance.

18. The group scoring high on Consideration (Cns) had a higher mean for Sociability (S), but the group scoring low had higher means for Ascendancy (A), Responsibility (R), Emotional Stability (E), Cautiousness (C), Original Thinking (O), Personal Relations (P), and Vigor (V). In no case, however, was the difference significant. The high group also had a higher mean for Initiating Structure (Str). The difference was significant at better than the .001 level.

19. Female subjects had higher means for both Initiating Structure (Str) and Consideration (Cns) than did male subjects. The difference in neither case, however, was significant.

20. The elementary group had higher means for both Initiating Structure (Str) and Consideration (Cns) than did the secondary group. In the case of Consideration (Cns), the difference between the means reached better than the .01 level of significance. In the case of Initiating Structure (Str), however, the difference did not reach significance.

21. The Anglo-American group had a higher mean for Initiating Structure (Str) than did the Latin-American group,
whereas the Latin-American group had a higher mean for Consideration (Cns). In neither case, however, was the difference significant.

22. The Anglo-American group had a higher mean for Consideration (Cns) than did the Negro group, but the Negro group had a higher mean for Initiating Structure (Str). In both cases, the difference between the means was significant at better than the .05 level of confidence.

23. Negro subjects had a higher mean for Initiating Structure (Str) than did the Latin-American subjects, whereas the Latin-American subjects had a higher mean for Consideration (Cns). Only in the case of Consideration (Cns) did the difference reach significance, and this difference was significant at better than the .05 level of confidence.

24. When compared with standardization groups, the total group had high means for both Initiating Structure (Str) and Consideration (Cns). The group had a significantly higher mean for Consideration (Cns) than for Initiating Structure (Str), the difference being significant at better than the .001 level of confidence.

25. The group scoring high for Ascendancy (A) had higher means for Emotional Stability (E), Sociability (S), Original Thinking (O), Personal Relations (P), and Vigor (V) than did the group scoring low. In the cases of Emotional Stability (E)
and Personal Relations (P), the differences did not reach significance. In the cases of Sociability (S), Original Thinking (O), and Vigor (V) the differences in means were significant at better than the .001 level of confidence. The group scoring low on Ascendancy (A) had higher means for Responsibility (R) and Cautiousness (C) than did the group scoring high. For Responsibility (R) the difference in means was significant at better than the .001 level of confidence, whereas for Cautiousness (C) the difference in means was significant at the .05 level.

26. The group scoring high on Responsibility (R) had higher means for Emotional Stability (E), Cautiousness (C), Original Thinking (O), Personal Relations (P), and Vigor (V) than did the group scoring low. In each case, the difference in means was significant at better than the .001 level of confidence. The group scoring low on Responsibility (R) had higher means for Ascendancy (A) and Sociability (S) than did the group scoring high. In the case of Ascendancy (A), the difference in means was significant at better than the .05 level, whereas in the case of Sociability (S) the difference in means was significant at the .001 level.

27. The group scoring high on Emotional Stability (E) had higher means for Ascendancy (A), Responsibility (R), Cautiousness (C), Original Thinking (O), Personal Relations
(P), and Vigor (V). For Ascendancy (A), the difference in means was not significant. In the case of Original Thinking (O), the difference in means was significant at better than the .05 level of confidence. For Vigor (V), the difference in means was significant at better than the .01 level, whereas for Responsibility (R), Cautiousness (C), and Personal Relations (P), the differences in means were significant at better than the .001 level. For Sociability (S), the group scoring low on Emotional Stability (E) had a higher mean than did the group scoring high, and the difference in means was significant at better than the .001 level.

28. The group scoring high on Sociability (S) had higher means for Ascendancy (A), Original Thinking (O), Personal Relations (P), and Vigor (V) than did the group scoring low. For Personal Relations (P), the difference in means was not significant. In each of the other cases, the difference in means was significant at better than the .001 level of confidence. The group scoring low on Sociability (S) had higher means for Responsibility (R), Emotional Stability (E), and Cautiousness (C) than did the group scoring high. In each case, the difference in means was significant at better than the .001 level of confidence.

29. The group scoring high on Cautiousness (C) had higher means for Responsibility (R), Emotional Stability (E),
Original Thinking (O), Personal Relations (P), and Vigor (V) than did the group scoring high. For Original Thinking (O), the difference in means was not significant. For Vigor (V), the difference in means was significant at better than the .01 level of confidence. In the cases of Responsibility (R), Emotional Stability (E), and Personal Relations (P), the differences in means were significant at better than the .001 level. The group scoring low on Cautiousness (C) had higher means for Ascendancy (A) and Sociability (S) than did the group scoring high. For Ascendancy (A), the difference was not significant; but for Sociability (S), the difference in means was significant at better than the .001 level of confidence.

30. The group scoring high on Original Thinking (O) had higher means on all the other personality traits than did the group scoring low. For Cautiousness (C), the difference in means was significant at better than the .05 level of confidence. For Emotional Stability (E), the difference in means was significant at better than the .01 level. In the cases of Ascendancy (A), Responsibility (R), Sociability (S), Personal Relations (P), and Vigor (V), the differences in means were significant at better than the .001 level.

31. The group scoring high on Personal Relations (P) had higher means for all the other personality traits than did
the group scoring low. For Sociability (S) and Vigor (V), the differences in means were not significant. For Ascendancy (A), the difference in means was significant at better than the .01 level of confidence. For Responsibility (R), Emotional Stability (E), Cautiousness (C), and Original Thinking (O), the differences in means were significant at better than the .001 level.

32. The group scoring high on Vigor (V) had higher means for all the other personality traits than did the group scoring low. For Personal Relations (P), the difference in means was not significant. For Cautiousness (C), the difference in means was significant at better than the .05 level of confidence. In each of the cases of Ascendancy (A), Responsibility (R), Emotional Stability (E), Sociability (S), and Original Thinking (O), the difference in means was significant at better than the .001 level.

33. The male group had higher means for Ascendancy (A), Emotional Stability (E), Original Thinking (O), Personal Relations (P), and Vigor (V) than did the female group. Only in the cases of Ascendancy (A) and Emotional Stability (E) were the differences in means significant. These were significant at better than the .01 level of confidence. The female group had higher means for Responsibility (R), Sociability (S),
and Cautiousness (C) than did the male group. In no case, however, was the difference in means significant.

34. The elementary group had higher means for Responsibility (R), Emotional Stability (E), Sociability (S), Cautiousness (C), and Personal Relations (P). Only in the case of Personal Relations (P) was the difference in means significant. This was significant at better than the .01 level of confidence. The secondary group had higher means for Ascendancy (A), Original Thinking (O), and Vigor (V) than did the elementary group. In the case of Vigor (V), the difference in means was significant at better than the .01 level of confidence. For Original Thinking (O), the difference in means was significant at better than the .001 level.

35. With the exception of Vigor (V), the Negro group had higher means for all measured personality traits than Anglo-Americans. For Vigor (V), the difference in means was not significant. Only in the cases of Emotional Stability (E) and Cautiousness (C) were the differences in means found to be significant. These were significant at better than the .05 level of confidence.

36. The Anglo-American group had higher means for Ascendancy (A), Responsibility (R), Personal Relations (P), and Vigor (V) than did the Latin-American group. On the other
hand, the Latin-American group had higher means for Emotional Stability (E), Sociability (S), Cautiousness (C), and Original Thinking (O). In no case was the difference in means significant. In all the traits, the differences were very slight.

37. With the exception of Original Thinking (O), the Negro group had higher means for all the measured personality traits than did the Latin-American group. In no case, however, was the difference in means significant.

Conclusions

The following conclusions were drawn from the findings of this study:

1. No apparent relationships exist between the personality traits of student teachers and their expectations of the leadership role of the principal.

2. Student teacher expectations of leadership are generally idealistic. The student teachers expect a great deal of warmth, friendliness, and personal consideration from the principal. Though their expectations for structuring behavior are not as high as their expectations for consideration behavior, they do have relatively high expectations of this kind. They expect him to take control of the situation, give directions, and, in general, organize and supervise the work of the group.
3. Male and female student teachers have generally the same expectations of leadership behavior on the part of the principal.

4. Elementary student teachers expect more warmth, friendliness, and personal consideration from their principal than do secondary teachers. Both groups expect about the same degree of structuring behavior.

5. Anglo-Americans and Latin-Americans have about the same kinds of expectations.

6. Anglo-American subjects and Latin-American subjects expect a greater degree of warmth, friendliness and personal consideration from their principals than do Negro subjects. On the other hand, Negro subjects expect more direction and supervision.

7. All student teachers, without regard to their sex, race, or level of professional preparation, tend to expect a great deal of warmth and friendliness as well as a high degree of direction and supervision from their principals.

Conclusions drawn from the peripheral findings are as follows:

1. Highly ascendant subjects tend to be more sociable, to think more originally, and to be more vigorous than are subjects who are not ascendant in nature. One who is not
ascendant is, nevertheless, quite likely to be more responsible and cautious in his behavior than one who is ascendant.

2. One who is highly responsible is likely to be more stable emotionally, to be more cautious, to think more originally, to be more successful in personal relations, and to be more vigorous than one who is not very responsible. One who is lacking in responsibility is likely to be highly ascendant and sociable.

3. One who is highly stable emotionally is likely to be vigorous, responsible and cautious in his behavior, to be successful in his personal relations, and to think quite originally. One who is lacking in emotional stability is likely to be quite sociable.

4. One who is highly sociable is probably also quite ascendant, quite original in his thinking, and quite vigorous in his actions. One who is unsociable is likely to be quite responsible, stable emotionally, and cautious.

5. A cautious person is probably responsible, emotionally stable, successful in personal relations, and vigorous. A person lacking in cautiousness is likely to be sociable.

6. One who is highly original in his thinking is quite likely to be high in all other traits.
7. One who is successful in his personal relations is likely to be ascendant, responsible, stable emotionally, cautious, and original in his thinking.

8. A vigorous person is quite likely to be ascendant, responsible, emotionally stable, sociable, cautious, and original in his thinking.

9. Male subjects are more ascendant and emotionally stable than female subjects, but differ little in other traits.

10. Elementary student teachers are more successful in personal relations than secondary student teachers, but secondary student teachers are more ascendant and think more originally. In other traits they differ but little.

11. Negro subjects are more emotionally stable and more cautious when compared to Anglo-Americans. However, in other traits they differ but little.

12. Anglo-American and Latin-American subjects are quite similar in their personality patterns.

13. Negro and Latin-American subjects differ little in their personality traits. However, the similarities are not as apparent between these two groups as they are between Anglo-Americans and Latin-Americans.
Implications

Three important implications were drawn from the findings and conclusions of this study. First, the findings of this study support much research in the past that suggested that beginning teachers are highly malleable. Beginning teachers generally start their careers in a state of idealism. They have grand ideas about the role of the teacher in the lives of young people, but they are confused about how the teacher should fill this role. An overly zealous new teacher may become disillusioned by the apparent inconsistency between what he was taught in college and what he actually perceives in the classroom, and may give up teaching after a year or so. Those who remain in teaching may either become extraordinary teachers or become members of the faculty room fraternity. In most of these cases, the new teacher is left to rise or fall on his own and usually does so depending upon the chance influences which come his way.

It is at this very beginning stage of the teacher's career that the "good" principal can use his professional experience and influence to undergird the training that the new teacher has already had. The findings of this study suggest that new teachers expect their principals to give them professional leadership in terms of personal consideration and directive supervision. Probably most of the negative attitudes and
expectations that are prevalent among older teachers are not the result of existing supervisory practices but are due to the lack of supervision.

The expectations exhibited by the 877 subjects in this study were quite idealistic, but they were not unreasonable expectations. They expect more than what the average principal gives in terms of leadership, but they do not expect more than what the good principal can give with very little more effort than he now extends.

The good principal should give major consideration to the expectations of his group of teachers. These expectations should be the basis upon which he gauges his behavior in his interpersonal relations with his teachers. With knowledge of the expectations of beginning teachers he can develop a more meaningful orientation program for the new teacher. He can also make use of the knowledge for planning long range programs for the professional development of his faculty.

A second implication was that the findings of this study also support past research that bears upon the individual differences of students. Though the expectations of student teachers regarding the leadership role of the principal are somewhat idealistic, they are, nevertheless, quite individual. No principal with any understanding of human differences should attempt to meet only one set of expectations. The
good principal would want to ascertain the individual expectations of his teachers. By doing this he is meeting one dimension of their expectations, that of personal consideration. Differences in student teachers' expectations vary more widely within the sex group than between the sexes; therefore, gender is an undependable factor in evaluating the expectations of teachers. There are, however, some very important differences between elementary and secondary student teachers. The elementary principal would have different expectations to consider than would the secondary principal. Race also was shown to be a factor in the expectations of student teachers. Though Anglo-American and Latin-American student teachers had very similar expectations, Negro student teachers had quite different expectations. With integrated faculties a reality, the principal must consider the expectations of teachers of different races.

Perhaps the best way for a principal to ascertain and modify the expectations of his teachers would be to develop an atmosphere of freedom in which the teachers would feel free to express their desires and expectations. To do this, the principal must, in his own interaction with his teachers, permit a give and take of ideas.

The third implication drawn from this study relates to the preparation of student teachers. The findings did not
bear this out conclusively, but it was suggested that these expectations stemmed to some extent from the education courses that the student teachers had taken. There are no formal courses in which students learned to expect certain kinds of behavior, but their expectations are probably indirectly related to the courses they have had. The implication, however, is that student teachers' expectations are quite varied, which indicates that the sources of their expectations are also quite varied. It is not suggested that uniformity of expectations is desirable; but if student teachers understood the differences in the expectations of their own group toward the leadership role of the principal, there might possibly be greater tolerance among teachers for the principal whose task it is to meet these varied expectations.

In summary, it was concluded that generally student teachers expect their principals to be warm, friendly, and considerate. In addition, they expect him to give them concrete direction and supervision. A principal who can meet both these expectations will most likely be successful as an instructional leader.

Recommendations

The following recommendations are made for further study:
1. There is a need for additional study of the relationships between the personality patterns of teachers and prospective teachers and their expectations of the leadership role of principals.

2. There is a need for the study of the consistency of these expectations perhaps after one or two years of teaching experience have been accrued.

3. There is a need for the study of the effect of teacher expectations upon the leader behavior of the principal.
INSTRUCTIONS TO TEST ADMINISTRATORS

On Selecting the Sample

1. From your enrollment select ___ secondary student teachers and ___ elementary student teachers. Students who will do their student teaching at all levels should not be included in the test sample.

2. Select your sample by first selecting, at random, from the coordinators on your staff a sufficient number of coordinators to obtain the requested sample. Use all of the student teachers assigned to the coordinators selected.

On Administering the Questionnaires

1. There are three questionnaires to be completed by the subjects. Accompanying these questionnaires is a PERSONAL DATA SHEET. The PERSONAL DATA SHEET must be completed in full, or the questionnaires for that subject cannot be used in the study.

2. Follow the instructions for administration that accompany each instrument. It is not necessary for the administrator to read the instructions aloud to the subjects. Be sure, however, that everyone understands the instructions. There are no time limits. An hour will probably be sufficient for all to finish the questionnaires.

3. MAKE CERTAIN that all subjects use soft lead pencils (No. 2 pencils) for marking their answer sheets.

Upon completion of the administration, collect the answer sheets and PERSONAL DATA SHEETS; place them in the mailing envelopes provided for your use; and mail them back to me.
APPENDIX B
PERSONAL DATA SHEET

Code Number __________

IMPORTANT: Write the above number on each answer sheet in the blank which is provided for your name. You DO NOT need to write your name on any answer sheet. This sheet will contain all your necessary personal data. Be certain your code number is on ALL your answer sheets.

PLEASE, answer all items on this sheet. If you fail to complete this form, all your questionnaires must be discarded; for they cannot be used in this study.

Note: The anonymity of your responses WILL be safeguarded.

NAME ___________________________ (Last) ____________ (First) ____________ (Middle) ____________

AGE ______ SEX (Please check) Male ___ Female ___

Permanent Address ____________________________ (Street, Route, or P. O. Box) ____________________________

____________________ (City) ____________________________ (State) ____________________________ (Zip Code) ____________________________

National-Racial Origin (Please check appropriate blank)

Anglo-American ___ Negro-American ___

Latin-American ___ Other (Please Specify) ___

College or University __________________________

Major Field of Concentration __________________________

First Minor Field __________________________

Second Minor Field __________________________

At what level will you do your student teaching? (Please check)

Secondary ___ Elementary ___

What is your expected date of graduation? __________________________

Would you participate in a follow-up study after you have taught a year or two? (Please check one of the following)

Yes ___ No ___ Undecided now, but contact me when you do this follow-up study ___
APPENDIX C
APPENDED INSTRUCTIONS

(To accompany the IDEAL LEADER BEHAVIOR Questionnaire)

On the following pages is a list of items that may be used to describe the behavior of your principal, as you think he should act. This is not a test of ability. It simply asks you to describe what an ideal principal ought to do in supervising his faculty.

Since you have not met the principal with whom you will eventually work, your responses to the items will be based upon what you think he should do in each situation.

Note: The term "group" as employed in the following items, refers to the faculty which is supervised by the principal.

The term "leader" refers to the principal whom you are describing.

The term "member" refers to all the people in the faculty unit which is supervised by the principal.

IMPORTANT: Please restrict your responses to the description of the ideal behavior of male principals.
IDEAL LEADER BEHAVIOR (What You Expect of Your Leader)

Developed by staff members of
The Ohio State Leadership Studies

On the following pages is a list of items that may be used to describe the behavior of your supervisor, as you think he should act. This is not a test of ability. It simply asks you to describe what an ideal leader ought to do in supervising his group.

Note: The term, "group," as employed in the following items, refers to a department, division, or other unit of organization which is supervised by the leader.

The term "member," refers to all the people in the unit of organization which is supervised by the leader.

Published by
Bureau of Business Research
College of Commerce and Administration
The Ohio State University
Columbus, Ohio 43210

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18. Refuse to explain his actions. ____________________________ A B C D E
19. Keep the group informed. ________________________________ A B C D E
20. Act without consulting the group. ___________________________ A B C D E
21. Back up the members in their actions. ________________________ A B C D E
22. Emphasize the meeting of deadlines. __________________________ A B C D E
23. Treat all group members as his equals. _________________________ A B C D E
24. Encourage the use of uniform procedures. ______________________ A B C D E
25. Get what he asks for from his superiors. ________________________ A B C D E
26. Be willing to make changes. _________________________________ A B C D E
27. Make sure that his part in the organization is understood by group members. ________________________________ A B C D E
28. Be friendly and approachable. ________________________________ A B C D E
29. Ask that group members follow standard rules and regulations. ________________________________ A B C D E
30. Fail to take necessary action. ________________________________ A B C D E
31. Make group members feel at ease when talking with them. ________________________________ A B C D E
32. Let group members know what is expected of them. ________________ A B C D E
33. Speak as the representative of the group. ________________________ A B C D E
34. Put suggestions made by the group into operation. ____________________ A B C D E
35. See to it that group members are working up to capacity. ________________ A B C D E
36. Let other people take away his leadership in the group. ________________ A B C D E
37. Get his superiors to act for the welfare of the group members. ________________________________ A B C D E
38. Get group approval in important matters before going ahead. ________________________________ A B C D E
39. See to it that the work of group members is coordinated. ________________ A B C D E
40. Keep the group working together as a team. __________________________ A B C D E
18. Refuse to explain his actions.

19. Keep the group informed.

20. Act without consulting the group.

21. Back up the members in their actions.

22. Emphasize the meeting of deadlines.

23. Treat all group members as his equals.

24. Encourage the use of uniform procedures.

25. Get what he asks for from his superiors.

26. Be willing to make changes.

27. Make sure that his part in the organization is understood by group members.

28. Be friendly and approachable.

29. Ask that group members follow standard rules and regulations.

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37. Get his superiors to act for the welfare of the group members.

38. Get group approval in important matters before going ahead.

39. See to it that the work of group members is coordinated.

40. Keep the group working together as a team.
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