THE RELATIONSHIPS BETWEEN LEADERSHIP STYLES AND PERSONALITY TYPES OF TEXAS ELEMENTARY ADMINISTRATORS

DISSERTATION

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

For the Degree of

DOCTOR OF PHILOSOPHY

By

Andra Jones Penny, B.S., M.Ed.

Denton, Texas

May, 1996

THE RELATIONSHIPS BETWEEN LEADERSHIP STYLES AND PERSONALITY TYPES OF TEXAS ELEMENTARY ADMINISTRATORS

DISSERTATION

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

For the Degree of

DOCTOR OF PHILOSOPHY

By

Andra Jones Penny, B.S., M.Ed.

Denton, Texas

May, 1996

Penny, Andra Jones, <u>The relationships between leadership styles</u> and personality types of Texas elementary administrators. Doctor of Philosophy (Early Childhood Education), May, 1996, 127 pp., 12 tables, 2 illustrations, bibliography, 145 titles.

The purposes of this study were to explore the leadership styles and personality types of Texas elementary administrators. The Leader Effectiveness and Adaptability Description-Self (LEAD-Self) assessed the leadership style and adaptability of the administrators. The four identified styles were Telling/Directing, Selling/Coaching, Participating/Supporting, and Delegating. The MBTI measured 16 combinations of 4 personality types which included Extrovert or Introvert, Sensing or Intuition, Thinking or Feeling, and Judging or Perceiving.

The sample was 200 Texas elementary administrators: 100 with early childhood certification and 100 without early childhood certification. A chi-square test of independence was utilized.

Findings included: (a) A majority of Texas elementary administrators in both groups had a Selling/Coaching or Participating/Supporting leadership style; (b) Leadership adaptability scores of both groups were equivalent; (c) Most Texas elementary administrators had Introvert/Sensing/Thinking/Judging and Extrovert/Sensing/Thinking/Judging personality types; (d) Administrators

with early childhood certification had a higher percentage of Intuitive personality types, while administrators without early childhood certification had a predominance of Sensing types; (e) A large percentage of administrators which had Participating/Supporting leadership styles had Feeling personality types; (f) No significant relationship between leadership styles and personality types was found in either group; and (g) No significant relationship between leadership adaptability and personality types was found in either group. Recommendations included: (a) further study to investigate the role of gender in leadership style and personality type; (b) further study to determine if elementary administrators have higher adaptability scores than secondary administrators; (c) further study to determine if elementary administrators have different leadership styles than secondary administrators; (d) further study to determine if elementary administrators have different personality types than secondary administrators; (e) further study to determine if leadership adaptability scores accurately portray an administrator's effectiveness; and (f) provide opportunities for future and practicing administrators to assess their leadership style, leadership adaptability, and personality type.

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
LIST OF ILLUSTRATIONS	vi
Chapter	
1. INTRODUCTION	I
Statement of the Problem Purposes of the Study Research Questions Significance of the Study Study Design Definition of Terms Limitations Basic Assumptions Organization of the Report	
2. REVIEW OF RELATED LITERATURE	17
Leadership Leadership Theories Summary of Leadership Personality Leadership Styles and Personality Traits Summary	
3. METHODOLOGY AND STUDY DESIGN	60
Population and Sample Data Collection Procedures Description of the <u>LEAD</u> Description of the <u>MBTI</u> Description of the Administrator Information/ Data Sheet	

Chapter	Page
4. DATA COLLECTION AND ANALYSIS	75
Characteristics of the Sample Population Leadership Styles of Texas Elementary Administrators Leadership Adaptability (Effectiveness) of Texas Elementary Administrators Personality Types of Texas Elementary Administrators The Relationships Between Leadership Styles and Personality Types of Texas Elementary Administrators Who Have Early Childhood Certification Summary	
5. FINDINGS, INTERPRETATIONS, AND RECOMMENDATIONS FOR FURTHER	
RESEARCH	98
Findings and Interpretations Recommendations	
APPENDIX	110
BIBLIOGRAPHY	116

LIST OF TABLES

Tab	le	Page
1.	Ages of Texas Elementary Administrators	77
2.	Leadership Styles of Texas Elementary Administrators	82
3.	Leadership Adaptability of Texas Elementary Administrators	83
4.	Personality Preferences of Texas Elementary Administrators	85
5.	Personality Types of Texas Elementary Administrators	86
6.	Leadership Styles and Personality Types of Texas Elementary Administrators	89
7.	Leadership Styles and Personality Types of Texas Elementary Administrators With Early Childhood Certification	90
8.	Leadership Styles and Personality Types of Texas Elementary Administrators Without Early Childhood Certification	91
9.	Leadership Adaptability and Personality Types of Texas Elementary Administrators	92
10.	Leadership Adaptability and Personality Types of Texas Elementary Administrators With Early Childhood Certification	93
11.	Leadership Adaptability and Personality Types of Texas Elementary Administrators Without Early Childhood Certification	94
12.	Research Findings Based on the MBTI and LEAD of Selected Groups of Educators	103

LIST OF ILLUSTRATIONS

Figure	Page
1. Blake and Mouton's Managerial Grid	24
2. The Basic Leadership Styles (Hersey and Blanchard)	29

CHAPTER 1

INTRODUCTION

The principal, historically, has been considered the leader of a school and, therefore, responsible for the effective operation of the entire educational program. In recent years, the role of the public school principal has come under intense scrutiny as research has focused on the relationship between effective schools and effective principals (Zirkel & Greenwood, 1987). Since the effective schools research identified strong instructional leadership as a correlate of effective schools, considerable time and energy has been devoted to analyzing and scrutinizing the behaviors of effective principals with the hope that specific behaviors which characterize instructional leadership can be isolated and described. Elementary school administrators face new challenges in their role as educational leaders. Two critical elements in the leadership situation are the leader's leadership style and the personality of the leader.

Herriott and Gross (1965) found a clear link between the leadership of principals and the professional performance of teachers and the success of students. Hartly (1985) asserted that leaders must acquire an understanding of leadership style and how they will lead. In their theory of leadership, Blanchard and Hersey (1970) believed that administrators must

vary their behavior according to the demands of the situation. Believing that various styles of leadership are exercised by principals in their quest for effectiveness, they developed the Leader Effectiveness and Adaptability Description (LEAD) instrument to assess leadership behaviors. Hollander (1971) stated that "style may involve the interactive characteristics of the leader's personality which stamp his relationships with his followers" (p. 1). Burns (1978) stated, "The key to understanding leadership lies in recent findings and concepts in psychology" (p. 49). Von Fange (1961), Burns (1978), and Flores (1987) have advocated further research on leadership and personality types/preferences.

Jung (1923) believed that although people's personalities are fundamentally different, all have the same multitude of instincts from within that drive them to behave in certain ways. A person's personality is their preference for functioning in a certain way. The principal's personality, or their preference for a particular function, is evident in their behavior as an educational leader. Myers and Myers (1980) believed that information known about personality types was useful in human relations, learning, and work. Each of these areas is an integral part of a principal's position. Basing their work on Jung's theory of personality types, Myers and Myers developed the Myers-Briggs Type Indicator (MBTI) to assess personality types and to facilitate understanding of their own personality and the personalities of others. Thus, understanding personality types would lead to greater effectiveness in a job situation.

In 1995 the Texas Education Agency (TEA) reported the number of Texas elementary principals and assistant principals to be 3,895. Of this number, 617 of the administrators had certifications in early childhood education specializing in pre-kindergarten through grade 6. For the purpose of this study, early childhood certification will include kindergarten endorsement, teachers of young children endorsement, and/or early childhood endorsement as granted by the Texas Education Agency. Administrators with early childhood certification comprised fewer than 20% of the elementary administrator population. Perhaps this is due, in part, to the fact that the early childhood certification is relatively new. Although the study of young children is centuries old, only in recent years have early childhood certifications been awarded. Additional course work in child development, hours in an early childhood classroom, and other certification requirements may explain why the early childhood certification is not more sought. Hiring patterns and self-selections may also influence the low number. For many years, the majority of Texas elementary administrators was male. Perhaps the stigma associated with working in the field of early childhood was another reason for the small number of male administrators seeking early childhood certification. With the rising number of female administrators, the number of administrators with early childhood certification may rise. It is also a possibility that teachers with early childhood certification are now realizing that they have the knowledge and background to be effective school administrators. Many of these early

childhood teachers are leaving the classroom to make greater impacts on the education of young children by becoming elementary administrators. This study examines the relationships between leadership styles and personality types/preferences of a random selection of Texas elementary administrators who have early childhood certification and/or endorsement and those who do not.

Statement of the Problem

The problem of this study is to explore the personality types and the leadership styles of elementary administrators. This study investigated the relationships between leadership styles, as specifically measured by the LEAD-Self, and personality types, as measured by the MBTI, of Texas elementary administrators and compared those who have early childhood certification with those who do not.

Purposes of the Study

The purposes of this study are threefold:

- 1. To describe and compare the leadership styles of Texas elementary administrators who have early childhood certification and those who do not;
- 2. To describe and compare the personality types of Texas elementary administrators who have early childhood certification and those who do not:

3. To explore possible relationships between leadership styles and personality types of Texas elementary administrators who have early childhood certification.

Research Questions

To pursue the purposes of this study, the following questions are addressed:

- I. What are the leadership styles of Texas elementary administrators who have early childhood certification and those who do not? Is there a difference?
- 2. What are the personality types of Texas elementary administrators who have early childhood certification and those who do not? Is there a difference?
- 3. Are there any relationships between leadership styles and personality types of Texas elementary administrators who have early childhood certification? If so, what are the relationships?

Significance of the Study

Effective leadership is essential to the effectiveness of an educational organization. Administrators utilize various styles of leadership in their administrative roles. In addition, the personality of these administrators is evident in their leadership behaviors. Data from this study will increase the understanding of the relationship between leadership styles and personality types/preferences of Texas elementary administrators. Elementary

administrators who understand their personality type and leadership style may effectively handle situations that arise in their schools. These findings may assist colleges and universities as they design courses and plan course content for the preparation of future elementary school administrators. Findings may also assist local school districts as they plan staff development for elementary school administrators who are currently employed. In addition, the findings could have implications for the selection and hiring of elementary administrators. Finally, the body of knowledge regarding leadership styles and personality types will be broadened.

Study Design

Both descriptive and relational research are represented in this study. Three instruments were used in gathering data for this study: an Administrator Information/Data (demographic) sheet, the <u>LEAD</u>, and the <u>MBTI</u>. The data sheet, designed for this study, was developed to obtain background information on each selected subject/respondent (see Appendix). Packets containing the three instruments and a cover letter were mailed to 200 Texas elementary administrators. Of the 200 sample subjects, 100 of the administrators had early childhood certification and 100 did not.

The subjects for this study were randomly chosen from a list of elementary principals and assistant principals as recognized by the TEA. A materials packet containing the three instruments was mailed to each

selected administrator. Included in the packet were instructions on how to complete and return the instruments. A stamped, self-addressed envelope was included.

The LEAD is an instrument which measures leadership style and adaptability. The instrument is based on Hersey and Blanchard's Situational Leadership Theory and involves 12 situational problems to be solved by the participant. The four identified styles of leadership are: "telling/directing" (high task/low relationship), "selling/coaching" (high task/high relationship), "participating/supporting" (high relationship/low task), and "delegating" (low relationship/low task). In addition, the LEAD measures the style range and style adaptability. Style range is the extent to which leaders can vary their leadership styles depending on the situation. Style adaptability is the degree to which leaders are able to vary their leadership styles appropriately to the readiness level of a follower in a specific situation. Hersey and Blanchard (1973) equate style adaptability with leader effectiveness.

The MBTI is a self-scoring, 126-item inventory which is based on Jung's theory of psychological types. The essence of type theory is that, due to basic differences in the way individuals prefer to use their perception and judgment, behavior is orderly and consistent. Perception involves all the ways of becoming aware of things, people, happenings, or ideas. Judgment involves all the ways of coming to conclusions about what has been perceived. The MBTI is based on Jung's ideas about perception and

judgment, and the attitudes in which these are used in different types of people. The instrument contains four separate indices: Extroversion or Introversion, Sensing perception or Intuitive perception, Thinking judgment or Feeling judgment, and Judgment or Perception. The Extrovert-Introvert (EI) index is designed to reflect whether a person is an extrovert or introvert. The Sensing-Intuition (SN) index is designed to reflect a person's preference between two opposite ways of perceiving: Sensing (S) which relies on observable facts or happenings through one of the five senses or Intuition (N) which relies on meanings, relationships, and/or possibilities that have been worked out beyond the reach of the conscious mind. The Thinking-Feeling (TF) index is designed to reflect a person's preference between two contrasting ways of judgment. A person relying primarily on Thinking (T) decides on the basis of logical consequences while a person relying primarily on Feeling (F) decides of the basis of personal or social values. The Judgment-Perception (JP) index is designed to describe the process a person uses in dealing with the outer world. Judging (J) types organize, plan, and move quickly to decisions, while Perceiving (P) types are curious and open to change. The four indices yield 16 possible combinations called types which are denoted by the four letters of the preferences. The 16 combinations are ISTJ, ISFJ, ISFP, INFJ, INTJ, INFP, INTP, ESFP, ESTP, ESTJ, ESFJ, ENFP, ENTP, ENFJ, and ENTJ. The MBTI is used to identify the four basic preferences of a person which direct their use of perception and judgment. Both

instruments score well on tests of validity and reliability. Data were analyzed using a chi-square test for independence.

Definition of Terms

The following terms are defined for this study:

Attitudes as described in Jung's (1923) theory, refers to extroversion and introversion. The term can also refer to judgment and perception (Myers-Briggs & McCaulley, 1985).

Delegating (S4) is one of the four styles of leadership identified by Hersey and Blanchard and measured by the <u>LEAD</u> instrument. Leaders identified as "delegating" display low relationship/low task behavior (Blanchard, Zigarmi, & Nelson, 1993; Hersey, 1988).

Early childhood certification refers to the granting of kindergarten endorsement, teachers of young children endorsement, or early childhood certification by the Texas Education Agency to an individual who meets the criteria to receive such certification.

Elementary administrator is defined as an elementary principal or assistant principal who is currently assigned to a Texas elementary school which may include any combination of grades pre-kindergarten through eight.

Extroversion is defined as an attitude which directs attention and energy toward the outer world (Myers-Briggs & McCaulley, 1985).

Extroverts are people who like to have people around, usually communicate freely, often act quickly, like variety and fun, do not mind interruptions, tend to be faster, are often impatient with long, slow jobs, and are good at greeting people (Myers-Briggs, 1976a).

<u>Feeling</u> is a judging function which makes decisions by ordering choices in terms of personal values (Myers-Briggs & McCaulley, 1985).

Feeling types are people who are more people-oriented, like harmony, enjoy pleasing people, tend to be very aware of other people and their feelings, tend to be sympathetic, dislike telling people unpleasant things, need occasional praise, and often let decisions be influenced by likes and wishes (Myers-Briggs, 1976a).

Functions are the four basic mental processes of Sensing (S), Intuition (N), Thinking (T), and Feeling (F) (Myers-Briggs & McCaulley, 1985).

Introversion is an attitude which orients attention and energy to the inner world (Myers-Briggs & McCaulley, 1985).

Introverts are people who are content with solitary activities, like quiet for concentration, tend to be careful with details, tend not to mind working on one project for a long time, dislike interruptions, like to think before they act, and sometimes have problems communicating (Myers-Briggs, 1976a).

Intuition is a perceptive function which attends to meanings, symbols, relationships, and possibilities (Myers-Briggs & McCaulley, 1985).

Intuitive types are people who dislike repetition and are impatient with routine details, work in bursts of energy, like solving new problems, follow their inspirations, and frequently make errors of fact (Myers-Briggs, 1976a).

<u>Judging</u> is an orientation which allows persons to organize, plan, and move quickly to a decision (Myers-Briggs & McCaulley, 1985).

<u>Judging types</u> are people who like to get things organized and finished, may decide things too quickly, may not notice new things that need to be done, want only the essentials needed to begin their work, and work best when they can plan their work (Myers-Briggs, 1976a).

Leadership style is a dimension of a leader's behavior that is based on the amount of direction (task behavior) and the amount of socio-emotional support (relationship behavior) a leader provides in a given situation.

Leadership styles identified by Hersey and Blanchard (1988a) include Selling, Telling, Participating, and Delegating. They were later renamed Coaching, Directing, Supporting, and Delegating (Blanchard et al., 1993).

Participating/Supporting (S3) is one of the four styles of leadership identified by Hersey and Blanchard and measured by the <u>LEAD</u> instrument. Leaders identified as "participating/supporting" display high relationship/low task behavior (Blanchard et al., 1993; Hersey & Blanchard, 1988a).

Perceiving is an orientation which allows persons to be curious and open to changes, often keeps options open in case something better comes along (Myers-Briggs & McCaulley, 1985).

Perception types are people who may start many projects and have difficulty finishing them, may postpone unpleasant tasks, adapt well to changing situations, welcome new perspectives on a situation, may have difficulty in making decisions, and leave things undone and open for changes (Myers-Briggs, 1976a).

Personality type is defined as a self-reported combination of preferences on four scales: Extroversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judgment-Perception (Myers-Briggs, 1976a).

Relationship behavior is the extent to which a leader engages in two-way communication by socio-emotional support, psychological strokes, and facilitating behavior (Hersey & Blanchard, 1974).

Selling/Coaching (S2) is one of the four types of leadership identified by Hersey and Blanchard and measured by the <u>LEAD</u> instrument. Leaders identified as "selling/coaching" display high task/high relationship behavior (Blanchard et al., 1993; Hersey & Blanchard, 1988a).

Sensing is a function which attends to experience available to the senses (Myers-Briggs & McCaulley, 1985).

Sensing types are people who tend to do well at precise work, usually reach a conclusion in a step-by-step manner, like an established way of

doing tasks, seldom make errors of fact, and are not often inspired (Myers-Briggs, 1976a).

Style adaptability is the degree to which a leader is able to vary their leadership style appropriately to the readiness level of a follower in a specific situation. Points are awarded for each alternative action selected in response to the 12 situations provided on the LEAD instrument. Scores in the 30 to 36 point range indicate a leader with a high degree of adaptability, 24 to 29 points indicate a moderate degree of adaptability, and 0 to 23 points indicate a low degree of adaptability. Style adaptability is equated with leader effectiveness (Hersey & Blanchard, 1974).

Style range is the extent to which a leader varies their leadership style depending on the situation as measured by the <u>LEAD</u> instrument (Hersey & Blanchard, 1974).

Task behavior is the extent to which a leader engages in one-way communication by explaining what each follower is to do as well as when, where, and how tasks are to be accomplished (Hersey & Blanchard, 1974).

Telling/Directing (S1). One of the four leadership styles identified by Hersey and Blanchard and measured by the <u>LEAD</u> instrument. Leaders identified as "telling/directing" display high task/low relationship behavior (Blanchard et al., 1993; Hersey & Blanchard, 1988a).

Thinking is a function which makes decisions by ordering choices in terms of impersonal, logical analysis (Myers-Briggs & McCaulley, 1985).

Thinking types are people who tend to decide impersonally, need to be treated fairly, like things in logical order, tend to be firm-minded, do not readily show emotion (Myers-Briggs, 1976a).

The Abbreviations

E is the abbreviation used for Extroversion.

F is the abbreviation used for Feeling.

I is the abbreviation used for Introversion.

J is the abbreviation used for Judgment.

LEAD is the abbreviation used for the Leader Effectiveness and Adaptability Description instrument.

MBTI is the abbreviation used for the Myers-Briggs Type Indicator.

N is the abbreviation used for Intuition.

P is the abbreviation used for Perception.

PEIMS is the abbreviation used for Public Education Information Management System.

S is the abbreviation used for Sensing.

T is the abbreviation used for Thinking.

TEA is the abbreviation used for Texas Education Agency.

Limitations

The following are limitations imposed on this study:

- 1. The study is limited to elementary administrators as identified in the PEIMS report as reported by the TEA. Those having early childhood certifications are also identified by the PEIMS report.
- 2. The study is subject to all limitations that are recognized in collecting data by mailed questionnaires (i.e., response bias due to return).
- 3. Since the assessment instruments depend on self-reported data, the responses may reflect leadership styles and personality types that the respondents think they should display.
- 4. Responses may reflect participation by a certain leadership orientation or personality type.
- 5. The amount of time required to answer the questionnaire (approximately 30-35 minutes) may result in fewer returns from the initial sampling.

Basic Assumptions

The basic assumptions of this study are:

- I. It is assumed that the elementary administrator responded honestly to the questions on the assessment instruments.
- 2. It is assumed that the responses expressed by the randomly chosen subjects are representative of views held by others of the same population.

3. It is assumed that data furnished by the TEA regarding the elementary administrators are correct.

Organization of the Report

This dissertation is divided into five chapters. Chapter I includes the introduction of the study, statement of the problem, purpose of the study, research questions, significance of the study, study design, definition of terms, limitations, basic assumptions, and organization. Literature related to leadership styles and personality types is reviewed in Chapter 2. The research methodology used for data collection, selection of the sample subjects, and detailed descriptions of the instruments used are described in Chapter 3. The methods used to analyze the collected data are also described. The findings of the study relating to leadership styles and personality types of the elementary administrators surveyed are presented in Chapter 4. In addition, the information summarized from the data sheets returned by the respondents is presented in Chapter 4. The findings of the study, interpretations of the data, and recommendations for further research are presented in Chapter 5.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Both leadership and personality have been recognized as important components of effective school leadership. Research and theory on leadership style and personality have existed for over 100 years, although the last 25 to 50 years have been the most prolific.

The review of literature was undertaken to provide a comprehensive overview of leadership styles and personality traits and their relationship to each other. The first part of the review includes an historical perspective of leadership, leadership traits, and leadership theories. The second part of the review includes literature as it pertains to personality traits. Finally, studies focusing on the relationship between leadership styles and personality types are reviewed.

Leadership

For many years, leadership has been the focus of extensive study and research. "The study of leadership is an ancient art" (Bass, 1990, p. 2). In 1977, Stogdill prepared a comprehensive volume of abstracts and bibliographies on leadership. Over 3,000 pieces of literature relating to leadership were reviewed and abstracted by Stogdill. This voluminous number was indicative of the continued and growing interest in leadership.

Although leadership has been the focus of much research, a clear definition of leadership has been rather elusive. In actuality, the many definitions of leadership reflect the many persons who have attempted to define it. Burns (1978) stated, "Leadership is defined as leaders inducing followers to act for certain goals that represent the values and the motivations . . . of both leaders and followers. Leadership is one of the most observed and least understood phenomena on earth" (p. 19). Terry (1960) stated that "leadership is the activity of influencing people to strive willingly for a group goal" (p. 19). Katz and Kahn (1966) described leadership as "any act of influence on a matter of organizational relevance" (p. 334). Thompson (1983) was quoted as saying, "Leadership is best defined as getting the job done through people" (p. 19). Sergiovanni (1979) stated that "defining leadership is not easy, yet most of us know it when we see it" (p. 388). Perhaps Bennis's (1959) summary of leadership is even more accurate today. He stated:

Of all the hazy and confounding areas in social psychology, leadership theory, undoubtedly, contends for top nomination. And, ironically, probably more has been written and less known about leadership than about any other topic in the behavioral sciences. (Bennis, 1959, pp. 259-260)

For this study, the Hersey and Blanchard (1972) definition of leadership is adopted. Their definition is a result of over 50 years of research and theorizing about leadership.

Leadership Theories

Initiating Structure and Consideration

Extensive studies on leadership were conducted at Ohio State
University during the 1940s and 1950s (Shartle, 1956). Shartle classified
leadership behavior into two independent factors which he called Initiating
structure and Consideration. Initiating structure concerned the leader's
behavior in planning as well as in organizing work and tasks. Consideration
dealt with maintaining relationships between the leader and his staff. These
two types of leader behaviors undergirded the majority of the work of
Halpin and Winer (1957), Hersey and Blanchard (1969, 1972, 1979,
1988b), Blake and Mouton (1964, 1982), and Reddin (1967). Later these
two terms, Initiating structure and Consideration, were used synonymously
with task orientation and relations orientation by Stogdill and Coons
(1957).

In their study of Consideration and Initiating, Halpin and Winer (1957) compared 64 educational administrators and 132 aircraft commanders. The study examined the relationship between a leader's ideal and his/her actual leadership behavior as observed by his/her subordinates. Halpin stated, ..."the mean score of administrators exceeds the mean score of commanders for Consideration, but the reverse is true for Initiating structure" (Halpin & Winer, 1957, p. 67). Therefore, Consideration would

appear to be more dominant in an educational institution than in a military institution with a corresponding diminishment of Initiating structure.

In another study by Halpin (1966), school superintendents' behaviors were assessed. Superintendents adopted different behavioral roles depending on the group they were interacting with. Administrators, had a tendency to view Consideration and Initiating structure as an either/or form of behavior. Halpin stressed that this conflict should not necessarily exist. He felt that effective leadership behavior was characterized by high scores on both Initiating structure and Consideration. High Initiating structure and high Consideration style was theoretically the best leader behavior, while low scores on both dimensions were theoretically the worst (Halpin, 1966).

In an extensive review of leadership studies pertaining to Initiating structure and Consideration by Korman (1966), the Leadership Opinion Questionnaire (LOQ) and Leadership Behavior Description Questionnaire (LBDQ) were described and validated. Authors included in Korman's review were Fleishman, Bass, Parker, Halpin, Winer, Hemphill, Harris, Burtt, Oaklander, Sptitzer, McNamera, and Peters. In his summary of the studies, Korman (1966) observed, "There is yet almost no evidence on the predictive validity of 'Consideration' and 'Initiating structure' nor on the kinds of situational moderators which might affect such validity" (p. 360). Both Kavanagh and Weissenberg (1972) reviewed studies which used the LBDQ or LOQ to measure leadership behavior. They concluded that "the

two leadership dimensions of 'Consideration' and 'Structure' are not always empirically independent" (Kavanagh & Weissenberg, 1972, p. 127).

Lowin, Hrapchak, and Kavanagh (1969) discussed the Consideration and Initiating structure dimensions and the relationships between the two. They concluded that "Consideration and Initiating structure can each correlate positively, negatively, both positively and negatively (depending on other variables), and only weakly if at all with effectiveness and morale indices" (Lowin et al., 1969, p. 240). The authors found that "the Consideration and Initiating structure manipulations did not interact" (Lowin et al., 1969, p. 247). This study supported Blake and Mouton's (1964) Managerial Grid Theory.

Situational Leadership Theories

Situational leadership focuses on the observed behavior/behaviors of leaders and their group members in various situations. Early reviews by Bird and Jenkins (cited in Stogdill, 1948) were frequently cited as support of the view that leadership involves the situation and that no personal characteristics are solely predictive of leadership behavior. Criticism of these views was that they tended to over emphasize the situational and under emphasize the personal nature of leadership.

Studies by Stogdill (1948) focused on research pertaining to traits and personal factors associated with leadership. He classified the factors associated with leadership under five headings: capacity, achievement,

responsibility, participation, and status (Stogdill, 1948, p. 64). Later adding a sixth heading which he called situation, Stogdill (1948) concluded that, "the evidence suggests that leadership is a relation that exists between persons in a social situation, and that persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 65). Stogdill (1948) also asserted that, "a person does not become a leader by virtue of the possession of some combination of traits" (p. 64). Stogdill (1948) concluded that leaders' traits must bear some relevant relationship to the characteristics of the follower, and since behaviors of leaders tend to differ with each situation, leadership also involved the situation.

In response to Likert's (1961) earlier work and Hersey and Blanchard's theory of adaptive leader behavior, Blake and Mouton (1964) introduced the Managerial Grid. In the Managerial Grid, five different types of leadership based on concern for production (task) and concern for people (relationship) were located in four quadrants. Concern for production (task) was a point on the horizontal axis and concern for people (relationship) was a point on the vertical axis. Task became more important to the leader as his rating advanced on the horizontal scale. A leader with a rating of nine on the horizontal axis had a maximum concern for task. Relationship became more important to the leader as his rating progressed up the vertical axis. A leader with a rating of nine on the vertical axis had a maximum concern for people. There are 81 possible combinations of these two indices. The major managerial styles were

examined in terms of direction and control, concept or goals, management under the style, boss-subordinate relationships, approaches to managing conflict, impact on creativity and change, personal behavior, and conditions and consequences of the style.

In 1981, Blake, Mouton, and Williams revised the grid and applied it to the educational setting. Administrations were identified by one of five major styles: caretaker administration (1,1), authority-obedience administration (9,1), constituency-centered administration (5,5), comfortable and pleasant administration (1,9), and team administration (9,9). The authors examined personal motivations affecting the various Academic Grid styles and advocated the 9,9 leadership style (see Figure 1).

While Blake, Mouton, and Williams (1981) advocated the one-best style of leadership (9,9), they compared their approach to that of Hersey and Blanchard. Blake et al. noted that their approach involved interaction of the two variables, task and people. They favored the approaches advocated by Argyris, Likert, and McGregor who were proponents of participative leadership. Blake et al. (1981) asserted that the Hersey and Blanchard approach was a combination of the task and people variables. Fleishman and Peters (1962), Reddin (1967), and Fiedler (1965) also supported the behavior approach of Hersey and Blanchard.

High	9	Though		ntion to	needs		9.9 Management Work accomplishment is from				
	8	relation	le for sat ships lea table frie	ds to a			committed people; interdependence through a "common stake" in organization				
	7	u		work ter	mpo.		purpose leads to relationships of trust and respect.				
ople	6				nagemer	_					
Concern for People	5	 - -	Adequate organization performance is possible through balancing the necessity to get out work with maintaining morale								
Concer	4		of people at a satisfactory level.								
	3	1.1 Management					<u>9,1 Ma</u>	nagemen	<u>ıt</u>		
	2	Exertion of minimum effort to get required work done is appropriate to sustain				Efficiency in operations results from arranging conditions of work in such a way that human					
Low	I	organization membership.				i	elements interfere to a minimum degree.				
	-	l	2	3	4	5	6	7	8	9	
		Low		•	Concer	n for Pro	duction			High	

Figure 1. Blake and Mouton's Managerial Grid. From: The Managerial Grid (p. 10) by R. R. Blake and J. S. Mouton, 1964, Houston: Gulf Publishing.

Emphasis on Social Interaction

Fiedler's (1965, 1967) Leadership Contingency Theory postulated that the effectiveness of a group depended on the leader's motivational orientation (person vs. task) and on the nature of the situation. Three critical dimensions described by Fiedler (1965) seemed to determine the type of leadership needed in different situations: leader-member relations,

task structure, and position power. Although Fiedler (1965) asserted that these three dimensions can be changed, he maintained that people do not change their behavior very easily. Fiedler (1965) observed that, "It is surely easier to change almost anything in the job situation other than a man's personality and his leadership style" (p. 115). He suggested that a number of leader behavior styles can be effective, depending on the elements of the situation. Joining Fiedler, Reddin was concerned with the situation in which a leader worked. Reddin (1967) presented a theory of leadership based on task and relationships, describing the style demands of the situation as involving the job, the supervisor, and the subordinates. Reddin (1967) argued that "a useful typology must allow that a variety of styles may be effective or ineffective depending on the situation" (p. 13). Effectiveness depended on using the appropriate behavior to match the situation. The two basic tenets of Reddin's theory were that there is no consistent evidence for one style being generally more effective than another and that leader training must focus on style flexibility rather than style rigidity. The effective styles of leadership were those of bureaucrat, developer, benevolent autocrat, and executive; the ineffective styles were deserter, missionary, autocrat, and compromiser (Reddin, 1967).

Evans (1970) and House (1971) provided additional theories rooted in the contingency approach. Their Path-Goal model advocated that a leader's style is effective when it clarifies linkage between subordinate effort and valued outcome. Likewise, other researchers studied leadership from a

social interaction viewpoint. Hollander, joined by Julian (1969), examined the development of various trait and situational approaches to leadership. The authors viewed leadership in social terms and stated that "the key to an understanding of leadership rests in seeing it as an influence process" (Hollander & Julian, 1969, p. 395). In his review of the research on leadership, Hollander (1971) observed that "style may involve the interactive characteristics of the leader's personality" (p. 1), concluding that the "situational view was never aimed at throwing away concern with the individual or his attributes, including perceptions and behavioral propensities" (Hollander, 1971, p. 9). "Leadership fingerprint" was Katz's (1985) description of an administrator's leadership style (p. 6).

In 1969, McGregor presented his theory on leadership management in which he believed that leadership potential was broadly distributed in the population and developed Theory X and Theory Y about his assumptions concerning the nature of people. Originally considered pertinent to leadership management, the theories frequently have been applied in educational settings.

Theory X assumptions (McGregor, 1969) were:

- 1. The average human being has an inherent dislike of work and will avoid it if he can.
- 2. Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, or threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.
- 3. The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, and above all wants security. (pp. 33-34)

Theory Y assumptions (McGregor, 1969) were:

- 1. The expenditure of physical and mental effort in work is as natural as play or rest.
- 2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and control in the service of objectives to which he is committed.
- 3. Commitment to objectives is a function of the rewards associated with their achievement.
- 4. The average human being learns, under proper conditions, not only to accept but to seek responsibility.
- 5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
- 6. Under the conditions of modern industrial life, the intellectual potentials of the average human being are only partially utilized. (pp. 47-48)

McGregor (1969) suggested that "it is more fruitful to consider leadership as a relationship between the leader and the situation than as a universal pattern of characteristics possessed by certain people" (p. 185). In addition, he stated that "the attempt to train supervisors to adopt a single leadership 'style' yields poorer results than encouraging them to create the essential conditions in an individual way and with due regard for their own particular situation" (p.184). Mattaliano (1982) examined McGregor's theories with respect to motivation, creativity, and job satisfaction. In all areas, Mattaliano argued for Theory Y of leadership, seeing a link between a leader's view of human nature and his leadership style. Mattaliano (1982) asserted that Theory Y leadership was needed in the realm of education. McGregor (1969) considered leadership much more than traits, but was concerned about the ethical use of psychological testing for administrative

purposes. This view contrasted with the perspectives of Hemphill, Griffiths, and Frederiksen (1962), who stated that "personality assessment might make a valuable addition to a battery of tests for selecting principals, providing the school district is able to describe the principal it wants in terms of administrative performance" (p. 338).

Adaptive Leadership

In 1970, Blanchard and Hersey presented the Life Cycle Theory of Leadership which also concerned adaptive leadership behavior, advocating that educational administrators must vary their behavior according to the demands of the situation. Behavior based on the situation was referred to Situational Leadership. An important part of the Life Cycle Theory of Leadership was the concept of maturity. The authors advocated adapting leader behavior to the maturity level of group followers. Maturity level was defined by achievement motivation, relative independence, and the ability to take responsibility. In describing the Situational Leadership Theory, Gates, Blanchard, and Hersey (1976) focused on the importance of the perception of leader behavior by subordinates and others. The authors thought that their Situational Leadership Theory could be applied to all levels within an educational institution. Hersey and Blanchard (cited in Blanchard, Zigarmi, & Zigarmi, 1987) referred to the readiness level of subordinates instead of the maturity level of subordinates as the "developmental level of subordinates" (p. 13).

Four leadership styles described by Hersey and Blanchard (1972) were based on the Initiating structure and Consideration concepts developed by the Ohio State University Leadership studies. Task behavior related to Initiating structure and relationship behavior related to Consideration. Hersey and Blanchard's (1988a) Life Cycle Theory suggested that

leader behavior should move through (I) high Task-low Relationship (telling/directing) behavior to (2) high Task-high Relationship (selling/coaching) behavior to (3) low Task-high Relationship (participating/supporting) behavior to (4) low Task-low Relationship (delegating) behavior, provided followers progress from immaturity to maturity. (p. 119)

(See Figure 2.)

onship .vior (High)	Low Tas and High Relatio Participating/Su		High Task and High Relationship Selling/Coaching
Relationship (Low) Behavior	Low Tasi and Low Relation Delegatin	nship	High Task and Low Relationship Telling/Directing
	(Low)	Task Behavior	(High)

Figure 2. The Basic Leadership Styles (Hersey and Blanchard). From: Management of Organizational Behavior: Utilizing Human Resources (2nd ed., p. 82), by P. Hersey & K. Blanchard, 1972, Englewood Cliffs, NJ: Prentice-Hall.

Hersey and Blanchard (1988a) refined the Life Cycle Theory by adding an effectiveness dimension as Reddin had done; their model was then called the Tri-Dimensional Leader Effectiveness Model. In this model, any of the basic styles could be effective or ineffective depending on the situation. Still later, Hersey and Blanchard referred to their model as Situational Leadership Theory. The basic concept found in Situational Leadership Theory is that as the level of maturity of the group continues to increase in terms of accomplished specific tasks, the leader should begin to reduce his task behavior and increase relationship behavior until the group reaches a moderate level of maturity. As the group begins to move into an above average level of maturity, then the leader should decrease not only task behavior but also relationship behavior. In short, Situational Leadership Theory focuses on appropriateness of leadership styles according to the task-relevant maturity of the followers (Hersey & Blanchard, 1988a, p. 120).

In their leadership studies, Hersey and Blanchard used the terms "personality" and "style" interchangeably. The Leader Effectiveness and Adaptability Description (LEAD) instrument, developed by Hersey and Blanchard in 1973 (cited in Hersey & Blanchard, 1988b), provided an assessment tool which can be used to investigate leadership style. For each of 12 situations presented to the test taker, one of four alternatives can be selected. The instrument allows the test taker to determine his primary leadership style, style range, and leadership adaptability (effectiveness).

The test taker's leadership style is determined by the alternatives chosen for the 12 situations. Style range is described as the extent to which a leader is able to vary his leadership style in a particular situation and is determined by interpreting the numerical values assigned to the choices given in each situation. Leadership adaptability reflects the degree to which a person's change in style is appropriate to the level of maturity of the people involved in the situation. Though style range is important, the critical element in determining a leader's effectiveness is his leadership style adaptability (Hersey & Blanchard, 1988b, p. 7).

Other Contemporary Leadership Theories

Situational leadership behavior was also discussed by Tannenbaum and Schmidt (1973) in their continuum of leadership behavior consisting of seven points. They stated, "Each type of action is related to the degree of authority used by the boss and to the amount of freedom available to his subordinates in reaching decisions" (Tannenbaum & Schmidt, 1973, p. 163). A description of the leader's behavior at the seven points along this continuum was provided. Three factors were presented for the leader to consider when deciding to manage: forces in the manager, forces in the subordinates, and forces in the situation (Tannenbaum & Schmidt, 1973, p. 173). Originally published in 1958, the Tannenbaum and Schmidt Leadership Grid recognized that there were forces within the situation which influenced a leader's style. An expanded view of Tannenbaum and

Schmidt's grid was provided by Hartley in 1985. He identified four styles of leadership as telling, selling, consulting, and joining. Hartley also described the Thomas-Kilmann Conflict Mode Instrument which was designed to identify an individual's pattern of response to conflict. Several modes of response that Harltley (1985) identified were competing, accommodating, avoiding, collaborating, and compromising (p. 26). Hartley's work is considered relevant since leadership involves the handling of conflicts.

Sexton and Switzer (1977) presented the <u>Educational Management</u>

<u>Grid</u> which was developed to determine leadership styles for educators. The instrument was a self-test which had 28 situations divided into five areas pertaining to education. The categories were decision-making, group dynamics, motivational skills, and communication. Based on their research, Sexton and Switzer also advocated the situational approach to leadership style.

In his discussion of situational leadership, Cawelti (1979) stressed that educators must keep the human element in their leadership styles, suggesting that "We must continue to demonstrate joint concern for people and goals as the situationalists would suggest, but also assure that we retain balance in modeling qualities of the head and the heart" (p. 378). Getzel, Lipham, and Campbell (cited in Lipham, 1988) developed a model of behavior in social systems (Lipham, 1988). Personality and situation interacted in the model developed by the three researchers. This model

postulated that the interaction of culture, ethics, and values shape a leader's behavior. Getzel stated "Expectations, both expressed and unexpressed, help formulate an administrator's behavior in a particular situation" (cited in Gorton & Snowden, 1993, p. 88). Getzel further explained that factors such as an administrator's personal needs, the role expectations that are held by other relevant individuals and groups, and the interaction between these two forces shape an administrator's leadership style (cited in Gorton & Snowden, 1993).

In additional studies, Shapira (1976) described leadership style as a function of three facets: the leader's behavior, the locus of power, and the locus of information. Shapira (1976) used the following facets:

A: Leader Behavior al: Authoritative	B: Locus of Power bl: Boss has the	C: Locus of Information cl: Boss has the
a2: Democratic	power b2: Subordinate has the power	information c2: Subordinate has information. (p. 136)

Shapira (1976) described a person's leadership style by using 1 of 8 profiles based on these facets. In addition, Shapira presented five leadership styles described by Bass and Valenti which were direction, negotiation, consultation, participation, and delegation.

While Sergiovanni (1979) was critical of the situational approach to leadership, he saw it as an improvement over the one-best approach (9,9) advocated by Blake and Mouton. Sergiovanni maintained that many job characteristics were not included in defining situations for appropriate style matching. He concluded by asserting that "we need a shift of emphasis

from leadership training to leadership exploration" (Sergiovanni, 1979, p. 394).

In discussing decision styles and how knowledge about decision style theory can help identify certain types of leadership styles, Hunsaker and Hunsaker (1981) suggested that, "A decision style is a learned way of processing information and making decisions" (p. 23). Four decision styles were identified: hierarchical, decisive, flexible, and integrative. Hunsaker and Hunsaker related decision style characteristics to leadership styles. They asserted that different leadership types would prefer to use certain decision styles and stated, "Any given style, however, works best when there is an appropriate match between the job and the individual" (Hunsaker & Hunsaker, 1981, p. 31). This was similar to what Fiedler (1965) had advocated about the leadership style of a person and the situation.

In 1982, Ernest designed an assessment which could be taken by administrators to determine their leadership style. The test was based on the Managerial Grid of Blake and Mouton. The areas of the test included planning, operations, wrap-up, and overall leadership philosophy. Ernest (1982) commented on the test findings by stating, "The excellent administrator is the one who dismisses neither people nor production needs" (p. 17).

After examining the debate between the theories expressed by those advocating the Managerial Grid and those advocating situationalism, Beck

(1982) offered two key points: First, the Managerial Grid and situationalism were similar. The approaches were both rooted in the Ohio State University Leadership studies. Beck outlined the similarities between the two approaches. The second, and more important, point was that he viewed the two approaches as passing paradigms. Contrasting the older paradigm with the new "Living Systems" paradigm, Beck (1982) argued,

in the 'Living Systems' approach both individuals and organizations of any size are the product of a delicate balance of a number of interlocking and interdependent subsystems. A slight change in any of these subsystems will result in a gestalt-like shift in the entire network. (p. 81)

In another approach to leadership, Walton (1986) presented the Fourteen Points of Dr. Deming's management method known as Total Quality Management (TQM). The TQM approach was known as a transformational approach to leadership, advocating "Quality comes not from inspection but improvement in the process" (Walton, 1986, p. 35). Educational leaders should be working to improve the process. "Leading consists of helping people to do a better job and of learning by objective methods who is in need of individual help," stated Walton (1986, p. 35). Walton (1986) asserted that "the job of a manager is to lead, to help people do their jobs better" (p. 71).

As evidenced by the growing amount of research pertaining to leadership, theories that address this topic abound. Many researchers seek to validate or negate previous research theories, while others attempt to introduce and postulate their own ideas regarding leadership. It appears

that theories on leadership have been and will continue to be a source of investigation, research, and debate.

Leadership Characteristics

Leadership traits are those behaviors which are exhibited by people in various situations of leadership. Characteristics, or traits, of leaders is a different approach to understanding variables associated with effective leadership. Many of the early leadership characteristic studies compared leaders with non-leaders to see what traits existed with respect to physical characteristics, personality, and ability. Although difficult to enumerate, many traits and behaviors manifested by effective leaders were often repeated in research literature. As early as 1940, Reavis listed five characteristics that a successful school administrator should have. These included unselfish motivation, scholarly ability, industry, ability to get along with people, and executive capacity (p. 420). Reavis (1940) asserted that the "selection of the school executive usually is determined by personal characteristics" (p. 417).

Personal Traits and Leadership Success

In early studies of leadership traits, Thompson (1931), Wright (1937), Cubberly (1915), Broome (1930), and Gosling (1930) described qualifications and traits of successful school administrators. Each of the studies stressed the importance of the school administrator's ability to deal with the problems of human relationships. The effectiveness of an

administrator is enhanced by his ability to work with various personalities. Fiedler's writings (1965, 1967) were related to the theories of these authors.

Traits and personal factors associated with leadership were reviewed by Stogdill (1948). The 29 factors studied included physical characteristics (personal appearance), intelligence, judgment/decision making, self-confidence, and social skills (Stogdill, 1948, p. 64) which Stogdill placed into six categories: capacity, achievement, responsibility, participation, status, and situation (1948, p. 64). He stated that

evidence suggests that leadership is a relationship that exists between persons in a social situation, and that persons who are leaders in one situation may not necessarily be leaders in other situations. A person does not become a leader by virtue of the possession of some combination of traits. (Stogdill, 1948, pp. 64-65)

Mann (1959) reviewed literature concerning the relationship of an individual's personality traits to his behavior in groups. The review included personality traits such as intelligence, adjustment, dominance, extroversion-introversion, masculinity-femininity, conservation, and interpersonal sensitivity. Mann (1959) concluded, "The positive relationships of intelligence, adjustment, and extroversion to leadership are highly significant. In addition, dominance, masculinity, and interpersonal sensitivity are found to be positively related to leadership, while conservatism is found to be negatively related to leadership" (p. 252).

The trait theory of leadership was reviewed by Kritsonis in 1982. He presented a list of traits that effective superintendents strive to develop and strengthen. These traits were courage, decisiveness, dependability,

endurance, enthusiasm, initiative, integrity, judgment, impartiality, consistently, loyalty, sensitivity, and knowledge. One would assume that similar traits would be developed in effective principals.

Moving From Traits to Behavior

In contrast, McGregor (1969) stated that leadership potential was broadly distributed in the population and that "it is more fruitful to consider leadership as a relationship between the leader and the situation than as a universal pattern of characteristics possessed by certain people" (p. 185). In 1986, researchers at the Ontario Institute for Studies in Education conducted a series of studies that resulted in the principal profile, a description of principals' traits and behaviors affecting levels of principal effectiveness (Leithwood & Montgomery, 1986). Sixty-three principals were interviewed to verify the descriptions developed by the group. In addition, a research effort sponsored by the Florida Council on Educational Management (Croghan, Lake, & Schroder, 1983; Huff, Lake, & Schaalman, 1982; Martinko & Gardner, 1982; Snyder & Drummond, 1988) identified traits and competencies of high-performing, effective principals. Using these competencies as a framework, a model was developed to evaluate and train principals. The results of this study were combined with findings from a National Association of Secondary School Administrators (NASSA) study and a managerial competency model by Boyatzis to describe 19 principal competencies (Snyder & Drummond, 1988).

Youngs (1988) described a study which "sought to determine whether gender was a major factor in determining leadership style, influence, and use of power" (p. 40). The subjects in the study were 56 administrators. Youngs reported an interesting result related to age. The author found that school administrators over 45 years of age viewed themselves as managers and that school administrators under 45 years of age viewed themselves as leaders. Most managers under 45 years used information power and the managers over 45 years used coercive power. Youngs reported that the 45 years of age and under group of managers used situational leadership and that these younger administrators put the people before the organization. The over 45 years of age group placed more importance on the organization than on the people. Youngs recommended further study on the relationship between leadership style and age.

In his research reviewing the characteristics of effective principals, McCaulley (1990) identified 10 dimensions that formed a composite picture. These dimensions included belief and values about education, cognitive maps of factors influencing schooling, information processing and decision making styles, setting direction, organizing and implementing, monitoring, communicating, developing staff, managing relationships, and adapting actions to context (p. 10). Although somewhat simplified, the dimensions helped develop a framework of traits that contribute to principal effectiveness.

Clark and Clark (1990) reviewed papers presented at a conference on leadership held in San Antonio, Texas, in October 1988. Papers relating to personality and leadership were part of this conference. Topic areas included reviews of research in leadership, psychological measurements in prediction and assessment studies, measures of leadership as influence and inspiration, measures of leader and manager behavior, leadership at the top of an organization, personality and leadership, intellectual qualities of leaders, and development of leadership (Clark & Clark, 1990, pp. xiv-xvi). The consensus of the research and data in the 29 different investigations presented at the conference and included in the review by Clark and Clark was that traits and behaviors of effective leaders can be identified and measured.

A review of research by Stronge (1993) revealed a wide range of traits and behaviors contributing to a principal's effectiveness. Andrews and Soder (1987) identified the effective instructional leader as a principal performing at high levels in four areas: resource provider, instructional resource, communicator, and visible presence in the school. Bossert, Dwyer, Rowan, and Lee (1982) focused on four separate areas of the principal's effective leadership: goals and production emphasis, power and decision making, organization/coordination abilities, and human relations skills.

In Johns and Moser's (1989) review of the current developments in leadership studies, they examined the work of Tichy and Devanna on transformational leaders. Tichy and Devanna (1986) asserted that a new

type of leadership was needed. The authors discussed transformational leadership, and stated that "transformational leadership is about change, innovation, and entrepreneurship . . . it is the kind of leadership needed to manage uncertainty. A transformational leader created a vision of change" (Tichy & Devanna, 1986, p. 27). Johns and Moser (1989) stated, "Perhaps the best embodiment of current leadership theory is the transformational leader" (p. 121). Similar to Tichy and Devanna (1986), Barr and Barr (1989) asserted, "A leader sees the vision, communicates its possibilities, believes in its achievement, inspires others to contribute their best, motivates others to want to belong, stretches and pushes people, and demonstrates the confidence of victorious achievement of the vision" (p. 21). This quotation could have easily expressed the adaptive leadership theory of Hersey and Blanchard (1973).

Summary of Leadership

The growing body of research data on leadership has produced numerous models, theories, and approaches. However, the accumulated research has not yet produced a unified or generally accepted paradigm for effective leadership. Although most theorists and researchers agree that leadership style is important, they disagree concerning style components, leader's capabilities for changing styles, the effects of personal characteristics on style, and the desirability of flexible styles. No ideal leader approach may fit all situations. Whether relation-oriented or task-oriented, effective

leaders most often adapt their actions to the situation, personality characteristics, time constraints, political considerations, and interpersonal relationships. One of the basic problems with describing effective leadership is not in the lack of ability to identify related behavioral traits, but rather with the difficulty in meshing these traits to define an effective leader. In 1987, Blanchard et al. described four leadership styles which have different combinations of directive and supportive behavior and were similar to the leadership styles earlier described by Hersey and Blanchard (1974). The influence process was described in four styles: directing, coaching, supporting, and delegating. In addition to the four leadership styles, the authors described four developmental levels which consisted of different combinations of commitment and competence. Blanchard et al. (1987) stated, "The quality of interaction between principal and faculty is directly related to the principal's unique ability to meet the individual teachers where they are, and to provide for them what they cannot do for themselves" (p. 16).

Personality

While the identification of leadership traits and characteristics of effective leaders is ongoing, the underlying psychological discussion of personality has also continued to be of interest in leadership literature. "Behind each person's everyday social behavior lies an identity, a preferred self-image, a dominant goal, and the images and goals are chosen as to

enhance the individual's status and social approval. This is personality" (Bass, 1976, p. 43). Research studies have indicated that personality traits cause individuals to act in certain ways. Often these traits can determine how various skills are utilized in leadership situations.

Leader Personality Theories

Early studies by Cubberly (1915), Broome (1930), Gosling (1930), Thompson (1931), Wright (1937), and Reavis (1940) stressed the importance of understanding human nature in effective leadership. The importance of an individual's personality and the organization was also asserted by Argyris (1957) when he stated that "it is impossible to understand others unless we understand ourselves and we cannot understand ourselves unless we understand others" (p. 6). An integral part of Argyris's study related to an individual's maturity. Argyris (1957) wrote that

healthy adults will tend to obtain optimum personality expressions while at work if they are provided with jobs which permit them to be more active than passive, more independent that dependent; to have longer rather than shorter time perspectives; to occupy higher positions than their peers; to have control over their world; and to express many of their deeper, more important abilities. (p. 53)

In viewing personality, Holland (1959) presented his theory of vocational choice. Holland (1959) stated,

Essentially, the present theory assumes that at the time of conventional choice the person is the product of the interaction of his particular heredity with a variety of cultural and personal forces including peers, parents and significant adults, his social class,

American culture, and the physical environment. Out of this experience the person develops a hierarchy of habitual or preferred methods for dealing with environmental tasks. (p. 35)

Later in 1966, Holland reviewed his earlier work in the <u>Vocational</u>

Preference Inventory. He associated his psychological classification scheme with vocations and major fields. Holland (1966) stated that, "the proposed schemes are based on the assumption that vocational choice is an expression of personality" (p. 278). Osipow, Ashby, and Wall (1966) presented the results of a study pertaining to Holland's theory of vocational choice. The authors stated, "Holland's theory is built on the assumption that there are several different personal orientations to life. These orientations were realistic, intellectual, social, conventional, enterprising, and artistic" (Osipow et al., 1966, p. 37). In addition,

Most people possess all aspects of Holland's occupational orientations, but each individual behaves in a manner which reflects one or two of these styles much more strongly than the others, thus giving the rise to the individual's particular orientation to life. (Osipow et al., 1966, p. 38)

The authors concluded that students in their study, "choose occupations consistent with their personality types, although not uniformly so" (Osipow et al., 1966, p. 42).

Jung's Theory of Personality

Myers and Myers (1980) would also address personality preferences in their work based on Jung's (1923) Typology of Personality. Jung believed that people are different in fundamental ways even though they all

have the same multitude of instincts from within that drives them. He believed that no one instinct is more important than another. What was important was our preference for how we function and that our preference for a given function was characteristic, and therefore we could be "typed" by this preference. Thus, Jung developed the function types or psychological types. Jung presented ideas concerning psychological types in Psychological Types. He described the general attitude types and the function types. The attitude types were Extrovert and Introvert. The function types were Sensation, Intuition, Thinking, Feeling, Perceiving, and Judging (Jung, 1923). Spranger (1928) was a contemporary of Jung's. Spranger's approach to types was different than Jung's. He described six attitudes as theoretic, economic, aesthetic, social, political, and religious. Spranger shared a viewpoint with some current writers concerning psychological type. He stated, "Types are certainly no final ends" (Spranger, 1928, p. 365). Later researchers Barr and Barr (1989) agreed with Spranger that a person should strive for a balance.

Basing their work on Jung's (1923) theory of personality types, Myers and Myers (1980) developed the Myers-Briggs Type Indicator (MBTI). They presented the 16 psychological types and the theory behind the types. In the MBTI Manual written in 1985, each type is described in the text and practical implications of type theory are included (Myers-Briggs & McCaulley, 1985). Myers and Myers (1980) believed that implications of type theory were useful in human relations, learning, and work. They

asserted that every person uses all eight processes, Extroversion (E) or Introversion (I), Intuition (N) or Sensing (S), Thinking (T) or Feeling (F), and Judging (J) or Perceiving (P). However, type theory postulated that one of each pair was instinctively preferred over the other and, thus, created a person's "type". Interests, motivations, skills, and, therefore, leadership style follow these basic preferences. Mitroff and Kilmann (1975) found that most people use their basic preference regardless of the task.

In addition, the <u>MBTI Manual</u> contained extensive information pertaining to validity and reliability of the instrument, tables and graphs, and other information relating to the <u>MBTI</u>. In the book's summary, McCaulley noted that all 16 <u>MBTI</u> types assume leadership positions, however, some such as ESTJ, ISTJ, and ESFJ are found more frequently. Types differ in many aspects of leadership such as the facts considered important, assessment of risk, style of decision making, orientation to time, ability to persuade, clarity of concepts, enjoyment of action, and the ability to go beyond what comes naturally to use less-preferred skills (Myers-Briggs & McCaulley, 1985). Myers-Briggs and McCaulley (1985), in a discussion concerning the theory behind the development of the <u>MBTI</u>, stated that, "random variation in behavior is actually quite orderly and consistent, being due to basic differences in the way individuals prefer to use their perceptions and judgment" (p. 1). However, it was noted that the bias for the general population is toward Extroversion-Sensing.

Other Interpretations of the MBTI

In further studies of personality, Keirsey and Bates (1984) considered the variable of personality of greatest importance when selecting individuals for leadership roles. The ability to work with and the manner in which a leader relates to others when handling conflicts and ambiguity, as well as the ability to work closely with others on a face-to-face basis, related directly to ones temperament and personality. Keirsey and Bates (1984) described the 16 MBTI types in terms of four temperaments. Using Greek mythology as a basis for the names, they labeled the four temperaments Dionysian (Sensing/Perceiving), Epimethean (Sensing/Judging), Promethean (Intuitive/Thinking), and Apollonian (Intuitive/Feeling).

Hirch and Kummerow (1989) also described the Myers-Briggs psychological types. The authors detailed the 16 types and discussed the eight basic preferences. The dimensions utilized by them were energizing, attending, deciding, and living. Extroversion and Introversion referred to energizing. Sensing and Intuition referred to attending. Thinking and Feeling referred to deciding. Judgment and Perception referred to living. The 16 types were examined regarding living, learning, laboring, leading, leisure, loving, and losing out. The four preferences were discussed with respect to population statistics, general characteristics, communication styles, relationship styles, work styles, and career information. Hirsh and Kummerow described the preferences, the order of the preferences for each

type, preference groupings, and descriptions of the 16 types. They also described leadership styles of the personality types.

In other studies, Cattell (1973) stated, "The personality of an individual is that which enables us to predict what he will do in a given situation" (p. 43). He acknowledged that people disagree on a definition of personality. Zaleznik (1977) asserted that leaders "are active instead of reactive, shaping ideas instead of responding to them" (p. 71). In addition,

Leaders work from high-risk positions, indeed are temperamentally disposed to seek out risk and danger, especially where reward and opportunity appear high. From my observations, why an individual seeks risks while another approaches problems conservatively depends more on his or her personality and less on conscious choice. (Zaleznik, 1977, p. 71)

The author presented contrasting images of managers and leaders in the area of relations with others. Zaleznik (1977) asserted, "Managers relate to people according to the role they play in a sequence of events or in a decision-making process, while leaders, who are concerned with ideas, relate in more intuitive and empathetic ways" (p. 73). Lueder (1983) reported in a study of "educators to watch" that over 70% were visionary leaders (Intuitive/Feeling and Intuitive/Thinking) who displayed a preference for intuition. Barr and Barr's (1989) studies supported this finding. In examining the difference between managers and leaders, Barr and Barr (1989) stated, "Management affects work; leadership affects people" (p. 9).

Leadership Styles and Personality Traits

Research on the characteristics of leaders indicate that personality is an important factor in the emergence of a leader and the maintaining of that role. While research has been unable to measure and categorize the personality traits that identify an effective leader, it has attempted to identify some general characteristics that appear to be important for principal effectiveness.

Early research by Bass, Moore and Smith, and Tarnopool (cited in Bass, 1976) had suggested that personality was a factor in leadership effectiveness. Bass (1976) wrote a well-documented book which integrated leadership with psychology and organizational behavior. A persistent theme in his book was the ability that a leader has to interact with other people. The integration of leadership, psychology, and organizational behavior provided a broad view of leadership. In a later study, Bass (1990) stated, "The conclusion that personality is a factor in differentiating leadership does not represent a return to the pure trait approach. It does represent a sensible modification of the extreme situationalist point of view" (p. 88).

Personality: Fixed or Mutable

Fiedler (1965, 1967) postulated that people do not change their behavior very easily. Three critical dimensions were described by Fiedler (1965) which seemed to determine the type of leadership which was needed in different situations. These dimensions were leader-member relations,

task structure, and positive power. Fiedler asserted that these three dimensions could be changed by a leader. He stated, "It is surely easier to change almost anything in the job situation than a man's personality and his leadership style" (Fiedler, 1965, p. 115).

In referring to their Managerial Grid, Blake and Mouton (1964) asserted,

Though most people seem to be predisposed to manage in one way or another, points on the grid are not to be thought of as personality types that isolate a given individual's behavior. They do not slot him in a rigid and inflexible ways into a certain place. Behavior is more changing and flexible than that. (pp. 12-13)

In contrast to Fiedler's (1965, 1967) view of human personality, Knowles and Saxburg (1971) advocated that human personality was not fixed and, under proper conditions, it could be changed in significant ways (p. 17). Knowles and Saxburg (1971) associated personality with leadership and stated that "the kind of leader an individual is reflects his personality and the process of development and growth which have affected it. The style of leadership thus must be regarded in terms of the underlying personality characteristics" (p. 148).

Other theories on the relationship of personality and leadership emerged, including those of Hollander. In his review of research relating to leadership and personality, he concluded that "style may involve the interactive characteristics of the leader's personality which stamp his relationship with his followers" (Hollander, 1971, p. 1). Tannenbaum and Schmidt (1973) found that some managers are more comfortable when they

function in a certain manner (p. 175). In addition, they state, "The manager's behavior in any given instance will be influenced greatly by the many forces operating within his own personality" (Tannenbaum & Schmidt, 1973, p. 173).

In 1974, Stogdill concluded that personality is a factor in leadership differentiation, but he insisted that his conclusion did not represent a return to the trait approach. Instead, he maintained that it represented sensible modification of the extreme situationalist point of view. In assessing leadership personality, Gorton (1980) stated,

The situational theory of leadership maintains that no particular style of leadership or personal qualities of the leader is appropriate for every situation. The theory places a high premium of the administrator's adaptability and flexibility. A major problem with this theory, however, is that many administrators are influenced in their choice of a leadership style and in the way they behave as a leader, by their own personality and need dispositions which tend to be rather consistent and unchanging over time and in different situations. Therefore, although the nature of the demands for leadership in education frequently change, an administrator's basic personality may not make it possible for him to adapt his leadership style to a new situation. (p. 266)

Gorton (1980) continued:

One way to ameliorate this problem is for organizations and groups to select those administrators who are or who can become flexible and adaptable in their leadership responses to changing leadership demands. Another possibility is to select leaders who possess the type of personality characteristics and leadership style for the leadership demands of the situation, and then rotate then to a new environment when the current situation changes. (p. 266)

According to Burns (1978), "The key to understanding leadership lies in recent findings and concepts in psychology" (p. 49). He expressed the

viewpoint that leadership behavior may not be constant and that, "role behavior modifies personality as new roles are assumed" (Burns, 1978, p. 100). Later research by Greenfield (1982) found that,

The manner in which a principal conducts his work, his style, is shaped more by the principal's basic personality structure and previous experiences than by formal education, years in education, or type, size and location of the school in which he works. (p. 17)

Fiedler and Chemers (1984) presented the Contingency Model of Leadership. The theory postulates that the effectiveness of a group is contingent upon the relationship between leadership style and the degree which the group situation enables the leader to exert influence. Fiedler and Chemers (1984) stated, "Let us remember, first of all, that your basic leadership style is part of your personality" (p. 177). They strongly suggested that it is easier to change a job than the personality of the individual in the job. Fiedler and Chemers (1984) asserted,

This is not to say that personality does not change, but such changes that do occur tend to be gradual and usually take many years. Your personality, and therefore your leadership style, will not change simply because you feel like changing it. (p. 177)

Hersey and Blanchard (1988a) presented the Tri-Dimensional Leader Effectiveness Model and the Situational Leadership Theory. In the authors' discussion of the Tri-Dimensional Leader Effectiveness Model, they stated, "The leadership style of an individual is the behavior pattern that the person exhibits when attempting to influence the activities of others as perceived by others" (Hersey & Blanchard, 1988a, p. 116). In the second edition of their book, the authors used "personality" and "style"

interchangeably. Hersey, Blanchard, Blake, and Mouton felt that leaders could change their leadership style. Mazzarella and Smith (1989) stated, "Leader personality does make a difference in leadership style; in fact many authors believe that leadership style is determined by personality and is difficult to change" (p. 38).

Personality Patterns and Leadership Patterns of Educational Personnel

In 1961, Von Fange used the <u>MBTI</u> in a dissertation analyzing the patterns of personalities of educational personnel in Canada. The 124 subjects for the study included principals, education students, future teachers, and superintendents. The most frequent personality types for principals and other educators in this study were ESTJ (27%), ESFJ (15%), and ISTJ (14%). He did not assess leadership style.

Hemphill, Griffiths, and Frederiksen (1962) described a study which involved 232 principals from 32 school districts across the United States. The authors stated that a profile of a personality type was formed. The identified characteristics included: friendly, socially responsive; lively and enthusiastic; bold, warm-hearted, and spontaneous; self-confident and accepting; and free from worry and anxiety (Hemphill et al., 1962, p. 337). Many correlations between personality factors and principals' job performance were found. Hemphill et al. (1962) concluded that "personality assessment might make a valuable addition to a battery of tests

for selecting principals, providing the school district is able to describe the principal it wants in terms of administrative performance (p. 338).

Wright (1966) found that the personality of the 39 elementary school principals that she studied to be primarily Extrovert-Thinking-Judging (ETJ). In his study, Bell (1967) used Idaho school superintendents to investigate the relationship of leader behavior and personality. He used the Sixteen Factor Personality Questionnaire and Halpin's Leadership Behavior Descriptive Questionnaire (LBDQ). Bell concluded that there was no significant differences between personality characteristics and leadership behaviors of these educators. However, he recommended further study.

Using the <u>MBTI</u>, Frederick (1974) investigated the personality types of 88 doctoral students in educational administration in contrast to doctoral students in counseling, educational psychology, and special education at the University of Alabama. Educational administration majors were found to be significantly different from the other students in personality types.

Nineteen percent of the educational administration majors were found to be ESTJ.

Carlyn (1977) used the <u>MBTI</u> and <u>Teacher Preference Questionnaire</u> to study 200 future teachers at Michigan State University. In a significant finding related to administrators, Carlyn found that extroverts and thinking types are more interested in administrative functions than introverts and feeling types. Future studies were recommended to examine

the effectiveness of the instruments in predicting which students would pursue positions in school administration.

The subjects of a study by Morrison (1980) were 30 principals in Florida. The instruments used for the study were the MBTI, LEAD-Self and LEAD-Other. Conclusions drawn by Morrison included that the majority of the principals perceived their leadership style to be high-task/high-relationship and more than half of the principals exhibited a Sensing (79%)-Judging (83%) personality. He found that 10 times as many principals had the Sensing-Judging (SJ) combination than the Intuitive-Perceiving (NP) combination.

Pendley (1985) studied elementary school principals in Wyoming to determine the relationship between personality and leadership style. Data were collected from 30 elementary principals using the <u>LEAD-ED</u> and the Sixteen Personality Factor (16PF) Scale. The two findings were: (a) the personality characteristics of the principals were not significantly related to leadership effectiveness, and (b) a majority of principals identified their leadership style as Selling/Coaching (high-task/high-relationship).

In 1986, Hoffman reviewed seven dissertations pertaining to educational administrators and Myers-Briggs psychological types. He found the ESTJ type as the most frequent type of educational administrator. Toppins (1986) investigated the relationship between leadership styles and personality patterns of school administrators. Sixty-seven principals and central office personnel were assessed. A strong preference (82%) for the

Selling/Coaching (high-task/high-relationship) leadership style was demonstrated with the findings suggesting a lack of evidence that leadership is related to personality.

Using the <u>MBTI</u> and the <u>LEAD</u> instruments, a study by Flores (1987) examined the relationship between the personality types and leadership styles of elementary principals in Nevada. Flores found that 70% of the elementary principals selected STJ or NTJ as their preferred type which indicated that a majority of those surveyed were Thinking/Judging types. The difference between the scores for determining the relationship between the personality type scores and the scores used to determine effectiveness was not significant. Flores concluded that one can be effective in leadership positions regardless of personality type.

Barr and Barr (1989) examined leadership with respect to psychological types. They stressed the importance of developing the least preferred preference on each dimension of the MBTI. They examined the preferences with respect to communication, information, judgment, and control. Barr and Barr (1989) stated, "The more balanced the development on the Myers-Briggs dichotomous dimensions, the harder to categorize the style" (p. 171). They believed that a better balancing of preferences helped promote effective leadership.

Clark and Clark (1990) edited papers presented at a conference on leadership which was held in San Antonio, Texas, in 1988. The papers reviewed some of the most recent research on leadership and included

several studies which involved the use of the <u>MBTI</u>. The compiled studies revealed that personality and leadership are associated with each other.

McCaulley (1990) wrote on leadership and the MBTI. One chapter included a table which summarized the different MBTI types of administrators in schools, colleges, and universities. Elementary and secondary administrators were not separated for the study. The largest percentages of elementary and secondary administrators in the data base were found to be ESTJ (13.2 %), ISTJ (12.5 %), and ESFJ (10.6 %), (McCaulley, 1990, p. 393).

A later study conducted by Vail (1991) investigated the leadership styles and personality types of 44 South Carolina superintendents. The participants completed both the MBTI and the LEAD-Self. The most common personality type of superintendent found in this study was the ESTJ (31.83%). Vail reported that the primary leadership style was Selling/Coaching (52.27%). The second most frequent leadership style was Participating/Supporting (34.09%). When the data was statistically analyzed using the Pearson correlation coefficient, Vail did not find any significant relationship between leadership style and personality type.

The purpose of Berg's (1993) study of Minnesota school superintendents was to examine differences in leadership styles and personality types. Seventy-four superintendents were included in the study. Both the <u>LEAD-Self</u> and <u>MBTI</u> were used to assess the subjects. Berg found that the primary leadership style (52.7%) was Selling/Coaching

(high-task/high-relationship). The two most frequent personality types were ENTJ and ESTJ. These two types were 40.5% of the respondents. No significant relationship was found between the leadership styles and personality types of the Minnesota superintendents who were studied.

Summary

After years of empirical investigations, the precise relationships between leadership style and personality traits remain elusive. The growing amount of research on each topic and their relationship to each other has produced an impressive amount of contradictions. Almost every conceivable trait, characteristic, and personality style has been examined, yet the results have not been conclusive. In addition, researchers have looked at leadership from almost every angle. They have examined personality traits, leadership styles, situational contingencies, and a multitude of other topics pertaining to leadership. While numerous models, theories, and approaches have emerged concerning personality and leadership, the research has not yet produced a unified, and generally accepted, paradigm for the relationship.

With an accepted paradigm for studying these relationships still elusive, further research was of interest. The literature review found that the majority of leadership research was not specifically related to elementary educators. In addition, little research focused on a specific segment of the elementary educator population.

An issue of interest to the researcher was the leadership styles and personality traits of administrators with early childhood backgrounds. Would extensive preparation in early childhood education and early childhood teaching experiences relate to the leadership styles and personality traits of those administrators? This question coupled with the lack of research involving elementary administrators, prompted an interest in investigating the leadership styles and personality types of Texas elementary administrators--specifically those who have early childhood certification.

CHAPTER 3

METHODOLOGY AND STUDY DESIGN

The purpose of the study is to investigate the leadership styles and personality types of Texas elementary administrators and compare those who have early childhood certification with those who do not. The purposes of this chapter are to describe the method of selecting the administrators for the sample, the instruments used in the study, and the data-gathering procedures.

Population and Sample

One group of subjects was the population of Texas elementary administrators with early childhood certification, and the second group included those elementary administrators who did not have early childhood certification. The administrators in the study were randomly selected by using a list of all Texas elementary principals and assistant principals provided by the Public Education Information Management System (PEIMS) report from the Texas Education Agency (TEA). Packets were mailed to 100 subjects from each of the two sample groups. The desired return rate was 50%.

Data Collection Procedures

This study was both descriptive and relational. Three instruments were used in gathering data for this study: an Administrator Information/Data (demographic) Sheet, the <u>Leader Effectiveness and Adaptability Descriptor</u> (<u>LEAD</u>), and the <u>Myers-Briggs Type Indicator</u> (<u>MBTI</u>).

The following procedures were used in this study: (a) valid and reliable instruments were selected, (b) two sample populations were selected, (c) instruments were mailed and administered, (d) data were collected, and (e) data were analyzed.

Administrator packets containing the three instruments and a letter of introduction/information was sent to each sample subject. Each selected administrator was asked to complete the MBTI, the LEAD, and the Administrator Information/Data Sheet. Completion of the three instruments required approximately 30 to 35 minutes. Assessment instruments were identified by a code number assigned to each administrator. Each participant was assured of confidentiality and advised of the purpose/use of the study. The first mailing of the packet was sent to subjects on April 15, 1995. Each subject was asked to respond by May 5, 1995. A follow-up letter was mailed to subjects who did not respond to the first mailing.

After receiving each returned information packet, the assessment instruments were scored. Individual results of both the <u>MBTI</u> and the

<u>LEAD</u> were mailed to each respondent. In addition, a description of the 16 possible <u>MBTI</u> personality preference types was included. Results and data gathered from the three assessment instruments are presented in Chapter 4.

The LEAD-Self is an instrument which measures leadership style. The instrument, based on Hersey and Blanchard's (1973) Situational Leadership Theory, is a 12-item instrument used to gather data on the leadership styles of the administrator as perceived by self. The MBTI, developed by Myers-Briggs, is used to gather data on the personality types of the administrators (Myers-Briggs & McCaulley, 1985). The data sheet, designed for this study, was designed to obtain background information on each selected subject.

Description of the <u>LEAD</u>

The <u>LEAD</u> instrument was developed by Paul Hersey and Kenneth Blanchard at the Center for Leadership Studies, Ohio State University. The theoretical framework behind the <u>LEAD</u> was developed by Hersey and Blanchard (1969, 1974, 1988a, 1988b) and was originally named the <u>Leadership Adaptability and Style Inventory (LASI)</u>. Specifically designed to assess the leadership of educators, the instrument measures three aspects of leadership behavior: style, style range (flexibility), and style adaptability (effectiveness). The instrument provides the person taking the assessment with an opportunity to investigate their leadership style. The <u>LEAD-Self</u> is a self-administering instrument composed of 12 situations. For each

situation, the respondent selects one of four options that he would do in that particular situation. Since the instrument depends on self-reported data, it is important to recognize that the responses may reflect leadership styles that the test taker feels or thinks that they should exhibit.

Hersey and Blanchard (1974) developed four styles based on task behavior (one-way communication) and relationship behavior (two-way communication). Hersey and Blanchard (1974) defined task behavior as:

The extent which a leader is likely to organize and define the roles of the members of his group (followers); to explain what activities each is to do as well as when, where, and how tasks are to be accomplished. It is further characterized by endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting jobs accomplished. (p. 25)

Hersey and Blanchard (1974) defined relationship behavior as:

The extent to which a leader is likely to maintain personal relationships between himself and the member of his group (followers) by opening up channels of communication, delegating responsibility and giving subordinates an opportunity to use their potential. It is characterized by socio-emotional support, friendship and mutual trust. (p. 25)

The definitions of task behavior and relationship behavior provided by Hersey and Blanchard are founded in the leadership studies conducted at Ohio State University.

The four basic styles identified by the <u>LEAD</u> are: high task and low relationship (telling/directing), high task and high relationship (selling/coaching), low task and high relationship (participating/supporting), and low task and low relationship (delegating). Style one (S1) leadership refers to high-task/low-relationship (HTLR) behavior which is characterized

by "telling/directing." The "telling/directing" leader defines to others what, how, and where the follower is to do various tasks (Hersey & Blanchard, 1977, p. 168). Style two (S2) leadership refers to high task-high relationship (HTHR) behavior which is characterized by "selling/coaching." The "selling/coaching" leader attempts to solicit follower support and input in decision making (Hersey & Blanchard, 1977, p. 169). Style three (S3) leadership refers to low-task/high-relationship (LTHR) behavior which is characterized by "participating/supporting." The "participating/supporting" leader frequently acts as a facilitator and shares decision making with others. Style four (S4) leadership refers to low-task/low-relationship (LTLR) behavior which is characterized by "delegating." The "delegating" leader gives supervision and expects followers to operate at high task levels (Hersey & Blanchard, 1977, p. 170).

Style range is the extent to which a person is able to vary their leadership style. Leaders differ in their ability to vary their style to accommodate different situations. Some leaders seem to be limited to one primary style. As a result, rigid leaders tend to be effective only in situations where their styles are compatible with the environment. Other leaders are able to modify their behavior to fit any of the four styles; still others can utilize two or three styles. According to situational leadership, flexible leaders have the potential to be effective in a number of situations. This does not necessarily mean that they will be effective--only that they have the potential (Hersey & Blanchard, 1982).

While style range indicated the extent to which a leader is able to vary his style, style adaptability reflects the degree to which a change in styles is appropriate to the level of readiness of the people involved in the different situations. Although style range is important, the critical element in determining a leader's effectiveness is their style adaptability. Style adaptability is used interchangeably with leader effectiveness (Hersey & Blanchard, 1982).

Eberhardt (1985) reviewed instruments based on the Situational Leadership Theory developed by Hersey and Blanchard. He stated:

The responses of 264 managers, ranging in age from 21 to 64, were used to standardize the <u>LEAD-Self</u>. The managers represented a variety of managerial levels. The concurrent validity coefficients of the 12 items ranged from .11 to .52. In another study, a significant correlation of .67 was found between the adaptability scores of the manager and the independent ratings of their alternate style. (Eberhardt, 1985, p. 1385)

In reviewing the validity of the LEAD, Maher (1986) stated:

Several empirical validity studies were conducted at the Center for Leadership Studies, Ohio State University. As hypothesized, correlations with demographics/organismic variables of sex, age, years of experience, degree, and management level were generally low, indicating the relative independence of the scales with respect to these variables. Satisfactory results were reported supporting the four styles dimensions of the scale using a modified approach to factor structure. In 46 of 48 item options (96%), the expected relationship was found. (pp. 72-73)

Regarding face validity, Leedy (1989) stated, "This type of validity relies basically upon the subjective judgment of the researcher" (p. 27).

Zedeck (1985) in his review of the <u>LEAD-Self</u> described the instrument as

having face validity (p. 1386). Maher (1986) stated, "Face validity emanated from the procedures employed to create the original set of items" (p. 72).

Description of the MBTI

The MBTI is a self-reporting inventory which assesses the differences in the way people perceive and the way they judge. There are no right or wrong preferences on the MBTI. Each of the 126 items indicate a behavior which identifies an underlying personal preference. Based on Jung's (1923) theory which states that human behavior is orderly and consistent, four basic preferences determine an individual's personality. Myers-Briggs and McCaulley (1985) stated, "The aim of the MBTI is to identify the basic preferences of people in regard to perception and judgment" (p. 1). These preferences are measured on the MBTI as self-reported behavior or value judgments. There are four indices: (a) Extroversion-Introversion, EI; (b) Sensing-Intuition, SN; (c) Thinking-Feeling, TF; and (d) Judging-Perception, JP.

The Extrovert-Introvert (EI) category reflects the preference direction of one's interest, either outward toward the world of people or things (Extroversion) or inward toward the world of ideas and concepts (Introversion). Jung (cited in McCaulley, 1985) regarded Extroversion and Introversion as mutually complementary.

The Sensing-Intuition (SN) category measures a person's preference between two opposite ways of perceiving. Sensing (S) is becoming aware of things through the five senses, and Intuition (N) is becoming aware primarily by the indirect route of the unconscious.

The Thinking-Feeling (TF) category recognizes a person's preference between two contrasting ways of judging or coming to conclusions. If one relies primarily on Thinking (T), one objectively and impersonally analyzes the facts and orders them in terms of cause and effect. One who judges according to Feelings (F) relies on subjective personal value. Thinking is a logical process, while Feeling (F) is more of a process of appreciation. The Thinking-Feeling (TF) preference is entirely independent of the Sensing-Intuition (SN) preference of perceiving. Either kind of judgment can pair with either kind of perception.

The Judging-Perception (JP) category denotes reliance on either the perceptive process of Sensing (S)-Intuitive (N) or the judging of Thinking (T)-Feeling (F). Perception is the process of becoming aware of things, and Judgment is the process of coming to conclusions about what has been perceived. The Judging (J)-Perceptive (P) preference illustrates the dominant process in one's personality structure. The scores from these four categories are used to form a profile of a subject's personality type. The points from each preference are totaled to obtain a preference score. The numerical portion of the score indicates how strongly the preference is reported.

Based on combinations of the four indices, 16 possible preference types of the MBTI are: (a) ISTJ, Sensing Type with Thinking (Introvert Judging); (b) ISFJ, Sensing Type with Feeling (Introvert Judging); (c) ISTP, Sensing Type with Thinking (Introvert Perceptive); (d) ISFP, Sensing Type with Feeling (Introvert Perceptive); (e) ESTP, Sensing Type with Thinking (Extrovert Perceptive); (f) ESFP, Sensing Type with Feeling (Extrovert Perceptive); (g) ESTJ, Sensing Type with Thinking (Extrovert Judging); (h) ESFJ, Sensing Type with Feeling (Extrovert Judging); (i) INTJ, Intuitive Type with Thinking (Introvert Judging); (j) INFJ, Intuitive Type with Feeling (Introvert Perceptive); (l) INFP, Intuitive Type with Feeling (Introvert Perceptive); (m) ENTP, Intuitive Type with Thinking (Extrovert Perceptive); (n) ENFP, Intuitive Type with Feeling (Extrovert Perceptive); (o) ENTJ, Intuitive Type with Thinking (Extrovert Perceptive); (o) ENTJ, Intuitive Type with Feeling (Extrovert Judging); and (p) ENFJ, Intuitive Type with Feeling (Extrovert Judging); and (p) ENFJ, Intuitive Type with Feeling (Extrovert Judging).

Criterion Validity of the MBTI

According to the MBTI Manual and The Bibliography: Myers-Briggs

Type Indicator, the instrument has been used extensively in research.

Leedy (1989) stated,

Criterion validity usually employs two measures of validity; the second, as a criterion, checks against the accuracy of the first measure. The essential component in criterion validity is a reliable and valid-criterion--a standard against which to measure the results of the instrument. (p. 27)

A review of research on the MBTI revealed information on this type of validity.

In her article concerning the criterion validity of the MBTI, Bradway (1964) described a study involving 28 Jungian analysts in California. The participants were asked to take the MBTI and the Gray-Wheelwright Questionnaire. In addition, they were asked to classify themselves according to the eight Jungian types. Bradway (1964) stated, "Both tests showed an almost perfect concordance with analysts' self typing in the Introvert-Extrovert classification" (p. 135). The author reported that "both tests showed a greater than chance concordance with self-typing in the Sensation-Intuition classification" (Bradway, 1964, p. 135). In addition, she stated, "The self-typing of Jungian analysts provides excellent criterion data against which to validate test of psychological types, in that the fact of their being Jungian analysts specially qualifies them to classify themselves according to type" (Bradway, 1964, p. 130).

Construct Validity of the MBTI

"Construct validation is interested in the degree to which the construct itself is actually measured" stated Leedy (1989, p. 27). In her assessment of the MBTI, Carlyn (1977) concluded, "The numerous studies of construct validity summarized that the individual scales of the MBTI measure important dimensions of personality which seem to be quite similar to those postulated by Jung" (p. 471).

Tzeng, Outcalt, Boyer, Ware, and Landis (1984) conducted a study involving 444 college students and clerical workers. The study examined the item validity of the MBTI, Form G. They concluded, "The results of this study tended to substantiate that the MBTI is a reliable instrument and ... items in the inventory would generate four distinct psychometric dimensions that are consistent with the theoretical constructs of the MBTI" (Tzeng et al., 1984, p. 255).

Willis (1984), in his review of the MBTI, stated, "Critical to the examination of validity on the MBTI is whether the scales accurately measure Jung's constructs and Myers' extension thereof" (p. 488). Willis examined correlational data of the MBTI with other instruments such as the Allport-Vernon-Lindzey Study of Values, the Gray-Wheelwright Psychological Type Questionnaire, and the Sixteen Personality Factors Test (16PF). Willis (1984) concluded that "examination of data on individual MBTI scales demonstrated the behaviors and attitudes which the MBTI appears to tap, suggesting strong argument for construct validity" (p. 484).

Carlson (1985), in his assessment of the MBTI, referred to a study by Steele and Kelly as an example of the construct validity of the instrument.

Carlson (1985) stated,

Although relationships between the indicator and other tests have generally supported hypotheses concerning underlying theoretical overlap, five of the eight studies reviewed in the interest correlations section concentrated on the EI scale of the instrument. However, it is notable that the three more recent studies cited have found evidence of validity of some of the remaining scales when correlations with

other tests were performed. Future studies should give relatively greater attention to these other scales. (p. 364)

Carlson suggested additional research is needed to provide evidence of construct validity concerning the three other scales of the instrument.

In a review of research on the MBTI, Murray (1990) reported that "the constructs underlying the MBTI have been supported by correlations with other tests of personality, Extroversion-Introversion, and Emotionality" (p. 1199). He reported in his review that the results of a study involving 185 college psychology students by Sipps and DiDaudo in 1988 "supported the convergent and divergent validity of the MBTI scales" (cited in Murray, 1990, p. 1192). Murray (1990) concluded, "The inventory has served as a practical assessment instrument by virtue of its known construct validity" (p. 1199). Carlyn (1977), Tzeng et al. (1984), Willis (1984), Carlson (1985), and Murray (1990) agreed in their reviews of the MBTI instrument that there was evidence suggesting construct validity for the MBTI.

Content Validity of the MBTI

Leedy (1989) stated, "Content validity is the accuracy with which an instrument measures the factors or situations under study: i.e., the 'content' being studied" (p. 27). In her assessment of the MBTI, Carlyn (1977) stated, "It would appear from an inspection of the scored items that the EI, SN, and TF scales are generally consistent with the content of Jung's typological theory" (p. 468).

Carlyn (1977) stated in her article that a study conducted in 1946 by Gray and Wheelwright involving the MBTI and the Gray-Wheelwright Questionnaire provided evidence for content validity (p. 468).

Myers-Briggs and McCaulley (1985) stated in the MBTI Manual that "while the theory was taken very seriously in developing items . . ., as was also observations of the behaviors of different types, item selection was ultimately based only on the empirical evidence that the items separate persons with opposing preferences" (p. 175).

Reliability of the MBTI

Studies by Carlyn (1977), Carskadon (1977), and Carlson (1985) examined the reliability of MBTI scores. Carlyn (1977) reviewed four studies relating to internal consistency of type-category scores, internal consistency of continuous scores, stability of type-category scores, and stability of continuous scores. The retest period varied from 2 months to 6 years. Carlyn (1977) reported that continuous scores were higher. Stricker and Ross (1964) stated that "internal consistency reliability of the continuous scores was generally in the .70's and low .80's and the type-categories' reliability was generally in the .40's and .50's" (p. 292).

Carskadon (1977) described a study involving 64 male and 70 female college students. The study related to the reliability of the continuous scores and had a test-retest interval of 7 weeks. Carskadon's study revealed

the scores ranging from .73 to .87. This finding was similar to the 1964 study by Stricker and Ross.

Steele and Kelly (1976) reported test-retest reliability on the MBTI to range from .86 to .89 (p. 690). Levy and Padilla (1982) and Inclan (1986) both described the reliability of a Spanish version and the English version of the MBTI. Both studies indicated that the percentage of agreement of the preference scores and the percentage of agreement of types were high.

Myers-Briggs and McCaulley (1985) stated, "In conclusion, test-retest reliabilities of the MBTI show consistency over time. When subjects report a change in type, it is most likely to occur in only one preference, and in scales where the original preference was low" (p. 171). The literature provided evidence to suggest that the MBTI is a reliable instrument. Myers-Briggs and McCaulley provided a table listing 11 studies on the test-retest agreement of type categories. The percentage agreement in each MBTI category for these studies ranged from 64% to 92% with a test-retest interval ranging from 5 weeks to 6 years (Myers-Briggs & McCaulley, 1985, p. 173). Literature reviewing both the LEAD and MBTI provide evidence that both instruments are reliable in research which attempts to measure leadership styles and personality traits. The LEAD instrument was found to exhibit face validity. Evidence was presented regarding content, construct, and criterion-related validity of the MBTI.

Description of the Administrator Information/Data Sheet

The Administrator Information/Data Sheet was developed to gather biographical information on each subject. Items on the sheet include: age, gender, years of experience in an early childhood teaching situation, years of experience in administration, number of years in the classroom, fields of educational study (degrees), reason for entering the field of elementary administration, and total years in education (see Appendix). In Chapter 4 the results of the data collection and analysis are presented.

CHAPTER 4

DATA COLLECTION AND ANALYSIS

The purposes of the studies were to describe and compare the leadership styles of Texas elementary administrators who have early childhood certification and those who do not, to describe and compare the personality types of Texas elementary administrators who have early childhood certification and those who do not, and to explore possible relationships between leadership styles and personality types of Texas elementary administrators who have early childhood certification. In this chapter, results from the data collection and analysis are presented. First, a description of the sample is given, then each of the major questions is addressed. For each question, data concerning the whole sample are presented followed by a comparison between characteristics of elementary administrators who have early childhood certification and those who do not.

Characteristics of the Sample Population

From the population of 3,895 elementary principals and assistant principals currently serving in Texas public schools, a list of 200 randomly selected administrators was provided by the Texas Education Agency (TEA) from the report of the Public Education Management System (PEIMS)

which was released in spring 1995. Of the 200 administrators, a stratified random sample of 100 subjects had early childhood certification and 100 subjects did not.

Each sample subject was assigned a numerical value to insure confidentiality and simplify recording of the data collected. Subjects were mailed packets containing a letter of introduction, an Administrator Information/Data Sheet, a <u>Leader Effectiveness and Adaptability</u> Descriptor-Self (LEAD-Self) instrument, a Myers-Briggs Type Indicator (MBTI) instrument, and a stamped self-addressed envelope. The packets were mailed on April 15, 1995, with a requested return date of May 5. Eighty-two administrators responded by the May 5 deadline. A follow-up letter was mailed on May 31 to request return of the instruments not yet received which resulted in 13 more responses. Responses were received from 50 administrators with early childhood certification and 45 administrators without early childhood certification for a total of 95 responses. Of the 95 responses, one subject failed to answer and return the LEAD instrument. The group response rate for completion and return of the three instruments was 47.5%. The response rate for the early childhood group was 50% and 45% for the administrators not early childhood certified.

In Table 1, the subjects in the sample are categorized into four age groups. Of the sample of 95 administrators who responded, 52.6% were between the ages of 35 to 45 years old. Thirty-two (33.7%) of the

Table 1

Ages of Texas Elementary Administrators

Administrators	26-35 Years (%)	36-45 Years (%)	46-55 Years (%)	Over 56 Years (%)	Total (%)
All administrators	4.2	52.6	33.7	9.45	100
Administrators with early childhood certification		56.0	40.0	4.00	100
Administrators without early childhood certification	8.9	48.9	26.7	15.60	100

administrators were in the 46- to 55-year-old category. Few administrators were in the over 56-year-old category (9.5%) or the 26- to 35-year-old category (4.2%). Those administrators with early childhood certification followed a similar pattern when categorized by age. Fifty-six percent of those with early childhood certification were between the ages of 36 to 45 years old, 40% were between the ages of 46 to 55 years old, and 4% were 56 years old or older. No responding administrators with early childhood certification were under 36 years of age. Administrators without early childhood certification were more numerous in the 56-year-old category (15.6%) and in the 26- to 35-year-old category (8.9%) than the early childhood certified.

Of the 200 administrators in the survey, 85% were female and 15% were male. Those returning surveys were 82.1% female and 17.9% male. Of the early childhood administrators surveyed, 98% were female and 2% were male. The sample without early childhood certification consisted of 64.4% female and 35.6% male.

For the entire sample, the lowest years of experience was 6 and the highest was 33. The mean years of experience was 19.4. As in the entire sample, the administrators with early childhood certification had a minimum of 6 years and a maximum of 33 years experience. The mean of educational experience was 19.9 years. The years of experience totaling 10% or more included 18 years (10%), 19 years (14%), 20 years (10%) and 27 years (10%). Administrators without early childhood certification had a minimum of 7 years experience and a maximum of 32. The mean number of years of total educational experience for this group was 18.9.

In addition to the total years of educational experience, a breakdown of classroom experience and administrative experience was noted. The sample of 95 Texas elementary administrators had a minimum of 3 years classroom experience with a maximum of 27 years classroom experience. The mean number of years was 12.17. The largest number of administrators (13) had 14 years of classroom experience. The administrators with early childhood certification were found to have a minimum of 3 years and a maximum of 26 years of classroom experience. The mean number of years that an administrator with early childhood

certification had as a classroom teacher was 13.28. Of the administrators with early childhood certification, 82% had experience in an early childhood teaching assignment, and 18% did not have early childhood classroom experience. Of the 45 administrators without early childhood certification, the minimum number of years of classroom experience was 3, and the maximum was 27. The mean number of years in the classroom for this group was 10.95. Mid-management certification in Texas requires a minimum of 3 years classroom teaching experience.

The total years of educational experience for each group was almost identical. In addition, the mean years of experience, 19.4, 19.9, and 18.9, for each group was similar. Longevity in the classroom for each of the three groups was comparable. All three groups had years of classroom experience ranging from 3 to 27 years. The administrators with early childhood certification averaged approximately 2 more years of classroom teaching experience than the other group.

In summarizing the demographic information describing the Texas elementary administrators surveyed, most of them are female (82.1%), between the ages of 36 to 45 years old, and have approximately 20 years of educational experience. Likewise, the majority of administrators with early childhood certification (56%) and those without certification (49%) are between the ages of 36 to 45 years old. Only in two areas did the subjects diverge. An overwhelming number (98%) of administrators with early childhood certification were female as compared to 64% of the

administrators without early childhood certification. Although both groups had an average of 20 years of educational experience, administrators with early childhood certifications had an average of 2 more years of classroom experience (13.28%) than those administrators without early childhood certification (10.95%).

Leadership Styles of Texas Elementary Administrators

Hersey and Blanchard (1988a, 1993) identified four leadership styles that are measured by the LEAD-Self instrument. The high task-low relationship style was identified as Telling/Directing (S1). The high task-high relationship style was identified as Selling/Coaching (S2). The low task-high relationship style was identified as Participating/Supporting (S3). The low task-low relationship style was identified as Delegating (S4). In addition, the LEAD-Self measured style range and style adaptability. Style range is the extent to which a leader can vary his leadership style depending on the situation. Style adaptability (effectiveness) is the degree to which a leader is able to vary his leadership style appropriately to the

Ninety-four administrators completed and returned the <u>LEAD-Self</u> instrument. Of the entire sample, 48.4% were Selling/Coaching (S2), 38.9% were Participating/Supporting (S3), 3.2% were Telling/Directing (S1), and 9.5% did not have a primary leadership style preference. No administrators were identified as Delegating (S4).

readiness level of followers in a specific situation.

The majority of administrators with early childhood certification, 44 of 50, were also Selling/Coaching (44%) or Participating/Supporting (42%). Therefore, 86% of the administrators demonstrated a preference for styles of leadership described by Hersey and Blanchard (1974) as having high relationship behaviors. Only 4% of the early childhood certified administrators were Telling/Directing, 10% had no primary leadership style preference, and none were identified as Delegating (S4).

Selling/Coaching (54.5%) was the leadership style most frequently identified for the administrators without early childhood certification. Participating/Supporting (S3) administrators comprised the next largest category with 36.4%, and no primary leadership style preference was found for 9.1% of the group. No administrators without early childhood certification were identified as Telling/Directing (S1) or Delegating (S4). Both of these styles are described as low relationship styles by Hersey and Blanchard (1974). One respondent did not complete the <u>LEAD-Self</u> instrument. These data are displayed in Table 2.

Leadership styles for the administrators with early childhood certification and those without certification were similar. Both groups had more respondents identified as Selling/Coaching (S2) and Participating/Supporting (S3) which are high relationship styles. Neither group had administrators who preferred the Delegating (S4) style of leadership. Both groups had similar percentages (10%) in the category where no primary leadership style was preferred. A chi-square test of

Table 2

<u>Leadership Styles of Texas Elementary Administrators</u>

Administrators	Telling/ Directing S1 (%)	Selling/ Coaching S2 (%)	Participating/ Supporting S3 (%)	Delegating S4 (%)	No Primary Preference (%)
All administrators	3.2	48.4	38.9	0	9.5
Administrators wit early childhood certification		44.0	42.0	0	10.0
Administrators without early childhood certification	0.0	54.5	36.4	0	9 . I

statistical difference indicated that there was no significant relationships in the groups.

Leadership Adaptability (Effectiveness) of Texas Elementary Administrators

A composite score taken from the questions on the <u>LEAD-Self</u> instrument was used to determine an administrator's adaptability or effectiveness. Hersey and Blanchard (1974) determined that scores in the 0 to 23 range indicated low adaptability, scores in the 24 to 29 range indicated a middle or moderate degree of adaptability, and scores in the 30 to 36 range indicated a high degree of adaptability. Fifteen percent of the

administrator sample had low adaptability scores, 72% had moderate adaptability scores, and 13% had high adaptability scores.

In comparing the leadership adaptability (effectiveness) of Texas elementary administrators, those with early childhood certification and those without early childhood certification were similar. Of the administrators with early childhood certification, 14% had low adaptability scores, 72% had moderate adaptability scores, and 14% had high adaptability scores. Of the administrators without early childhood certification 16% had low adaptability scores, 73% had moderate adaptability scores, and 11% had high adaptability scores. A chi-square test confirmed that there was no significant relationship between the groups. This information is found in Table 3.

Table 3

<u>Leadership Adaptability of Texas Elementary Administrators</u>

	Degree of Adaptability						
Administrators	Low (%)	Moderate (%)	High (%)	Total (%)			
All administrators	15	72	13	100			
Administrators with early childhood certification	14	72	14	100			
Administrators without early childhood certification	16	73	11	100			

Personality Types of Texas Elementary Administrators

The MBTI was developed by Myers and based on Jung's theory of psychological types. It is a self-scoring inventory which assesses the differences in the way individuals prefer to use their perception and judgment. The instrument contains four separate indices: Extroversion or Introversion, Sensing perception or Intuitive perception, Thinking judgment or Feeling judgment, and Judgment or Perception. The four indices yield 16 possible combinations called types which are denoted by the four letters of the preferences. These types are used to describe different personalities.

The entire sample, the administrators with early childhood certification, and the administrators without early childhood certification were cross-tabulated with the eight different preferences of the four indices. The 95 sample administrators were more Extroverted (62.85%) than Introverted (37.15%), more Sensing (60.5%) than Intuitive (39.5%), more Thinking (66.55%) than Feeling (33.45%), and more Judging (71.6%) than Perceiving (28.4%). The administrators with early childhood certification were also more Extroverted (68%) than Introverted (32%), more Sensing (52%) than Intuitive (48%), more Thinking (62%) than Feeling (38%), and more Judging (70%) than Perceiving (30%). Consistent with other groups in their personality characteristics, the administrators without early childhood certification were more Extroverted (57.8%), more Sensing (68.9%), more Thinking (71.1%), and more Judging (73.3%). This information is displayed in Table 4.

Table 4

Personality Preferences of Texas Elementary Administrators

Administrators	E (%)	I (%)	S (%)	N (%)	T (%)	F (%)	J (%)	P (%)
All administrators	62.85	37.15	60.5	39.5	66.55	33.45	71.6	28.4
Administrators with early childhood certification	68.00	32.00	52.0	48.0	62.00	38.00	70.0	30.4
Administrators without early childhood certification	57.80	42.20	68.9	31.1	7I.I	28.90	73.3	26.7

Note. E = Extrovert, I = Introvert, S = Sensing, N = Intuitive, T = Telling, F = Feeling, J = Judging, and P = Perception.

No significant differences were found between administrators with early childhood certification and those without early childhood certification in the three preferences of EI, TF, or JP. However, administrators with early childhood certification had a significantly smaller percentage (52%) of Sensing types than those without early childhood certification (69%) On the polar scale, administrators with early childhood certification had a significantly larger percentage of Intuitive types (48%). A chi-square test indicated a significant relationship between administrators with early childhood certification and those without early childhood certification on the Sensing-Intuition (SN) preference.

Since 98% of the early childhood respondents were female, a question concerning the role of gender in the findings was raised. A chi-square test indicated no significant relationship between Intuition (N) and gender existed in the sample.

The results of the MBTI for all 95 respondents is presented in Table 5. Fifteen of the 16 personality types were represented in the sample. Six

Table 5

Personality Types of Texas Elementary Administrators

Administrators	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)	Total (%)
All administrators	21.0	18.0	11.35	10.2	6.35	8.45	24.65	100
Administrators with early childhood certification	22.0	12.0	16.00	16.0	6.00	8.00	20.00	100
Administrators without early childhood certification	20.0	24.4	6.70	4.4	6.70	8.90	29.00	100

Note. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

types had more than 6% from each of the three sample groups: ESTJ, ISTJ, ENTJ, ENTP, and ESFJ. These six types accounted for 75.35% of

the total. Nine types having less than 6% of the respondents were categorized as "other" and represented 24.65% of the total. Personality types with 6% or more were used for comparisons in this study.

The largest categories of Texas elementary administrators were found to be the ISTJ type (21%) and the ESTJ type (18%). The entire sample had 11.35% in the ENTJ type category, 10.2% in the ENFP type category, 8.45% in the ESFJ type category, and 6.35% in the ENTP type category. Ten categories were reported by fewer than 6% of the respondents.

Of the sample of 50 Texas administrators with early childhood certification, 22% were found to be ISTJ and 12% were ESTJ. Both the ENTJ and ENFP types each had percentages of 16% each. The ESFJ group had 8%, and the ENTP group had 6%. The remaining 20% of the respondents were classified as ESTP, ISFJ, ESFP, INFP, ENFJ, or INTJ. None were ISTP, ISFP, INFJ, or INTP.

The largest group of administrators without early childhood certification were found to be ESTJ (24.4%) and ISTJ (20%). Four administrators (8.9%) were ESFJ and 6.7% were in each of the ISTP, ENTP, and ENTJ categories. Eight categories, ISFJ, ISFP, ESFP, INFP, ENFP, ENFJ, INTJ, and INTP had two or fewer subjects for a total of 29%, and ESTP and INFJ were null.

The Extrovert-Sensing (ES) types of administrators without early childhood certification had a high percentage of Sensing types as compared to the Extrovert-Sensing (ES) types with early childhood certification. On

the other hand, the Extroverted-Intuitive (EN) administrators with early childhood certification had a higher percentage of intuitive types than the Extroverted-Intuitive (EN) administrators without early childhood certification. Both the Extrovert-Intuitive-Thinking (ENT) and the Extrovert-Intuitive-Feeling (ENF) with early childhood certification had higher percentages than the administrators without early childhood certification. The differences found in the Sensing and Intuition preferences seem to indicate a personality difference in the administrators with early childhood certification and those without early childhood certification. A chi-quare test confirmed that there was a significant difference between the groups; however, gender differences in the groups continue to be a confounding variable.

The Relationships Between Leadership Styles and Personality Types of Texas Elementary Administrators Who Have Early Childhood Certification

Comparisons between the leadership styles and personality types of the 50 Texas administrators with early childhood certification will be described in this section. This relationship was studied by comparing the information gained from the <u>LEAD-Self</u> and the <u>MBTI</u>. In addition, further investigation was conducted to see if a relationship existed between personality types as identified by the <u>MBTI</u> and the leadership adaptability scores taken from the <u>LEAD-Self</u>. A chi-square test of statistical difference was utilized in both studies.

A cross-tabulation of the four <u>LEAD</u> styles of Telling, Selling, Participating, and Delegating is shown with the <u>MBTI</u> types. Only the six personality types with 6% or more respondents are used for comparison purposes. This information as it pertains to the sample of all Texas elementary administrators is displayed in Table 6. A chi-square test indicated that there was no significant relationship between the leadership styles identified by the <u>LEAD-Self</u> and the personality types identified by the <u>MBTI</u> for the sample of 95 administrators.

Table 6

<u>Leadership Styles and Personality Types of Texas Elementary</u>

<u>Administrators</u>

Leadership Style	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)
Telling (Style 1)	1.1		••			••	1.1
Selling (Style 2)	11.7	9.6	8.5	3.2	4.3	••	11.7
Participating (Style 3)	6.4	7.4	2.1	5.3	1.1	8.5	8.5
Delegating (Style 4)		••				••	
No primary style	2.1		1.1	2.1	1.1	••	3.2

Note. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

The cross tabulation of the four <u>LEAD</u> styles and the six personality types as they pertain to administrators with early childhood certification is displayed in Table 7. A chi-square test indicated that there was no significant relationship between the leadership styles identified by the <u>LEAD-Self</u> and the personality types identified by the <u>MBTI</u> of the administrators with early childhood certification.

Table 7

Leadership Styles and Personality Types of Texas Elementary

Administrators With Early Childhood Certification

Leadership Style	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)
Telling (Stage 1)	2.0	•=		••			2.0
Selling (Stage 2)	10.0	8.0	10.4	4.0	6.0		6.0
Participating (Stage 3)	8.0	4.0	4.0	10.0		8.0	8.0
Delegating (Stage 4)		••				••	
No primary style	2.0	••	2.0	2.0			4.0

<u>Note</u>. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

The cross tabulation of the four <u>LEAD</u> styles and the <u>MBTI</u> types as they pertain to elementary administrators without early childhood certification is displayed in Table 8. A chi-square test indicated that no significant relationship existed between the leadership styles and personality types of elementary administrators without early childhood certification. However, it was observed that there is a predominance of Introvert-Selling (IS) types as compared to Introvert-Participating (IP) types. There is also a large percentage of Participating leadership types with Feeling personalities.

Table 8

Leadership Styles and Personality Types of Texas Elementary

Administrators Without Early Childhood Certification

Leadership Style	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)	
Telling (Style 1)						••	••	
Selling (Style 2)	13.6	11.4	6.8	2.3	2.3		18.2	
Participating (Style 3)	4.5	11.4			2.3	9.1	9.1	
Delegating (Style 4)					••		••	
No primary style	2.0			2.3	2.3		2.3	

Note. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

To further examine the leadership styles of Texas elementary administrators, leadership adaptability (effectiveness) cross tabulated with six major personality types identified by the MBTI is shown in Tables 9, 10, and 11.

Table 9

Leadership Adaptability and Personality Types of Texas Elementary
Administrators

Degree of Effectiveness	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)
Low	8.4	1.25	••	1.2		2.2	2.2
Moderate	11.8	16.30	8.3	7.2	5.3	6.4	17.3
High	1.0		3.2	2.0			5.4

Note. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

Of the 95 administrators, 15.25% had low adaptability scores, 72.6% had moderate adaptability scores, and 11.6% had high adaptability scores. The Introvert type ISTJ had the lowest adaptability scores (8.4%). The highest percentage of administrators with moderate adaptability scores were ESTJ (16.3%) and ISTJ (11.8%). Extrovert type ENTJ had the largest

Table 10

Leadership Adaptability and Personality Types of Texas Elementary

Administrators With Early Childhood Certification

Degree of Effectiveness	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)	
Low	10					2	2	
Moderate	10	12	12	12	6	6	14	
High	2		4	4			4	

<u>Note</u>. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

percentage (3.2%) of the administrators with high adaptability scores. The data are displayed in Table 9. Despite these apparent associations, a chi-square test of independence indicated no significant relationship between the adaptability scores and personality types of Texas elementary administrators.

Of the 50 administrators with early childhood certification, 14% had a low degree of leadership adaptability, 72% had a moderate degree of leadership adaptability, and 14% had a high degree of leadership adaptability. The Introvert type ISTJ had 10% of the administrators with low adaptability. Personality types ESTJ, ENTJ, and ENFP each had 12%

Table 11

Leadership Adaptability and Personality Types of Texas Elementary

Administrators Without Early Childhood Certification

Degree of Adaptability	ISTJ (%)	ESTJ (%)	ENTJ (%)	ENFP (%)	ENTP (%)	ESFJ (%)	Other (%)
Low	6.8	2.3		2.3		2.3	2.3
Moderate	13.6	20.5	4.5	2.3	4.5	6.8	20.5
High			2.3		2.3		6.9

Note. ISTJ = Introvert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, ENTJ = Extrovert-Intuitive-Thinking-Judging, ENFP = Extrovert-Intuitive-Feeling-Perception, ENTP = Extrovert-Intuitive-Thinking-Perception, and ESFJ = Extrovert-Sensing-Feeling-Judging.

of the administrators with moderate degrees of leadership adaptability. The Introvert type ISTJ had 10% of the administrators with moderate degrees of adaptability. Both the ENTJ and ENFP Extrovert personality types had 4% of the administrators with a high degree of leadership adaptability. A chi-square test indicated no significant relationships between the adaptability scores and personality types of Texas elementary administrators with early childhood certification.

The administrators without early childhood certification followed a similar pattern. Sixteen percent had low adaptability scores, 72.7% had moderate adaptability scores, and 11.5% had high adaptability scores. Low

adaptability scores were found in the Introvert type ISTJ with 6.8%. The personality type with the largest percentage of moderate adaptability scores was the ESTJ type with 20.5%. It was followed by the Introvert group ISTJ with 13.6%. Two types, ENTJ and ENTP, reported high adaptability scores with 2.3% for each group. Despite these interesting observations, a chi-square test indicated no significant relationships between the leadership adaptability and personality types of elementary administrators without early childhood certification. The data are displayed in Table 11.

Summary

Of the 95 Texas elementary administrators, two leadership styles predominate--48.4% have a Selling/Coaching (S2) leadership style and 38.9% are Participating/Supporting (S3). As with the general sample, the most frequent leadership style of administrators with early childhood certification is the Selling/Coaching (S2) style with 44%, and the second most frequent style is the Participating/Supporting (S3) style with 42%. Likewise, the most common leadership style of administrators without early childhood certification is Selling/Coaching (S2) with 54.5%, and Participating/Supporting (S3) administrators are the next largest group with 36.4%. A focus on high relationships was common in all three groups and accounted for over 85% of the respondents in each group. Neither group had respondents that were identified as Delegating (S4). Hersey and Blanchard (1988b) stressed the importance of a leader moving from

Telling/Directing (S1) to Selling/Coaching (S2) to Participating/Supporting (S3) in leadership situations. Leadership styles with high concern for people/relationships were found to be the most effective. In their work, Blake and Mouton (1982) also advocated a style of leadership which was characterized by a high concern for people and a high concern for production.

Elementary administrators with early childhood certification and those without early childhood certification were similar in respect to leadership adaptability. Low adaptability scores were shown by 14% of the administrators with early childhood certification and 16% of those without the certification. Moderate adaptability scores for early childhood certified administrators were 72%, while 73% of the administrators without certification had moderate adaptability scores. High adaptability scores were shown by 14% of those with early childhood certification and 11% of those without early childhood certification.

In reviewing the personality types of the Texas elementary administrators surveyed, 15 of the 16 MBTI types are represented. Six types accounted for 75% of the administrators. The most frequent personality type in the entire sample population is the ISTJ type (21%). The ESTJ type followed with 18%. Administrators in both groups are Sensing-Thinking-Judging types, but are differentiated by being either an Extrovert (E) or Introvert (I). Of the elementary administrators with early childhood certification, 22% are ISTJ. However, the next largest groups are

the ENTJ and ENFP types with 16% in each group. The administrators without early childhood followed a pattern similar to the entire sample with a majority being ESTJ (24.4%) and ISTJ (20%).

In comparing the relationship of leadership style and personality types of the Texas elementary administrators in the survey, several patterns emerged. Both the Extrovert and Introvert administrators indicated a preference for Selling/Coaching (S2) and Participating/Supporting (S3) leadership styles. This was true for the administrators with early childhood certification and those without the certification. Similar percentages were found in each group when the four <u>LEAD</u> styles were cross tabulated with the six personality types that were used for comparison.

The study produced data that were both interesting and informational. A summary of the findings of the study, interpretation of these findings, and suggested recommendations for further research are discussed in Chapter 5.

CHAPTER V

FINDINGS, INTERPRETATIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

In their role as educational leaders, elementary administrators face many challenges and responsibilities in assuring that their schools are effective and that a quality education is available for each student. Greater accountability for school effectiveness now rests in the hands of the school administrators and their leadership abilities. Research has identified strong leadership as a correlate of effective schools. Two critical elements found in a person's leadership ability are the personality of the leader and the leader's leadership style. The person in the leadership role influences both the followers and the situation. The manner in which leaders behave in a situation and the manner in which they influence the followers has been the topic of many leadership studies. Many different theories have emerged, yet, most researchers agree that persons in leadership roles have the ability to either positively or negatively affect the situation and the people involved. In all situations, leaders reflect both their leadership style and personality type. In the educational setting, the effectiveness or ineffectiveness of a school can be directly influenced by the administrator's leadership style and personality type.

The purpose of this study was to describe the leadership styles and personality types of Texas elementary administrators and compare those who have early childhood certification with those who do not. In addition, an exploration of possible relationships between leadership styles and personality types of Texas elementary administrators who have early childhood certification was undertaken.

A model for studying leadership style was developed by Blanchard and Hersey in 1970. They believed that leaders must vary their behaviors according to the demands of the situation. Behaviors based on the situation were referred to as Situational Leadership. Four leadership styles were identified by Hersey and Blanchard (1973, 1993): Telling/Directing (high task-low relationship), Selling/Coaching (high task-high relationship), Participating/Supporting (low task-high relationship), and Delegating (low task-low relationship). They later added an effectiveness dimension.

The <u>Leader Effectiveness and Adaptability Description</u> (<u>LEAD</u>) instrument was developed by Hersey and Blanchard in 1973 as an assessment tool to investigate leadership styles. This study utilized the <u>LEAD-Self</u> to identify leadership styles and measure leader adaptability of the Texas elementary administrators.

The personality of the elementary administrators was measured with the <u>Myers-Briggs Type Indicator (MBTI)</u>. The <u>MBTI</u> identifies the basic personality preferences of people based on four indices: Extroversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving.

Personality types are reported in 16 possible combinations of these four indices. Fifteen of the 16 personality types were found in the sample of Texas elementary administrators.

The LEAD-Self and MBTI, along with an Administrator
Information/Data sheet, were sent in an packet to a stratified random sample of 200 Texas elementary administrators. One hundred of the administrators had early childhood certification and 100 of them did not.

Ninety-four administrators responded. Fifty of the administrative respondents had early childhood certification and 44 did not. Responses for the questions on each instrument were tabulated and presented indicating the results of the findings. A chi-square test of independence determined if significant factors at the .10 level of confidence suggested a relationship between personality types and leadership styles.

Findings and Interpretations

- 1. Most Texas administrators in the sample with early childhood certification and those without early childhood certification have Selling/Coaching (S2) or Participating/Supporting (S3) leadership styles. The Selling/Coaching (S2) and Participating/Supporting (S3) leadership styles have high concern for people and are recognized as the most effective styles by Hersey and Blanchard (1974).
- 2. Elementary administrators with early childhood certification and those without certification are equivalent in their adaptability scores on the

LEAD-Self. For both groups, almost three-fourths were rated in the moderate adaptability range with the other fourth equally split between low and high adaptability. A chi-square test indicated no significant relationship between the adaptability scores of administrators with early childhood certification or those without early childhood certification. Since hiring decisions are made on an individual basis, individual scores should be considered when hiring for administrative positions.

In addition, administrators can be provided opportunities to assess their own leadership style and adaptability. This information would provide insight into their strengths and weaknesses as administrative leaders. Thus, administrators could seek opportunities for professional growth that was personalized.

University students and teaching professionals who are considering a career in educational leadership might also benefit from leadership assessments such as the <u>LEAD-Self</u>. Information gained from this assessment could provide the prospective administrator with insight as to personal strengths and areas of concerns. This information could be utilized in career planning and preparation.

Since adaptability scores of administrators with early childhood certification are comparable to those scores of administrators without early childhood certification, there is no evidence of bias in their ability to provide leadership. However, school districts hiring elementary administrators should be aware that educators with early childhood

development and the learning needs of young children. In addition, they tend to have more years of teaching experience.

3. Most Texas elementary administrators are ISTJ and ESTJ personality types. Similarly, most administrators without early childhood certification are ISTJ and ESTJ. Administrators with early childhood certification are ISTJ, ENTJ, and ENFP. A chi-square test found that there was no significant relationship between the personality types and the groups. Von Fange (1961), Hoffman (1986), Flores (1987), and McCaulley (1990) found either the ISTJ or ESTJ type to be the most prevalent type of school administrator. Similarly, Vail (1991) and Berg (1993) found most school superintendents to be ESTJ or ENTJ. This data is displayed in Table 12.

In this study, it was found that the majority of elementary administrators with early childhood certification are Extroverts. McCaulley (1985) noted that the bias for the general population is toward Extroversion-Sensing. Extroverts are those types who like to have people around them, like variety and fun, do not mind interruptions, and communicate well. Since good communication skills, good people skills, and an ability to handle change are necessary for an effective administrator, it would seem likely that the majority of elementary administrators with early childhood certification could have the personalities that make quality administrators.

(table continues)

Research Findings Based on the MBTI and LEAD of Selected Groups of Educators

Table 12

Year	Researcher	Instruments	Sample Population	Type	F 8	Type	8
1961	Von Fange	MBTī	124 Canadian principals, education students, future teachers	ESTJ ESFJ ISTJ	12.00 15.00 14.00		
1974	Frederick	MBTI	88 doctoral students in education administration, University of Alabama	ESTJ	19.00		
1976	Carlyn	MBTI	200 future teachers, Michigan State	ET			
1980	Morrison	MBTI	30 Florida principals	Sensing Judging	79.00* 83.00*	HTHR	
1985	Pendley	LEAD	30 elementary principals, Wyoming			HTHR	
1986	Hoffman	MBTI	Education administrators (7 dissertations)	ESTJ			
1986	Toppins	LEAD	67 principals and central office administration			HTHR	82.00
1987	Flores	MBTI	Elementary principals, Nevada	STJ/NTJ	70.00	HTHR	
1990	McCaulley	MBTI	Elementary/secondary principals, nationwide	ESTJ ISTJ ESFJ	13.20 12.50 10.60		

				MBT		LEAD	
Year	Researcher	Instruments	Sample Population	Type 9	8	Туре	s
1991	Vail	MBTI LEAD	44 South Carolina superintendents	ESTJ	31.83	HTHR	52.70 34.09
1003	Dogs	TAM	94 Minnesota superintendents	ENTJ/ESTJ 40.50	TJ 40.50	HTHR	40.00
CKKT	S	T T T T T T T T T T T T T T T T T T T			•		97.07
1995	Penny	MBTI	95 Texas elementary administrators	ISTJ ESTJ	21.00 18.00	LTHR	38.90
		O T					

Note. *10 times more Sensing-Judging than Intuitive Perceiving. MBTI = Myers-Briggs Type Indicator, LEAD = Leadership Effectiveness and Adaptability Descriptor, ESTJ = Extrovert-Sensing-Thinking-Judging, ESTJ = Extrovert-Sensing-Thinking-Judging, Thinking-Judging, ESTJ = Extrovert-Thinking, STJ = Sensing-Thinking-Judging, NTJ = Intuitive-Thinking-Judging, NTJ = Intuitive-Thinking-Judging, HTHR = low-task/high relationship, and LTHR = low-task/high relationship.

Administrators should be provided with opportunities to assess their own personality type. Knowledge about their personality type would assist them in better understanding themselves and the role that personality plays in their position as educational leaders. These opportunities could be provided through local district inservices and workshops.

4. On the Sensing-Intuition scale, administrators with early childhood certification had a significantly higher percentage of Intuitive (N) types than the administrators without early childhood certification. A chi-square test indicated that a significant relationship exists between the administrators with early childhood certification and Intuitiveness. However, this finding must be interpreted with gender as a confounding variable since 80% of the males in the administrators without early childhood certification were Sensing (S). Intuitive types are those people who dislike repetition and are impatient with routine details. They like solving new problems and following their inspirations. Early childhood educators have been trained in various problem-solving strategies. Their experiences with children have afforded them with many opportunities to solve new problems and be creative in their work. In addition, intuitive types may seek career choices such as administrative roles which offer opportunities for creativity and flexibility. In 1983, Lueder reported in his study of "educators to watch" that over 70% were visionary leaders who displayed a preference for Intuition. Barr and Barr's (1989) study supported Lueder's findings.

Administrators without early childhood certification had a larger percentage of Sensing (S) types than the administrators with early childhood certification. As noted earlier, McCaulley (1985) found the bias for the general population is toward Extroversion-Sensing. Also, Morrison (1980) found that 10 times as many principals were Sensing types than Intuitive types. A chi-square test confirmed a significant relationship between administrators without early childhood certification and Sensing (S). Frequently, Sensing types are people who like an established way of doing tasks and usually reach conclusions in a step-by-step manner. Early childhood educators are trained to search for varied ways of doing things and reaching conclusions. Early childhood educators must be flexible and rely on a variety of methods to meet the needs of individual children and address the situations that arise in the classroom. Therefore, it is not surprising that administrators with early childhood certification have a significantly smaller percentage of Sensing (S) types. Still, gender may account for this personality difference.

5. A large percentage of administrators with Participating/Supporting (S3) leadership styles had Feeling (F) personalities. Feeling types are those who are more people-oriented, tend to be aware of the feelings of others, and strive for harmony. Participating/Supporting leaders are those who support the people involved in a situation and display high relationship behaviors. A chi-square test found a significant relationship between

administrators who have Participating/Supporting (S3) leadership styles and Feeling (F) personalities.

Hersey and Blanchard (1982, 1988a, 1988b) recognized the most effective leaders as those who place a high priority on personal relationships within the school. It would seem logical that a majority of effective school administrators would have a Participating/Supporting (S3) leadership style and Feeling (F) personality type.

- 6. There was no significant relationship between the leadership styles identified by the <u>LEAD-SELF</u> and the personality types identified by the <u>MBTI</u> for either the administrators with early childhood certification or those without the certification. These findings support the data reported by Flores (1987), Vail (1991), and Berg (1993). Flores (1987) concluded that one can be effective in leadership positions regardless of personality type. Vail (1991) and Berg (1993) did not find any significant relationship between leadership style and personality type of school administrators.
- 7. There was no significant relationship between the adaptability scores and personality types of either the administrators with early childhood certification or those without early childhood certification. This was similar to Anderson's (1995) findings that no significant relationship existed between the adaptability scores and personality types of selected school administrators in North Texas. Anderson used both the <u>Leader Behavior Analysis II</u> and the <u>MBTI</u> instruments.

Recommendations

- I. Due to the small number of male respondents in this study, further study could be considered to investigate if gender differences are a significant factor in understanding leadership styles and personality types of Texas elementary administrators.
- 2. A study to determine if administrators with elementary certification have higher adaptability scores on the <u>LEAD-Self</u> than administrators with secondary certification could be of interest.
- 3. A study to determine if administrators with elementary certification have a different leadership style than administrators with secondary certification could be of interest.
- 4. A study to determine if administrators with elementary certification have a different personality type than administrators with secondary certification could be of interest.
- 5. In-service education for practicing administrators could include opportunities for them to identify and understand their own leadership style and the importance of leadership styles and leader adaptability.
- 6. Potential administrators could be involved in opportunities to better understand their own leadership styles and the importance of leadership styles and leader adaptability. This could be done through university courses or pre-administrative training in the local school districts.
- 7. Further research could be done to determine if leadership adaptability scores accurately portray an administrator's effectiveness. This

could be done by surveying the teachers in the administrator's building. Several assessment instruments are available for this type of research.

In recent years, more responsibility and higher expectations have been placed on elementary administrators. These administrators are expected to be effective leaders in a multitude of administrative tasks and situations. Effective leadership requires the utilization of many skills. Elementary administrators who understand their leadership style in relation to their personality type are better equipped to manage the demands which are placed on them to provide an effective learning environment for all children.

APPENDIX

ADMINISTRATOR INFORMATION/DATA SHEET

April 15, 1995

Dear Fellow Elementary Administrator,

I am a doctoral student at the University of North Texas, and I am interested in the leadership styles and personality types of elementary principals. You have been selected to participate in this study of personality traits and leadership styles of Texas elementary administrators. I appreciate you taking the time to be a part of this interesting survey.

The purpose of this study is to determine if there is a relationship between leadership styles and personality types of elementary administrators with early childhood certification and those who do not have early childhood certification. Please take the time to complete the enclosed instruments. Included is a general information/data sheet that will be used for demographic information, a LEAD (Leadership Effectiveness and Adaptability Description) assessment instrument which will determine your leadership style, and a copy of the MBTI (Myers-Briggs Type Indicator) which will assess your personality type.

After completing the three instruments, please return them to me in the self-addressed, stamped envelope by May 5, 1995. I will be happy to furnish you with the results of the study once it is completed and will include a summary of your leadership style and personality type. If you wish to have the assessment information forwarded to you, a space to indicate this desire is available on the data/information sheet. Please be assured that all collected data will be treated with confidence, and that any numerical coding of the assessment instruments is strictly for return identification purposes.

I sincerely appreciate your time and assistance with this study! If you have any questions, please feel free to contact me at 214-462-8000 (days) or 817-387-0351 (nights).

Sincerely,

Andra Penny Assistant Principal

andra Penny

Mockingbird Elementary/Wilson Elementary

Coppell Independent School District

 This project has been reviewed by the University of North Texas Committee for the Protection of Human Subjects phone 817-565-3946 601 Tennyson Denton, Texas 76205 May 31, 1995

Dear Fellow Elementary Administrator,

Several weeks ago you were mailed a survey which was intended to assess your leadership style and personality type. Realizing how busy we all have been, perhaps this is a more convenient time for you to take a few minutes to complete the instruments and mail them to me. As mentioned to you in the earlier letter, the results of the survey are an important part of a study that will take a closer look at the relationship between personality types and leadership styles of Texas elementary administrators. Your input is very important, and we want you to be a part of this interesting research. Remember that you will receive a personal assessment of your personality type and leadership style.

Again, thank you for your assistance in this project!

Sincerely,

Andra Penny
Andra Penny
Assistant Principal
Wilson Elementary
Coppell ISD

**If you are unable to participate in the survey, please return the testing instruments in the postage-paid envelope.

Myers-Briggs Personality Types

	Sensing Types	
	With Thinking	With Feeling
Indoine	ISTJ Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-offact, logical, realistic and dependable. See to it that everything is well organized. Take responsibility. Make up their own minds as to what should be accomplished and work toward it steadily, regardless of protests or distractions. Live their outer life more with thinking, inner more with sensing.	ISFJ Quiet, friendly, responsible, and conscientious. Work devotedly to meet their obligations and serve their friends and school. Thorough, painstaking, accurate. May need time to master technical subjects, as their interests are not often technical. Patient with detail and routine. Loyal, considerate, concerned with how other people feel. Live their outer life more with feeling, inner more with sensing.
Introverts	ISTP Cool onlookers, quiet, reserved, observing, and analyzing life with detached curiosity and unexpected flashes of original humor. Usually	ISFP Retiring, quietly friendly, sensitive, modest about their abilities. Shun disagreements, do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. May be rather relaxed about assignments or getting things done, because they enjoy the present moment and do not want to spoil it by undue haste or exertion. Live their outer life more with sensing, inner more with feeling.
Extroverts Perceptive	ESTP Matter-of-fact, do not worry or hurry, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. May be a bit blunt or insensitive. Can do math or science when they see the need. Dislike long explanations. Are best with real things that can be worked, handled, taken apart, or put back together. Live their outer life more with sensing, inner more with thinking.	ESFP Outgoing, easygoing, accepting, friendly, fond of a good time. Like sports and making things. Know what's going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound common sense and practical ability with people as well as with things. Live their outer life more with sensing, inner more with feeling.
Extra	ESTJ Practical realists, matter-of-fact, with a natural head for business or mechanics. Not interested in subjects they see no use for, but can apply themselves when necessary. Like to organize and run activities. Tend to run things well, especially if they remember to consider other people's feelings and points of view when making their decisions. Live their outer life more with thinking, inner more with sensing.	ESFJ Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Always doing something nice for someone. Work best with plenty of encouragement and praise. Little interest in abstract thinking or technical subjects. Main interests is in things that directly and visibly affect people's lives. Live their outer life more with feeling, inner more with sensing.

	. Int	uitives
	With Feeling	With Thinking
Perceptive	INFJ Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.	INTJ Have original minds and great drive which they use only for their own purposes. In fields that appeal to them they have a fine power to organize a job and carry it through with or without help. Skeptical, critical, independent, determined, often stubborn. Must learn to yield less important points in order to win the most important.
1	Live their outer life more with feeling, inner more with intuition.	Live their outer life more with thinking, inner more with intuition.
Introverts Judging	INFP Full of enthusiasms and loyalties, but seldom talk of these until they know you well. Care about learning, ideas, language, and independent projects of their own. Apt to be on yearbook staff, perhaps as editor. Tend to undertake too much, then somehow get it done. Friendly, but often too absorbed in what they are doing to be sociable or notice much. Live their outer life more with intuition, inner more with feeling.	INTP Quiet, reserved, brilliant in exams, especially in theoretical or scientific subjects. Logical to the point of hair-splitting. Interested mainly in ideas with little liking for parties or small talk. Tend to have very sharply defined interests. Need to choose careers where some strong interest of theirs can be used and useful. Live their outer life more with intuition, inner more with thinking.
erts Judging	ENFP Warmly enthusiastic, high-spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can always find compelling reasons for whatever they want. Live their outer life more with intuition, inner more with feeling.	ENTP Quick, ingenious, good at many things. Stimulating company, alert and outspoken, argue for fun on either side of a question. Resourceful in solving new and challenging problems, but may neglect routine assignments. Turn to one new interest after another. Can always find logical reasons for whatever they want. Live their outer life more with intuition, inner more with thinking.
Extrovert Perceptive	ENFJ Responsive and responsible. Feel real concern for what others think and want, and try to handle things with due regard for other people's feelings. Can present a proposal or lead a group discussion with ease and tact. Sociable, popular, active in school affairs, but put time enough on their studies to do good work.	ENTJ Hearty, frank, able in studies. Leaders in activities. Usually good in anything that requires reasoning and intelligent talk, such as public speaking. Are well-informed and keep adding to their fund of knowledge. May sometimes be more positive and confident than their experience in an area warrants.
	Live their outer life more with feeling, inner more with intuition.	Live their outer life more with thinking, inner more with intuition.

BIBLIOGRAPHY

- Anderson, L. K. (1995). An investigation of school administrator personality type and gender to leader effectiveness, flexibility, and years of experience. Unpublished doctoral dissertation, University of North Texas, Denton.
- Andrews, R. L., & Soder, R. (1987). Principal leadership and student behavior. Educational Leadership, 6, 9-11.
- Argyris, C. (1957). Personality and organization: The conflict between the system and the individual. New York: Harper & Row.
- Barr, L., & Barr, N. (1989). The leadership equation: Leadership. management, and the Myers-Briggs. Austin, TX: Eakin Press.
- Bass, B. M. (1961). <u>Leadership and interpersonal behaviors</u>. New York: Holt, Rinehart, & Winston.
- Bass, B. M. (1976). <u>Leadership</u>, psychology, and organizational behavior. Westport, CT: Greenwood Press.
- Bass, B. M. (1990). <u>Bass and Stogdill's handbook of leadership: Theory.</u> research, and managerial applications (3rd ed.). New York: Free Press.
- Bass, B. M., McGehee, C. R., Hawkins, W. C., Young, P. C., & Gebel, A. S. (1953). Personality variables related to leaderless group discussion behavior. <u>Journal of Abnormal Social Psychology</u>, 48, 120-128.
- Beck, D. E. (1982). Beyond the grid and situationalism: A living systems view. <u>Training and Development Journal</u>, 36, 76-83.
- Bell, T. O. (1967). A study of personality characteristics of school superintendents in relation to administrative behavior. <u>Dissertation Abstracts International</u>, 29, 2049-2050. (University Microfilm No. 70546-70547)
- Bennis, W. (1959). Leadership theory and administrative behavior: The problem of authority. <u>Administrative Science Quarterly</u>, <u>4</u>, 259-260.

- Berg, K. H. (1993). <u>Leadership styles and personality types of Minnesota school superintendents</u>. Unpublished doctoral dissertation, University of Minnesota, Duluth.
- Blake, R. R., & Mouton, J. S. (1964). The Managerial Grid. Houston: Gulf Publishing.
- Blake, R. R., & Mouton, J. S. (1978). The new managerial grid. Houston, TX: Gulf Publishing.
- Blake, R. R., & Mouton, J. S. (1982). How to choose a leadership style. Training and Development Journal, 36, 38-47.
- Blake, R. R., Mouton, J. S., & Williams, M. S. (1981). The academic administrative grid. San Francisco: Jossey-Bass.
- Blanchard, K. H., & Hersey, P. (1970). A leadership theory for educational administrators. <u>Education</u>, 90, 303-310.
- Blanchard, K. H., Zigarmi, D., & Nelson, R. B. (1993). Situational leadership after 25 years: A retrospective. The Journal of Leadership Studies, 1, 23-28, 31-34.
- Blanchard, K. H., Zigarmi, D., & Zigarmi, P. (1987). Situational leadership: Different strokes for different folk. Principal, 66, 12-16.
- Bossert, S. T., Dwyer, D. C., Rowan, B., & Lee, G. V. (1982). The instructional management role of the principal. <u>Educational Administration Quarterly</u>, 18, 34-64.
- Bradway, K. (1964). Jung's psychological types: Classification by test versus classification by self. <u>Journal of Analytical Psychology</u>, 9, 129-135.
- Broome, E. C. (1930). What attributes contribute most to a superintendent's success? Nation's Schools, 5, 21-24.
- Burns, J. M. (1978). Leadership. New York: Harper and Row.
- Carlson, J. G. (1985). Recent assessments of the Myers-Briggs Type Indicator. <u>Journal of Personality Assessment</u>, 49, 356-365.
- Carlyn, M. (1977). An assessment of the Myers-Briggs Type Indicator. <u>Iournal of Personality Assessment</u>, 41, 461-473.

- Carlyn, M. (1985). The relationship between Myers-Briggs personality characteristics and teaching preferences of prospective teachers.

 <u>Dissertation Abstracts International</u>, 37, 3493A. (University Microfilm No. 76-27, 081)
- Carskadon, T. G. (1977). Test-retest reliabilities of continuous scores on the Myers-Briggs Type Indicator. <u>Psychological Reports</u>, <u>41</u>, 1011-1012.
- Cattell, R. B. (1973). Personality pinned down. <u>Psychology Today</u>, 7, 40-46.
- Cawelti, G. (1979). Which leadership style--from the head or heart? Educational Leadership, 36, 374-378.
- Clark, K. E., & Clark, M. B. (1990). Measures of Leadership. West Orange, NJ: Leadership Library of America.
- Croghan, J. H., Lake, D. H., & Schroder, H. M. (1983). <u>Identification of the competencies of high-performing principals in Florida</u> (Report No. 90). Tallahassee: Florida Council on Educational Management.
- Cubberly, E. P. (1915). The superintendent of schools. <u>Elementary School Iournal</u>, 16, 147-154.
- Eberhardt, B. J. (1985). Review of situational leadership. In J. V. Mitchell (Ed.), The ninth mental measurements yearbook: Vol. 1 (pp. 1385-1386). Lincoln, NE: Buros Institute of Mental Measurements.
- Ernest, B. (1982). Taking your leadership temperature. <u>NAASP Bulletin</u>, <u>66</u>, 13-17.
- Evans, M. (1970). The effect of supervisionary behavior on the path-goal relationship. Organizational Behavior and Human Performance, 5, 277-298.
- Flores, M. (1987). Relationship between personality types and effective leadership styles. Unpublished doctoral dissertation, University of Las Vegas, Las Vegas.
- Fiedler, F. E. (1965). Engineer the job to fit the manager. <u>Harvard Business Review</u>, 43, 115-122.

- Fiedler, F. E. (1967). A theory of leadership effectiveness. New York: McGraw-Hill.
- Fiedler, F., & Chemers, M. M. (1984). <u>Improving leadership effectiveness:</u>

 <u>The leader match concept</u> (2nd ed.). New York: John Wiley and Sons.
- Fleishman, E. A., & Peters, D. R. (1962). Interpersonal values, leadership attitudes, and managerial success. <u>Personnel Psychology</u>, 15, 127-143.
- Frederick, A. H. (1974). Self-actualization and personality type: A comparative study of doctoral majors in educational administration and the helping relations. <u>Dissertation Abstracts International</u>, 35, 4786. (University Microfilm No. 7055A-7056A)
- Gates, P. E., Blanchard, K. H., & Hersey, P. (1976). Diagnosing educational leadership problems: A situational approach. <u>Educational Leadership</u>, 33, 348-354.
- Gorton, R. A. (1980). School administration and supervision (2nd ed.). Dubuque, IA: William C. Brown Company.
- Gorton, R., & Snowden, P. E. (1993). School Leadership and Administration. Madison, WI: Brown and Benchmark.
- Gosling, T. W. (1930). What qualifications best fit the superintendent for his job? Nation's Schools, 6, 37-39.
- Greenfield, W. (1982). A review of research on the principalship: 1971-81. Boston, MA: Allyn & Bacon.
- Halpin, A. W. (1966). How leaders behave. In A. W. Halpin (Ed.),

 Theory and research in administration (pp. 182-188). New York:

 Macmillan.
- Halpin, A. W., & Winer, B. J. (1957). The observed leader behavior and ideal leader behavior of aircraft commanders and school superintendents. In R. Stogdill & A. Coons (Eds.), <u>Leader behavior:</u>
 <u>Its description and measurement</u> (pp. 103-110). Columbus: Ohio State University.
- Hartley, M. P. (1985). Leadership style and conflict resolution: No man(ager) is an island. <u>Journal of Cooperative Education</u>, 21, 16-23.

- Hemphill, J. K., Griffiths, D. E., & Frederiksen, N. (1962). Administrative performance and personality. New York: Columbia University, Teachers College.
- Herriott, R. F., & Gross, N. (1979). The dynamics of planned educational change: Case studies and analysis. Berkley, CA: McCutchan.
- Hersey, P. (1988). <u>LEAD feedback on leadership style and instrument rational and analysis</u>. San Diego, CA: Pfeiffer and Company.
- Hersey, P., & Blanchard, K. (1969). Life cycle theory of leadership. <u>Training and Development Journal</u>, 23, 26-34.
- Hersey, P., & Blanchard, K. (1972). <u>Management of organizational</u> <u>behavior: Utilizing human resources</u> (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hersey, P., & Blanchard, K. (1973). <u>Leadership effectiveness and</u> <u>adaptability description-self</u>. San Diego, CA: Pfeiffer and Co.
- Hersey, P., & Blanchard, K. (1974). So you want to know your leadership style. <u>Training and Development Journal</u>, 28, 22-37.
- Hersey, P., & Blanchard, K. (1977). Management of organizational behavior: Utilizing human resources (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hersey, P., & Blanchard, K. H. (1979). Management of organization behavior: Utilizing human resources. Englewood Cliffs, NJ: Prentice-Hall.
- Hersey, P., & Blanchard, K. (1982). Leadership style: Attitudes and behaviors. <u>Training and Development Journal</u>, 36, 50-54.
- Hersey, P., & Blanchard, K. (1988a). <u>LEAD self</u>. Escondido, CA: Leadership Studies, Inc.
- Hersey, P., & Blanchard, K. (1988b). <u>Management of organizational</u> <u>behavior: Utilizing human resources</u> (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hersey, P., & Blanchard, K. (1993). <u>Management of organizational</u>
 <u>behavior: Utilizing human resources</u> (6th ed.). Englewood Cliffs, NJ: Prentice-Hall.

- Hirsh, S. K., & Kummerow, J. M. (1989). <u>Lifetypes</u>. Palo Alto, CA: Consulting Psychologists.
- Hoffman, J. L. (1986). Educational administrators: Psychological types. <u>Journal of Psychological Type</u>, 11, 64-67.
- Holland, J. L. (1959). A theory of vocational choice. <u>Journal of Counseling Psychology</u>, 6, 35-45.
- Holland, J. L. (1966). A psychological classification scheme for vocations and major fields. <u>Journal of Counseling Psychology</u>, <u>13</u>, 277-288.
- Hollander, E. P. (1971). Style, structure, and setting in organizational leadership. <u>Administrative Science Quarterly</u>, <u>16</u>, 1-9.
- Hollander, E. P., & Julian, J. W. (1969). Contemporary trends in the analysis of leadership processes. <u>Psychological Bulletin</u>, 71, 387-397.
- House, R. J. (1971). A path goal theory of leader effectiveness. Administrative Science Quarterly, 16, 321-338.
- Huff, S., Lake, D., & Schaalman, M. L. (1982). <u>Principal differences:</u>
 <u>Excellence in school leadership and management</u>. Boston, MA:
 McBer.
- Hunsaker, P. L., & Hunsaker, J. S. (1981). Decision styles--in theory, in practice. Organizational Dynamics, 10, 23-36.
- Inclan, A. F. (1986). The development of the spanish version of the Myers-Griggs Type Indicator, Form G. <u>Journal of Psychological Type</u>, 11, 35-46.
- Johns, H. E., & Moser, R. (1989). From trait to transformation: The evolution of leadership theories. <u>Education</u>, 110, 115-122.
- Jung, C. G. (1923). <u>Psychological types</u>. Translated by H. Godwin Baynes. New York: Harcourt, Brace, and Company.
- Katz, M. (1985). Match working styles, and find your way to board/superintendent harmony. <u>American School Board Journal</u>, 172, 33-34.
- Katz, D., & Kahn, R. L. (1966). The social psychology of organizations. New York: John Wiley and Sons.

- Kavanagh, M. J., & Weissenberg, P. (1972). The independence of initiating structure and consideration: A review of the evidence. <u>Personnel Psychology</u>, 25, 119-130.
- Keirsey, D., & Bates, M. (1984). <u>Please understand me</u> (5th ed.). Del Mar, CA: Prometheus Nemesis.
- Knowles, H. P., & Saxberg, B. O. (1971). <u>Personality and leadership</u>. Reading, MA: Addison-Wesley.
- Korman, A. K. (1966). Consideration, initiating structure, and organizational criteria: A review. Personnel Psychology: A Journal of Applied Research, 19, 349-361.
- Kritsonis, W. A. (1982). Leadership characteristics for school superintendents. <u>Thrust</u>, 12, 23.
- Leedy, P. D. (1989). <u>Practical research: Planning and design</u> (4th ed.). New York: Macmillan.
- Leithwood, K. A., & Montgomery, D. J. (1986). <u>Improving principal</u> effectiveness: The principal profile. Toronto: Ontario Institute for Studies in Education.
- Levy, N., & Padilla, A. (1982). A spanish translation of the Myers-Briggs Type Indicator, Form G. <u>Psychological Reports</u>, 51, 109-110.
- Likert, R. (1961). New patterns of management. New York: McGraw-Hill.
- Lipham, J. M. (1988). Getzel's models in educational administration. In N. J. Boyan (Ed.), <u>Handbook of research in educational</u> administration (pp. 171-184). White Plains, NY: Longman.
- Lowin, A., Hrapchak, W. J., & Kavanagh, M. J. (1969). Consideration and initiating structure: An experimental investigation of leadership traits. American Science Quarterly, 12, 13-15.
- Lueder, D. C. (1983, November). A study of the relationship between elementary school principals' psychological type and perceived problem-solving strategies. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Nashville, TN.
- Maher, M. T. (1986). <u>Leadership styles and beliefs in education of Minnesota superintendents</u>. Unpublished doctoral dissertation, University of Minnesota, Duluth.

- Mann, R. D. (1959). A review of the relationships between personality and performance in small groups. <u>Psychological Bulletin</u>, <u>56</u>, 241-270.
- Martinko, M. J., & Gardner, W. L. (1982). The behavior of high-performing educational managers: An observational study. Tallahassee: Florida State University, Department of Management.
- Mattaliano, A. P. (1982). Theory <u>x</u> or theory <u>y</u>--What is your style? <u>NASSP Bulletin</u>, <u>66</u>, 37-34.
- Mazzarella, J., & Grundy, T. (1989). Portrait of a leader. In S. C. Smith & P. K. Piele (Eds.), School leadership: Handbook for excellence (pp. 9-27). Eugene: University of Oregon. (ERIC Document Reproduction Service No. ED 355 786)
- Mazzarella, J., & Smith, S. C. (1989). Leadership styles. In S. C. Smith & P. K. Piele (Eds.), School leadership: Handbook for excellence (pp. 28-52). Eugene: University of Oregon. (ERIC Document Reproduction Service No. ED 309 506)
- McCauley, C. D. (1990). <u>Effective School Principals</u>. Greensboro, NC: Center for Creative Leadership.
- McCaulley, M. H. (1990). The Myers-Briggs Type Indicator and leadership. In K. E. Clark & M. B. Clark (Eds.), Measures of Leadership (pp. 381-418). West Orange, NJ: Leadership Library of America.
- McGregor, D. (1969). The human side of enterprise. New York: McGraw-Hill.
- Metroff, I. I., & Kilmann, R. H. (1975). Methodological approaches to social sciences. San Francisco: Jossey-Bass.
- Morrison, M. J. (1980). Perceptions of principals concerning knowledge of leadership style and personality preference for self-improvement.

 <u>Dissertation Abstracts International</u>, 41(2), 484A. (University Microfilms No. 617-607560)
- Mortimore, P., & Sammons, P. (1987). New evidence on effective elementary schools. <u>Educational Leadership</u>, 1, 2-334.
- Murray, J. B. (1990). Review of research on the Myers-Briggs Type Indicator. <u>Perceptual and Motor Skills</u>, 70, 1187-1202.

- Myers, I., & Myers, P. B. (1980). Gifts differing. Palo Alto, CA: Consulting Psychologists.
- Myers-Briggs, I. (1962). <u>Manual: The Myers-Briggs type indicator</u>. Princeton, NJ: Princeton University, Educational Testing Service.
- Myers-Briggs, I. (1976a). <u>Introduction to type</u>. Gainesville, FL: Center for Application for Psychological Types.
- Myers-Briggs, I. (1976b). <u>Manual: The Myers-Briggs type indicator</u>. Princeton, NJ: Princeton University, Educational Testing Service.
- Myers-Briggs, I., & Briggs, K. C. (1977). <u>Myers-Briggs Type Indicator</u>. Form G. Palo Alto, CA: Consulting Psychologists Press.
- Myers-Briggs, I., & McCaulley, M. H. (1985). A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.
- Osipow, S. H., Ashby, J. D., & Wall, H. W. (1966). Personality types and vocational choice: A test of Holland's theory. <u>Personnel and Guidance Journal</u>, <u>45</u>, 37-42.
- Pendley, K. L. (1985). Effective educational leadership: Its relationship to personality characteristics, interpersonal behaviors, and leadership style. Unpublished doctoral dissertation, University of Wyoming, Laramie.
- Reavis, W. C. (1940). Personal characteristics desired in public school executives. The Elementary School Journal, 40, 417-423.
- Reddin, W. J. (1967). The 3-D management style theory. <u>Training and Development Journal</u>, 21, 8-17.
- Reddin, W. J. (1979). Managerial effectiveness. New York: McGraw-Hill.
- Sergiovanni, T. J. (1979). Leadership: The next great training robbery? Educational Leadership, 36, 388-394.
- Sergiovanni, T. J. (1992). Moral leadership: Getting to the heart of school improvement. San Francisco, CA: Jossey Bass.
- Sexton, M. J., & Switzer, K. D. (1977). Educational leadership: No longer a potpourri. Educational Leadership, 35, 19-24.

- Shapira, Z. (1976). A facet analysis of leadership styles. <u>Journal of Applied Psychology</u>, 61, 136-139.
- Shartle, C. L. (1956). <u>Executive performance and leadership</u>. Englewood Cliffs, NJ: Prentice-Hall.
- Snyder, W. R., & Drummond, W. H. (1988). Florida identifies competencies for principals, urges their development. NASSP Bulletin, 72, 48-58.
- Spanger, E. (1928). <u>Types of men: The psychology and ethics of personality</u>. Translated by P. J. W. Pigors. Halle (Saale): Max Niemeyer Verlag.
- Steele, R. S., & Kelley, T. J. (1976). Eysenck Personality Questionnaire and Jungian Myers-Briggs Type Indicator correlation of extraversion-introversion. <u>Journal of Consulting and Clinical Psychology</u>, 44, 690-691.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. <u>Journal of Psychology</u>, 25, 35-71.
- Stogdill, R. M. (1974). <u>Handbook of leadership: A survey of theory and research</u>. New York: Free Press.
- Stogdill, R. M. (1977). <u>Leadership abstracts and bibliography</u>. Columbus: Ohio State University.
- Stogdill, R. M. (1981). Handbook of leadership. New York: Macmillan.
- Stogdill, R. M., & Coons, A. (1957). <u>Leader behavior: Its descriptions and measurement</u>. Columbus: Ohio State University Press.
- Stricker, L. J., & Ross, J. A. (1964). Intercorrelations and reliabilities of the Myers-Briggs Type Indicator scales. <u>Psychological Reports</u>, 12, 287-293.
- Stronge, J. H. (1993). Defining the principalship: Instructional leader or middle manager. NASSP Bulletin, 77, 61-63.
- Tannenbaum, R., & Schmidt, W. (1973). How to choose a leadership pattern. Harvard Business Review, 51, 162-180.
- Terry, G. (1960). <u>Principles of management</u>. Homewood, IL: Richard D. Irwin Publishing.

- Texas Education Agency. (1995). <u>Public Education Information</u>
 <u>Management System Report</u>. Austin, TX: Author.
- Thompson, L. W. (1931). Desirable personal and professional qualities of the superintendent. <u>School Executives Magazine</u>, 50, 562-563.
- Thompson, S. (1983). Leadership defined. NASSP Bulletin, 67, 19.
- Ticky, N. M., & Devanna, M. A. (1986). The transformational leader. Training and Development Journal, 40, 27-32.
- Toppins, A. D. (1986, November). Strengths and styles of school leaders:

 Is who they are how they lead? Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Memphis, TN.
- Tzeng, O. C. S., Outcalt, D., Boyer, S. L., Ware, R., Landis, D. (1984). Item validity of the Myers-Briggs Type Indicator. <u>Journal of Personality Assessment</u>, 48, 255-256.
- Vail, J. F. (1991). <u>Leadership styles and personality types of superintendents in South Carolina</u>. Unpublished doctoral dissertation, University of South Carolina, Columbia.
- Von Fange, E. A. (1961). <u>Implications for school administration of the personality structure of educational personnel</u>. Unpublished doctoral dissertation, University of Alberta, Alberta, Canada.
- Walton, M. (1986). The Deming management method. New York: Putnam.
- Willis, C. G. (1984). Myers-Briggs Type Indicator. In D. J. Keyer & R. C. Sweetland (Eds.), <u>Test critiques. Vol. 1</u> (pp. 482-490). Kansas City, MO: Test Corporation of America.
- Wright, F. L. (1937). Personal qualification of the superintendent. American School Board Journal, 94, 19-22.
- Wright, J. A. (1966). The relationship of rated administrator and teacher effectiveness to personality as measured by the Myers-Briggs Personality Type Indicator. Claremont, CA: The Claremont Graduate School. (ERIC Document Reproduction Service No. ED 033-187)

- Youngs, B. B. (1988). Does age affect school leadership style? The Education Digest, 54, 40-41.
- Zaleznik, A. (1977). Managers and leaders: Are they different? <u>Harvard Business Review</u>, 55, 67-78.
- Zedeck, S. (1985). Review of situational leadership. In J. V. Mitchell (Ed.), The ninth mental measurements yearbook. Vol. 3 (pp. 1385-1387). Lincoln, NE: The Buros Institute of Mental Measurements.
- Zirkel, P. A., & Greenwood, S. C. (1987). Effective schools and effective principals: Effective research. <u>Teachers College Record</u>, <u>89</u>, 255-267.