A CORRELATIONAL STUDY OF A RANDOM STRATIFIED SAMPLE OF SUPERINTENDENTS IN MICHIGAN – ANALYZING THE RELATIONSHIP BETWEEN MBTI® REPORTED PERSONALITY PREFERENCE TYPES AND FIRO-B™ INTERPERSONAL LEADERSHIP STYLES, MBTI® PERCEIVED AND REPORTED PERSONALITY PREFERENCE TYPES, AND MBTI® PERCEIVED PERSONALITY PREFERENCE TYPES AND FIRO-B™ INTERPERSONAL LEADERSHIP STYLES

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A Dissertation

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ABSTRACT

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In a search of educational leadership literature for models of school leadership that consider personality type, this researcher found that most scholars have avoided the topic of personality in favor of a focus on leadership skills (Richard, 2000; Shibley, 2002); or issues of certification and professional training (Holloway, 2001); or a focus on the office of the superintendency, rather than on the type of person who is most effective in that office (Keedy & Bjork, 2001; Muffis, Sullivan, & Fried, 2003).

Three research questions were developed to guide this correlational study where one statistically significant relationship was found between the MBTI® preference type Sensing and the FIRO-B™ leadership style Expressed Control. Superintendent respondents with the Sensing preference expressed a greater need to be influential and responsible in their districts than other preference types. Three instruments were used to collect the data about the 44 participants: the Myers-Briggs Type Indicator® (MBTI®) Form M, the Fundamental Interpersonal Relations Orientation-Behavior ™ (FIRO-B™), and a brief demographic questionnaire.

The findings include the following: 96% of the Michigan superintendent respondents were Caucasian; 88.6% were male. Forty and nine-tenths percent were aged 56 or older. Close to half (47.7%) had been in their positions for five or fewer years. All (100%) of the respondents had advanced degrees beyond the bachelor’s. Forty-six
percent held a master’s degree and 30% held an earned doctoral degree. One fourth of the respondents held specialist degrees.

Twenty-three percent fit the MBTI® profile of ISTJ (Introvert-Sensing-Thinking-Judging) followed by ESTJ (Extravert-Sensing-Thinking-Judging), describing 21% of the superintendents.

On the FIRO-B™, 41% of the participants exhibited low Expressed Control characteristics and an identical proportion exhibited medium Expressed Control attributes.

On the dimension of low Expressed Control and low Wanted Control, 23% of the superintendents exhibited the aspects. No respondent scored high on Wanted Control for any of the Expressed Control categories.

The quality of district leadership would benefit by systematic research on the interaction of superintendents’ behavior and educational outcomes. It would follow, then, that there is also a definite need for exploring the attributes of educational leaders and their relation to situational factors and educational outcomes.
This work is dedicated to my children, my grandchildren: Mariah and Gabriel;

And to the Glory of God.

One generation shall praise thy works to another, and shall declare thy mighty acts.

(PSalm 145:4)
ACKNOWLEDGMENTS

What makes us special is the signature of God on our lives (Max Lucado, 2000). Thanks be to God . . .

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And “now unto Him who is able to do exceeding abundantly above all that we ask or think, according to the power that worketh in us, Unto Him be glory . . . .”

—Ephesians 3:20, 21 KJV
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CHAPTER I. INTRODUCTION

Background of the Study

Educators and citizens who value the American system of education, and who believe, as I do, that excellence in public education is directly linked to excellence in all other areas of social life in a democracy, have a special interest in ensuring that the leaders of American education, unlike the leaders of the railroad industry, get their business right before it is too late. (Schlechty, 1990a, p. 151; Razik & Swanson, 2001, p. 156)

The drive for excellence in America’s schools has been accompanied by a call for strong leadership from a variety of stakeholders in public education (Berney & Ayers, 1990; Brower & Balch, 2005; Duignan & Macpherson, 1992; Maxcy, 1991; Razik & Swanson, 2001; Schlechty, 1990a; Yukl, 2006). The school superintendent stands at the apex of the organizational pyramid in K-12 education, often leading a multimillion dollar enterprise that is charged with the moral and technical socialization of children (Bridges, 1982; Gewertz, 2006). The superintendent’s leadership has not gone unchallenged, particularly in a climate in which all of education’s many stakeholders, from students to the United States President himself (Murray, 2006b), are urging reform. As the chief executive officer of a school system, the superintendent generally creates the vision, develops the mission, and establishes the culture and the climate that promote instructional improvement and student achievement (Brower & Balch, 2005; Gewertz, 2006)

Although studies of leadership have been a staple of the academic literature for many decades, no real consensus has been reached as to what the term leadership means (Yukl, 2006), particularly in the context of educational administration. In a review of more than 120 journal articles that appeared in the period 1988 to 1998, Leithwood and Duke (1998) identified 20 different concepts of leadership. The overwhelming impression conveyed by many authors, including those writing about school leadership, was that readers understood what they meant by the term.
In addition to a lack of consensus about what leadership is (Yukl, 2006), there is a tendency in the research to ignore the personality factor in leadership and to focus instead on issues of accountability, power, and management skills. When interpersonal relationships and behavior in school leaders are discussed, the topic tends to be treated as if it were unrelated to leadership.

Statement of the Problem

The problem addressed in this research contributes to closing the gap in the professional education literature in its treatment of leadership qualities in the school superintendency, with particular attention to the relationship between superintendents’ leadership styles and personality preference types. This study investigated leadership styles, as measured by the Fundamental Interpersonal Relations Orientation-Behavior™ (FIRO-B™) instrument and the reported personality preference types, as measured by the Myers-Briggs Type Indicator® (MBTI®) Form M. Superintendents’ perceived MBTI® preference types were self-reported on the demographic questionnaire. There were no comments from the respondents regarding the language on the demographic questionnaire.

Background of the Problem

One source of information about leadership styles and personality factors considered desirable in an effective school superintendent might be expected to be the standards proposed for the position by an appropriate professional organization. Yet, the Standards proposed by the American Association of School Administrators (AASA) in 1993 for the selection, training, and professional development of school superintendents are weighted toward their roles and responsibilities, and noticeably lack recommendations for personal leadership characteristics. Some of the standards refer to empowering others, demonstrating multicultural understanding,
and consensus building, but those standards that refer specifically to relationships with people (Standard 4, “Organizational Management,” and Standard 7, “Human Resources Management”) are concerned only with skills, rather than behavior or personal characteristics.

In 1999, the Interstate School Leaders Licensure Consortium examined superintendents’ roles and activities in an attempt to relate them to best professional practices (Holloway, 2001). Of the six critical roles, four described behaviors could be linked to personality attributes (facilitating, collaborating, acting, and understanding), yet no formal recognition was presented that personality could be an important element in professional behavior.

Purpose of the Study

The purpose of this research was to determine the relationship between superintendents’ FIRO-B™ interpersonal leadership styles and their reported MBTI® personality preference types.

Rationale for the Study

In a search of educational leadership literature for models of school leadership that consider personality type, this researcher found that most scholars have avoided the topic of personality in favor of a focus on (a) leadership skills (Richard, 2000; Shibley, 2002); (b) issues of certification and professional training (Holloway, 2001); or (c) the office of the superintendency, rather than the type of person who is most effective in that office (Keedy & Bjork, 2001; Muffs, Sullivan, & Fried, 2003).

The history of the development of leadership models is extensive (Bass, 1981, 1990; Razik & Swanson, 2001; Yukl, 2006). However in the last 30 years, scholars, researchers, and practitioners have given a great deal of attention to the concepts associated with transformational leadership, in part because it is widely regarded as a means of bringing about real change in an
organization by inspiring the organization’s members to seek common goals (Burns, 1978, 2003; Brower & Balch, 2005; Yukl, 2006). When transformational leadership is discussed in the context of educational institutions, it is invariably linked with the need for reform or school improvement, both of which constitute the major challenge for modern school superintendents. According to Zhu, Chew, and Spangler (2005) “transformational leadership will result in high levels of cohesion, commitment, trust, motivation, and performance . . . in organizational environments” (p. 3). Yukl (2006) corroborates that research has found that “chief executives of successful organizations used transformational behaviors” (p. 262). Earlier empirical research has also posited that transformational leadership has a positive effect on individual performance and organizational outcomes (Bass, 1981, 1990; Burns, 1978, 2003; Brower & Balch, 2005; Howell and Hall-Merenda, 1999; Razik & Swanson, 2001; Yukl, 2006).

The concept of school culture is often associated with leaders, their styles, and their personalities (Brower & Balch, 2005; Gewertz, 2006; Yukl, 2006). If a superintendent sets the tone for his/her district, such cultural leadership (Gewertz, 2006; Razik & Swanson, 2001; Sergiovanni, 1990) could be a force for change and innovation or a means of provoking resistance to change by maintaining the status quo. Schein (1992; Razik & Swanson, 2001; Yukl, 2006) has observed that changing an embedded school culture cannot necessarily be accomplished by effective leadership alone, as the culture represents a group’s shared set of beliefs, assumptions, practices, and problem solving approaches. Changing a culture can be a risky endeavor for a school superintendent, particularly if changes threaten entrenched ideas of the group and challenge those ideas (Short & Greer, 1997, 2002).

Leithwood (1992) argued that a professional school culture has to be developed, rather than imposed; built on collaborative problem-solving efforts; and essentially be supportive of
individuals’ professional development. He also contended that modeling behavior is an effective way to foster such a culture.

Although Henderson, Huffman, Caram, and Kennedy (2000) agreed that personal characteristics have a role in transformational leadership, these authors also emphasized the importance of behavior in convincing followers to identify with the transformational leader’s style, as well as with the leader’s personality.

According to Zhu et al., (2005), transformational leadership has “positive effects on individual and organizational performance, but the nature of the relationship remains obscure” (p. 3). “With transformational leadership, the followers feel trust, admiration, loyalty, and respect toward the leader, and they are motivated to do more than they originally expected to do” (Yukl, 2006, p. 262).

Paul Hill (2002) iterated that, “the quality of leadership provided or not provided by local school superintendents and school boards can be explored with more than anecdotes and war stories” (p. 2, as cited in Education Writers Association). The writer continued:

School reform ultimately has to happen in the classroom, but the odds that you’re going to get spontaneous improvement in the classroom without changing the broader, regulatory environment are pretty low. Classrooms are the way they are in large part because of what happens at the district level. (Hill, 2002, p. 2, as cited in Education Writers Association)

Alarmingly, Marla Ucelli (2002) provided that “the public and parents probably don’t yet associate better outcomes for students with what a superintendent …does” (p. 2, as cited in Education Writers Association). “Still research on superintendent effectiveness remains sparse and leaves much to be desired” said Janet Thomas (2002, as cited in Education Writers Association, p. 5), a researcher with the Center for Social Organization of Schools at Johns Hopkins University.
Research Questions

This study was based on the following questions:

1. Does a correlation exist between Michigan superintendents’ FIRO-B™ interpersonal leadership styles and their reported MBTI® personality preference types?

2. Is there a correlation between Michigan superintendents’ perceived MBTI® personality preference types, as self-reported on the demographic questionnaire, and their reported MBTI® preference types, as measured by Consulting Psychologists Press (CPP, Inc.)?

3. Is there a correlation between Michigan superintendents’ FIRO-B™ interpersonal leadership styles and their perceived MBTI® personality preference types, as self-reported on the demographic questionnaire?

Significance of the Study

Although there is some overlap, the recent leadership research can be generally grouped by its approach to the study of leadership (Razik & Swanson, 1995; 2001; Yukl, 2006). Personality characteristics and their relationship to leadership skills are referred to as trait research (Razik & Swanson, 1995, 2001; Yukl, 2006). Research that attempts to identify patterns in leaders’ exercise of their skills is referred to as behavioral in its approach (Razik & Swanson, 1995, 2001; Yukl, 2006). Another category of the research includes studies of leaders’ acquisition of power and the ways in which they use their power to influence the behavior of followers and others (Razik & Swanson, 1995; 2001; Yukl, 2006). Research that analyzes the relationship between leaders’ behavior and their effectiveness is generally categorized as contingency or situational in approach because of its focus on the context in which leaders operate (Razik & Swanson, 1995, 2001; Yukl, 2006). Transformational/transactional research
typically focuses on leader-follower relationships (Brower & Balch, 2005; Burns, 1978, 2003; Razik & Swanson, 1995; 2001; Yukl, 2006). Research that attempts to describe leaders’ behavior in the context of an organization’s culture is generally based on a cultural model (Razik & Swanson, 1995, 2001; Yukl, 2006). While all of these approaches are relevant to the current research, the approach with the most direct relevance is that based on personality or trait theoretical models.

The study of leaders’ personality characteristics is a well-established interest in the research communities from a variety of disciplines, and its history roughly parallels the major developments in the overall leadership research field (Bass, 1981, 1990; Myers, McCaulley, Quenk, & Hammer, 1998). While some researchers have claimed to identify specific traits or groups of traits that are found in effective leaders (e.g., Mann, 1959), others have concluded that leaders cannot be distinguished from followers by their personality traits (Jennings, 1961). For a time in the late 1950s and early 1960s, concepts such as the Great Man theory, which proposed that great men are the product of great periods in history, were popular, but they have since been dismissed because they lack a solid theoretical and empirical foundation (Razik & Swanson, 1995, 2001).

In the 1990s, with the advent of situational and contingency leadership models, researchers began looking at leadership traits in the context of leadership situations, concluding that the combination of personality and situation was a more realistic model to explain effective leadership than models based on personality or situational factors alone (Yukl, 1994, 2006).

Beginning in the 1980s and continuing into the present, popular interest in the accomplishments of corporate leaders fueled a resurgence of interest in leadership style and personality among researchers. Bennis (1984b; Razik & Swanson, 2001; Yukl, 2006), whose
work subsequently became widely popular, besides particularly scholarly, found that effective leaders were those who were able, by their personalities and behavior, to motivate and inspire employees. The significance of the Bennis work is that he closely related what he called character to a set of skills in order to create a profile of the effective leader that was widely accepted (Razik & Swanson, 2001; Yukl, 2006).

From the psychological research have come the concepts of psychological or personality type that have been widely used by social science and business researchers to develop modern models of leadership based on traits. The foremost among these conceptual frameworks perhaps is that developed by Jung (1923), who was among the first to determine that individuals appear to have natural preferences for certain abilities that shape the way they exercise their skills. He named these innate abilities perception and judgment, and the preferences by which these abilities are used as perception (which is used through sensing or through intuition) and judgment (which is used through thinking or feeling). One critical characteristic of the Jungian model is that the methods are opposites, so that an individual who chooses, for example, to use sensing rather than intuition will over time develop that method of dealing with the environment more fully than the other.

In Jung’s (1923) view, then, this framework for understanding behavior based on individuals’ natural preferences for the way they perceive their environment (sensing or intuition) and the way they process the information they receive from their perceptions (thinking or feeling) can describe their personality types. These Jungian concepts of psychological types have been operationalized in the Myers-Briggs Type Indicator® (MBTI®), the instrument that operationalizes the concepts that were developed by the mother-daughter team of Katherine Briggs and Isabel Briggs Myers. Internationally, the MBTI® is the most widely used personality
measure and has continually evolved over the 50 years since it was first developed due to continued research, new applications, and new ways of interpreting the results.

The other research instrument used in the current study, the FIRO-B™ (Fundamental Interpersonal Relations Orientation-Behavior), was developed by Schutz (1958) based on the theory of interpersonal orientation. Schutz assumed an innate desire on the part of individuals to be compatible with others as the basis that determines individuals’ needs to be included, to be in control, and to be close to others. The FIRO™ and the FIRO-B™ have come to be regarded as the standard measures of compatibility (Waterman & Rogers, 2004).

The use of both the MBTI® and the FIRO-B™ is not unknown among researchers, but they have not been used in conjunction very often to study educational leadership (Myers et al., 1998) nor has personality among school superintendents been studied in the state of Michigan. These are the contributions to the literature on leadership that it is hoped the current research will make.

Definition of Terms

The following terms are defined for this study in order to provide an understanding of how they are used in this dissertation.

*Attitudes:* A state of mind or a feeling; disposition (*The American Heritage Dictionary, 1997*). Based on Jung’s theory, attitudes also refer to personality measures, including extraversion and introversion. The MBTI® defines attitude as a term that also refers to the judging-perceiving dyad which can be interchanged with the term orientation (Myers, McCaulley, Quenk, & Hammer, 1998).

*Control:* The need for control has to do with authority, persuasion between people, or the ability to manage or direct decision making. Control determines the extent of power or

**Extraversion (E):** Refers to an interest in one’s environment or in others as opposed to or to the exclusion of oneself. The MBTI® further states that extraversion identifies the direction and flow of energy to the outer world (The American Heritage Dictionary, 1997; Myers et al., 1998).

**Extravert, Extraverted Type:** Refers to an individual who is interested in others or in the environment as opposed to or to the exclusion of self; in MBTI® usage, the individual displays a penchant for the extraverted attitude over the introverted attitude (The American Heritage Dictionary, 1997; Myers et al., 1998).

**Feeling (F):** Of the two opposite judging functions, the one by which decisions are made through the capacity to experience the higher emotions; sensitivity; sensibility (The American Heritage Dictionary, 1997; Myers et al., 1998).

**Feeling Types:** Individuals who use opinion based more on emotion than on reason or use sentiment to reach decisions; in MBTI® usage, they also prefer feeling to thinking as a way of discernment (The American Heritage Dictionary, 1997; Myers et al., 1998).

**Function or Process:** Something closely related to another thing and dependent on it for its existence, value, or significance as in MBTI® usage where it represents one of the four basic mental processes of sensing, intuition, thinking, and feeling (The American Heritage Dictionary, 1997; Myers et al., 1998).

**Function Pairs:** Something closely related to another thing and dependent on it for its existence, value, or significance as in MBTI® usage where pairs are created by combining each of the two perceiving functions with each of the two judging functions. The MBTI® uses four

*Introversion:* Is the direction of or tendency to direct one’s thoughts and feelings toward oneself as in MBTI® usage, where introversion identifies the direction and flow of attention and energy to the inner world (The American Heritage Dictionary, 1997; Myers et al., 1998).

*Introvert, Introverted Type:* To concentrate (one’s interests) upon oneself. The MBTI® defines this type as an individual who has a proclivity for the introverted attitude over the extraverted attitude (The American Heritage Dictionary, 1997; Myers et al., 1998).

*Intuition (N):* Is a sense of something not evident or deducible; an impression. In MBTI® usage, it is the one of two opposite perceiving functions, which is germane with meanings, relationships, patterns, and possibilities (The American Heritage Dictionary, 1997; Myers et al., 1998).

*Intuitive Type:* An individual marked by or capable of keen insight or perception and who, in MBTI® usage, prefers intuition to sensing as a way of assessing (The American Heritage Dictionary, 1997; Myers et al., 1998).

*Judging (J):* Is to form an opinion or evaluation after careful consideration. In MBTI® usage, it is the point of reference which indicates that either thinking or feeling is the preferred way of dealing with the outer world and is likely to appear in discernible behavior (The American Heritage Dictionary, 1997; Myers et al., 1998).

*Judging Functions:* The MBTI® defines the two functions as thinking and feeling (Myers et al., 1998).

*Judging Type:* Is an individual who forms an opinion or evaluation after careful consideration; in MBTI® usage, the individual prefers to use a judging function (thinking or
feeling) rather than a perceiving function (sensing or intuition) when maneuvering in the outer world (The American Heritage Dictionary, 1997; Myers et al., 1998).

Leadership Style: Is the behavior pattern of an individual, as discerned by others, that a person exhibits when attempting to impact the activities of those others. It may be very different from the person’s own discernment (Hersey, 1996).

Perceiving: Is the recognition and interpretation of sensory stimuli based chiefly on memory; in MBTI® usage, it is the attitude, that is, the point of reference, which indicates that either sensing or intuition is the preferred way of dealing with the outer world and is likely to appear in discernible behavior (The American Heritage Dictionary, 1997; Myers et al., 1998).

Perceiving Type: Is an individual who uses recognition and interpretation of sensory stimuli based chiefly on memory when making decisions; in MBTI® usage, the individual prefers to use a perceiving function (sensing or intuition) when maneuvering in the outside world (The American Heritage Dictionary, 1997; Myers et al., 1998).

Personality Type: In MBTI® usage is a self-reported questionnaire that is scored to yield a profile of the particular traits or characteristics that make up the respondent’s personality preferences on the four scales: Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judgment-Perception (The American Heritage Dictionary, 1997; Myers et al., 1998).

Rural: Is defined as a place with less than 2,500 people and coded rural and outside a Metropolitan Statistical Area (MSA) by the U.S. Census Bureau OR a place with less than 2,500 people and coded rural and inside an MSA by the U.S. Census Bureau (MDOE and the USDOE).

Sensing: The perceiving function that is concerned with experiences that are garnered from the use of any of the faculties by which stimuli from outside or inside the body are received
and felt, such as the faculties of hearing, sight, smell, touch, taste, and equilibrium (*The American Heritage Dictionary*, 1997; Myers et al., 1998).

*Sensing-Type:* In MBTI® usage is an individual who garners information by using a perception or feeling produced by a stimulus and most likely prefers the use of sensing to intuition as a way of assessing the information (*The American Heritage Dictionary*, 1997; Myers et al., 1998).

*Suburban:* Is a *small* town not within an MSA and with a population that is less than 25,000 and greater than or equal to 2,500 people (MDOE and the USDOE).

*Thinking (T):* Of the two opposite judging functions, the one by which decisions are made by ordering choices through the use of reasoning, reflection, or pondering into categories of logical cause-and-effect and objective scrutiny of pertinent information (*The American Heritage Dictionary*, 1997; Myers et al., 1998).

*Thinking Type:* An individual who prefers making decisions by using reasoning, reflection, or pondering; in MBTI® usage, the individual will most likely use thinking to feeling as a way of assessing his or her information (*The American Heritage Dictionary*, 1997; Myers et al., 1998).

*Urban:* Is a *large* central city of an MSA with a population that is greater than or equal to 250,000, *OR* a *mid-size* central city of an MSA with a population that is less than 250,000 (MDOE and the USDOE).

**Assumptions and Limitations**

It was assumed for this study that the data furnished by the Michigan Department of Education (MDOE) would be correct, that is, Michigan school superintendents would be correctly identified by name, address, and school district, and that the distribution of the selected
respondents would be approximately proportionate across urban, suburban, and rural school
districts in the state. Further, it was assumed that the respondents would answer the questions on
the demographic questionnaire honestly and accurately, and that they would complete the
assessment instruments.

The research study is subject to all of the limitations common to research conducted by
surveys and research instruments distributed by mail. For example, there may be response bias
due to the rate of return, so that an equitable distribution by type of school district may not be
achieved. The amount of time required to complete the demographic questionnaires and research
instruments (approximately 25 to 40 minutes) may result in fewer returns from the initial
sampling. The study was limited to Michigan superintendents as identified by the Michigan State
Board of Education; therefore, the results may not be generalizable to school superintendents in
other U.S. school districts.

Because the assessment instruments depended on self-reported data, the responses may
reflect interpersonal leadership styles and personality preference types that the respondents
thought they should demonstrate, rather than those they actually do demonstrate. Because the
research design did not include any means of verifying the respondents’ perceptions, such as by
surveying principals, school board members, or others in a position to observe the respondents at
work, generalizing from the responses may not be possible. Responses may reflect participation
by a certain interpersonal leadership orientation or personality preference type.

The researcher recognizes that there are multiple leadership models described in the
literature. While a complete review of this literature is beyond the scope of this endeavor, a
selective overview of relevant literature has been provided, including transformational
leadership, a current model and current descriptor of organizational culture (Atwater, personal
interview, December, 2005; Brower & Balch, 2005; Burns, 2003; Zhu, Chew, Spangler, 2005;),
that is germane to the present study.

It is further recognized by the researcher that multiple instruments for measuring
personality type and leadership styles are described in the literature. While a complete review of
this literature is beyond the scope of this study, a selective review of instruments with the most
direct relevance, i.e., those that are based on personality or trait theoretical models has been
provided. Moreover, the Fundamental Interpersonal Relations Orientation-Behavior™ (FIRO-
B™) and the Myers-Briggs Type Indicator® (MBTI®) assessment instruments have been
approved by the university’s human subjects’ review board for use in this study.

Methodology

Design of the Study

This study was designed as a correlational quantitative survey to determine whether there
is a relationship among the variables of the superintendents’ FIRO-B™ interpersonal leadership
styles and their MBTI® reported personality preference types, their MBTI® perceived and
reported personality preference types, and their MBTI® perceived personality preference types
and FIRO-B™ interpersonal leadership styles. For background purposes, selected demographic
data, including selected superintendents’ characteristics (gender, age, years in the district, years
in the superintendent’s position, educational background) and selected district characteristics
(racial, ethnic, and socioeconomic diversity; size, geographic type) are included in the study.

Population and Sampling

Of the more than 500 school districts in the state of Michigan, a random sampling of
superintendents, totaling 112, were selected and asked to participate in the study. Selection was
based on district enrollment size in urban, suburban, and rural school districts and conducted so as to obtain a proportionate representation of superintendents from each grouping.

Research Instrumentation

The participants completed a brief demographic questionnaire (see Appendix B), the MBTI® (see Appendix C) and the FIRO-B™ (see Appendix C) instruments.

Research Procedure

Data collection. Each of the superintendents who agreed to participate received a package from the researcher containing the demographic questionnaire, the MBTI®, the FIRO-B™, and a cover letter (see Appendix A) describing the measures taken to ensure the confidentiality of their responses, directions for returning the completed research instruments, and an offer of a complimentary copy of their leadership profile at the completion of the research study.

Participants were also notified in the cover letter of the time allowed for their response and return of the research instruments. One week before the due date, a brief reminder was sent. Two days after the due date, an additional reminder was sent to those participants who had not yet returned their responses.

Data analysis. The completed MBTI® and the FIRO-B™ instruments were computer scored by the publisher, Consulting Psychologists Press, Inc. The continuous scores of the MBTI® and the FIRO-B™ scores, along with the demographic data, were entered into a computer file for analysis using SPSS-Windows, version 13.

The data analyses were divided into two sections. The first section of the data analyses used frequency distributions. The second section used inferential statistical analyses to address the research questions.
The continuous scores for each personality preference type and the interpersonal leadership style scores were analyzed using Pearson product moment correlation coefficients to determine whether correlations existed between the variables.

Scores for each of the dichotomous perceived and reported personality preference categories were crosstabulated. Four chi-square tests were conducted to determine the independence between perceived and reported personality preference types.

Finally, point biserial correlation coefficient analyses were used to determine if the Michigan superintendents’ perceived personality preference types were associated with their FIRO-B™ interpersonal leadership styles.

Organization of the Manuscript

The following sections of this manuscript include a review of the relevant literature (chapter 2), a discussion of the analytical technique/research design, methodology, and instrumentation (chapter 3), a presentation of the results of the study (chapter 4), and a discussion of those findings and their implications (chapter 5).

Summary

Chapter 1 provided an overview of the proposed research. It included an introduction, a summary of the background of the research problem, a statement of the research problem, a description of the purpose of the research, an explanation of the rationale of the research and its significance, the research hypotheses questions, definitions of the terms used, and a discussion of the research design, instrumentation, procedures, assumptions, and limitations.
CHAPTER II. REVIEW OF THE LITERATURE

Introduction

To watch over the schools; to know the exact condition of every one, in all particulars; to bring the lagging forward; to suffer no defects to become prescriptive, no abuses to be indurate by time; to acquire and to impart such information as shall bring all our schools to that degree of excellence which our citizens not only have a right to demand, but without which they have no right, in justice to themselves and to their children, to be satisfied. This should be his business, his whole business; and he should be adequately paid. Although chosen annually, like our masters, his tenure of office, like theirs, would be permanent, if he discharged the duties of his office acceptably; and if he did not, another should be chosen in his stead. (Boston School Committee, 1840s, as quoted in McCurdy, 1992, p. 11)

The mid-19th century description of the school superintendent’s position quoted above may seem at first to be merely quaint, but within its words lie all the characteristics of the modern superintendency: supervision from a distance and up close, responsibility for seeing that academic standards are met, information management, and service at the will of the citizens (represented by the school board). The major difference, perhaps, is that the 21st century superintendent is required to perform these duties in a highly charged environment of educational reform.

A term that frequently occurs in the research, practitioner, and popular literature about education reform is leadership, yet there is an evident lack of consensus about what the term means as it applies to school superintendents. As Bennis (1989; Razik & Swanson, 2001; Yukl, 2006) once commented, “Leadership is like beauty: It is hard to define, but you know it when you see it” (as quoted in Siegrist, 1999, p. 297). In the current reform environment, superintendents are asked to be passionate (Harvey, Frase, & Larick, 1992; Gewertz, 2006), visionary (Goldman, 1998; Brower & Balch, 2005; Gewertz, 2006), and transformational (Leithwood, 1992; Brower & Balch, 2005; Yukl, 2006) leaders. Further, as Chalker (1992) observed, superintendents must be strategic planners, exceptional communicators, team builders,
organizational managers, and instructional leaders. As is clear from this terminology, and as a review of the literature shows, today’s superintendent is required to resemble the superlative CEO (i.e., Oprah Winfrey) of a large, complex corporation.

Overview of the School Leadership Literature

There is no shortage of studies of leadership as a generic term, most of which have come out of the corporate context (Bass, 1990; Razik & Swanson, 1995, 2001; Yukl, 2006). Leithwood and Duke (1998) conducted a thorough review of the education literature published between 1988 and 1998, and from a total of 121 articles on leadership they were able to identify 20 specific concepts of leadership. They grouped these concepts into half a dozen categories or models of leadership: instructional, transformational, moral, participative, managerial, and contingent.

While the purpose of the review conducted by Leithwood and Duke (1998) was to develop a framework of leadership models that could be used by researchers engaged in comparative studies across different social cultures, their review of the literature contributes a valuable perspective on the state of research in this field. Among their findings was that in more than 50 articles about leadership, no model at all was identified. Some authors referred to various leadership “perspectives” or “approaches,” and others “treated leadership as a generally understood phenomenon, without specific discussion of its meaning” (Leithwood & Duke, 1998, p. 33). This is the salient feature of the current state of research: In dozens of articles about leadership that discuss school superintendents or articles about the superintendency that discuss leadership, there is an implicit assumption that the reader understands what the writer means by leadership (Brower & Balch, 2005; Gewertz, 2006; Yukl, 2006).
What Leithwood and Duke (1998) did with a search for models of educational leadership, this researcher attempted on a smaller scale in a search for models of school leadership based on personality. The results are suggestive of an avoidance of “personal” factors in considering leadership and the superintendency, and a focus instead on skills (Richard, 2000; Shibley, 2002; Gewertz, 2006) or licensing standards and training (Holloway, 2001). Articles that are actually about educational reform discuss the superintendency as an office, not as requiring a certain type of personality to fill that office (Keedy & Bjork, 2001; Muffs, Sullivan, & Fried, 2003).

Educational Leadership in a Reform Environment

There is some recognition, at least in the popular and practitioner literature, that the unique organizational structure within which superintendents’ work imposes certain requirements that may relate to personality factors (Bennis, 1984a; Gewertz, 2006; Razik & Swanson, 2001; Yukl, 2006). Superintendents as managers of large numbers of personnel, in terms of principals, teachers, school staff, and other school employees, may resemble managers in other types of organizations, but their relationship with the school board is unique (Gewertz, 2006).

One of the primary characteristics of the school superintendency itself, particularly in the current reform environment, is accountability. Superintendents are accountable to a wide range of stakeholders in education: federal and state regulators and legislators, school boards, parents, and students among them (Gewertz, 2006). Accountability is inevitably accompanied by evaluation, a process that superintendents apply to schools and stakeholders apply to superintendents (Gewertz, 2006). Based on the review of the literature, the researcher concluded that personality can be a factor when superintendents use evaluation as a way of imposing control on others. As Frymier (1996) observed, some school superintendents use accountability
as a threat so that it “blunts enthusiasm, stifles initiative, or thwarts creativity” (p. 13), while others use it to improve school quality at the expense of the principals, teachers, and staff who must meet the standards imposed on them.

The superintendent-school board relationship has been examined in the literature, partly because it is viewed as a source of conflict in the move toward school reform (Kirst, 2002). Although traditionally the roles have been defined as “boards make policy and superintendents administer it,” in the lived reality in many school districts, the distinction is not always that simple. McCurdy (1992) cited the attempt by the AASA to design a standard for delineating the roles, noting that the superintendent has a key role as a professional adviser to the school board, but that the school board is “not bound to accept the superintendent’s advice” (p. 17), which amounts to a stalemate. On the other hand, while the superintendent is seen as having the authority to implement administrative policies and procedures, the board should be able to review them before they are implemented. The AASA has attempted to put the emphasis on communication and “mutual understanding,” but those conditions cannot be achieved by a written policy or standard; only individuals, with individual personalities and leadership styles, can achieve such ideals.

Muffs et al. (2003) conducted a survey of school superintendents in order to elicit their views on professional autonomy and found that the superintendents who participated reported that they had the freedom they needed to evaluate their administrative subordinates, design school board meeting agendas, and make professional development decisions in their districts. The areas where the participants perceived that they had less freedom than they desired were related to the ways in which they themselves were evaluated and to their authority to determine curricula and budgets.
Of particular interest is that the superintendents in this survey believed that their judgment was not sufficiently valued in their communities. This factor was tested in 5 of 20 items, and the discrepancy between the participants’ perceived and desired autonomy was greatest in the following three items: “My judgment is valued by the Board of Education,” “My judgment is valued by my community,” and “My experience and expertise is valued by my Board of Education” (Muffs et al., 2003, pp. 19-20). While there was no follow-up interview to determine the context of these responses or to relate them to such dimensions as job satisfaction, the results are suggestive of a significant gap between superintendents’ perceptions of themselves as leaders and the board’s and community’s perceptions. No study of this subject was identified in the literature, but research of this kind would certainly help define leadership in the school superintendency.

Professional Standards for the Superintendency

The Professional Standards for the Superintendency proposed by the AASA in 1993 were an attempt to establish benchmarks for selecting, training, and developing school superintendents, based on extensive interviews and a review of the literature. The eight proposed standards emphasize roles and responsibilities, rather than personal or leadership characteristics, so that they must be read carefully to uncover clues about the type of person and the type of behavior that characterizes a professional school superintendent according to the AASA. For example, Standard 1, “Leadership and District Culture,” includes references to empowering others and expressing multicultural understanding, and Standard 3, “Communications and Community Relations,” refers to building consensus. Standard 4, “Organizational Management,” and Standard 7, “Human Resources Management,” are focused strictly on skills, and make no mention of standards for personal interaction.
An analysis of the school superintendent’s job conducted by the Interstate School Leaders Licensure Consortium in 1999 attempted to define the categories of activities superintendents engage in and to relate them to standards for best professional practices. As Holloway (2001) reported, the standards include six critical roles:

- facilitating the development of a shared vision of learning;
- sustaining an instructional program conducive to student learning;
- ensuring a safe, efficient, and effective learning environment;
- collaborating with families and community;
- acting with integrity, fairness, and ethics;
- and understanding the political, social, economic, legal, and cultural context of the district. (p. 85)

It is worth noting that four of the six standards describe behaviors that can be linked to personality attributes: facilitating, collaborating, acting, and understanding.

Keedy and Bjork (2001) viewed the superintendent’s primary role as a political one, and one that is conducted in an atmosphere of conflict—over values, cultural differences, funding, testing, and all of the issues currently at the forefront of the debate over school reform. The personal attributes and skills needed to operate effectively in a political role among increasingly diverse constituencies often resemble those associated with leadership, as discussed later in this review.

There is not yet universal agreement among professionals that leadership can be taught, but the climate of reform and the clamor for educational administrators who can significantly improve public education have combined to put pressure on academics to provide more comprehensive professional development programs. However, as Siegrist (1999) commented, when administrators go to school to learn to be leaders, they become students in schools where professors talk and even graduate students listen. Instead, he urges, professional education needs the same kind of innovation at the graduate level as is needed at the elementary school level. As yet, there has been little effort to provide ongoing professional development for superintendents;
much of what is available is designed for school principals (Berg & Barnett, 1998, as cited in Holloway, 2001).

Hawley (1994) believed that if the AASA Standards and other similar documents provided “a clearer image of the essential elements of educational leadership, they could be more productive for school improvement” (p. 33). Although the AASA Standards provide a wealth of material about the roles of the school superintendent, it is interesting to note that they do not appear to address personal characteristics in terms of the make up of a professional, effective superintendent.

History of Leadership Research

Both the concept and the reality of leadership were explored by researchers throughout most of the 20th century, and research continues today, although there is still no consensus among academics, researchers, and practitioners about the subject. The theoretical and empirical work has often been reviewed, presumably in an effort to move the research ahead. Stogdill (1974; Razik & Swanson, 2001, Yukl, 2006), for example, collected and analyzed more than 4,700 studies of leadership but concluded that “the endless accumulation of empirical data has not produced an integrated understanding of leadership” (p. vii). Burns (1978) agreed, characterizing leadership as “one of the most observed and least understood phenomena on earth” (p. 2). Bass (1981, 1990), in his update of Stogdill’s Handbook, came to a similar conclusion but suggested that some progress had been made between 1950 and 1980, since much of the theoretical work was being applied in organizations. By the 1990s, Rost (1991) suggested that researchers and practitioners were failing to investigate “the essential nature of leadership as a relationship” (p. 5).
It should be noted that most of what has been written about leadership has come out of the fields of business and politics. Only recently have researchers turned their attention to leadership as it is exercised in social institutions and nonprofit organizations, although these investigators are generally using theoretical frameworks and models that were developed in a business or government context and cannot always be made to fit other types of organizations. A review of the major movements in leadership research over the last nearly 100 years reveals the themes that are being applied to educational leadership today and shows how closely leadership theory has paralleled the major social and political movements of the 20th century.

The earliest theories of leadership were essentially theories of management. Frederick Winslow Taylor (1916; Razik & Swanson, 2001), father of scientific management, described the management approach he observed in the leaders of large industrial corporations at a time when productivity was just beginning to be recognized as a source of profit. Taylor’s focus was on production methods and ways to improve them through time-motion studies, piecework analysis, and similar “scientific” management techniques (Razik & Swanson, 2001). Taylor’s model was also scientific in the sense that it viewed the industrial leader as detached and objective, and workers as the human means of production (Bass, 1990; Razik & Swanson, 2001). The leader’s responsibilities included planning, goal setting, creating performance or output standards for workers, and, above all, focusing on the needs of the organization over the needs of its workers (Bass, 1990; Razik & Swanson, 2001). The scientific management era has been epitomized by Henry Ford’s assembly line.

By the 1920s and early 1930s, a kind of backlash developed, which can be loosely described as the human relations movement, initiated by Elton Mayo (1933; Bass, 1990) and his associates. While the human relations movement advocates did not abandon the principle of the
primacy of organizational goals, they argued that the best way to achieve those goals was to motivate workers by providing them with opportunities for individual growth and development (Bass, 1990; Owens, 1995; Razik & Swanson, 2001). This focus on the individual worker led to the introduction of concepts that have persisted in management practice: morale, group dynamics, democratic supervision, personnel relations, and behavioral concepts of motivation (Owens, 1995; Razik & Swanson, 2001). The conflict between these two approaches to management and leadership—scientific management theory and human relations theory—continues to be discussed and studied today more in terms of the question, what’s more important: production or people (Siegrist, 2000).

Models of Leadership

The recent leadership research may be categorized by approach, although there is inevitably some overlap in some models (Razik & Swanson, 1995, 2001; Yukl, 2006). Trait research focuses on the personality characteristics of leaders and attempts to relate these characteristics to specific skills (Razik & Swanson, 1995, 2001; Yukl, 2006). The behavioral approach analyzes the content of leaders’ behavior in order to identify patterns (Razik & Swanson, 1995, 2001; Yukl, 2006). The power-influence approach focuses on the ways in which leaders obtain power and use it to influence others (Razik & Swanson, 1995, 2001; Yukl, 2006). Contingency/situational frameworks approach the relationship of leader behavior to leadership effectiveness through an analysis of context (Razik & Swanson, 1995, 2001; Yukl, 2006). In transformational/transactional models, the focus is on relationships between leaders and their followers (Brower & Balch, 2005; Burns, 1978, 2003; Razik & Swanson, 1995, 2001; Yukl, 2006).
Interest in the personal characteristics that distinguish leaders from followers and effective leaders from ineffective leaders has a long history that parallels the overall field of leadership research (Bass, 1990; Razik & Swanson, 2001; Yukl, 2006). The approach has been in and out of fashion among researchers over time. As early as 1948, Stogdill identified five categories of leadership traits from a review of more than 100 studies, which he termed capacity, achievement, responsibility, participation, and status (Bass, 1990; Razik & Swanson, 2001; Yukl, 2006). About 10 years later, Mann (1959; Bass, 1990) associated intelligence, adjustment, extraversion, masculinity, and interpersonal sensitivity with leadership. At about the same time, however, Jennings (1961) concluded from his review of 50 years of research that no one personality trait or set of traits had been definitively shown to distinguish leaders from others. One prevalent theory of that time, the late 1950s and early 1960s, was the Great Man theory of leadership, which argued that great events in history somehow shape great men who have the capacity to lead masses (Jennings, 1960; Bass, 1990; Razik & Swanson, 2001). The Great Man theory did not find many adherents, with the result that most researchers dismissed the notion that character or personality alone could determine a leader’s effectiveness. Yukl (1994) pointed out that it may have been an overreaction to dismiss the importance of personality traits. Although there is no guarantee that certain personality characteristics will make a leader effective, it is logical to assume having certain traits will make effective leadership more likely. Yukl (1994, 2006), among others, has argued that the leadership situation, combined with certain personality traits, is the true determinant of whether leadership is truly effective. This hypothesis later emerged as the theory of situational leadership, discussed later in this review.
In the early 1980s, trait research resurfaced, perhaps in response to publicity and popular interest in corporate leaders and their accomplishments, so that researchers, as well as members of the general public, wanted to know what made these successful leaders different. In a study of 90 outstanding business leaders and their followers, Bennis (1984a; Razik & Swanson, 2001; Yukl, 2006) identified four common management traits that he described as abilities: being able to communicate a common vision (the *Management of Attention*); being able to communicate meaning clearly (the *Management of Meaning*); behaving reliably and consistently (the *Management of Trust*); and understanding one’s strengths and weaknesses (the *Management of Self*).

Bennis (1984a; Razik & Swanson, 2001; Yukl, 2006) suggested that leaders with these management abilities used them to create work environments where workers are motivated, feel important, see themselves as members of a common enterprise, are stimulated by work, and are made to feel that their abilities and growth are important to the leader and the organization. While Bennis (1984a) emphasized that *character* was central to leadership, he also attempted to enumerate the skills common to the leaders he studied, thus producing a profile of the modern business leader who understood what business he was engaged in, could bring out the best in his followers, could think creatively, had the background and experience consistent with his position, could choose the right person for the right job, and could make decisions quickly (Razik & Swanson, 2001; Yukl, 2006).

The work of Bennis (1984b; Razik & Swanson, 2001; Yukl, 2006) and others who followed his example eventually found a home in the popular rather than the scholarly literature, but it has a place in this review because it symbolizes the direction that trait research has taken toward supporting management training and education. Through the 1980s and 1990s,
researchers attempted to follow the example Bennis set. Some attempted to identify the traits shared by successful managers, such as Kirkpatrick and Locke (1991), who named ambition, motivation, integrity, and self-confidence, among other traits. Others took the other tack and looked for the traits shared by unsuccessful, ineffective managers. Perhaps typical of this latter effort is the work of McCall and Lombardo (1983; Bass, 1990), who compared executives who reached the top of the promotion ladder and those who did not quite get there by looking for the “fatal flaws” in those who did not succeed. Their most common characteristic was insensitivity, expressed by bullying or arrogance, and the most serious impediment to their success was untrustworthiness. Otherwise, the characteristics identified by McCall and Lombardo are simply negative expressions of the traits identified by Bennis (1984a; Razik & Swanson, 2001; Yukl, 2006), such as an inability to think creatively or strategically.

**Behavioral Theories**

Behavioral models of leadership also have a long history in the management literature, having developed out of early theoretical work on personality traits. Some of the earliest leadership studies were conducted at the University of Michigan in the 1940s, where two fundamental types of leaders were identified: *employee-oriented* and *production-oriented* (Kahn & Katz, 1960). Employee- or relationship-oriented leaders were described as those who focused on relationships and employee welfare, whereas production- or task-oriented leaders were those who focused on the technical aspects of the organization’s work.

The Michigan studies were designed to investigate the interactions among leader behavior, group processes, and group performance in organizations, and the researchers generally concluded that the most productive work groups had leaders who were both...
relationship- and task-oriented, depending on the situation (Kahn & Katz, 1960), a finding that was later confirmed by Bowers and Seashore (1966; Yukl, 2006), among others.

Also in the 1940s, the Bureau of Business Research at Ohio State University began a series of leadership studies based on Stogdill’s leadership dimensions, *initiating structure* and *consideration* (Stogdill & Coons, 1957; Bass, 1990; Razik & Swanson, 2001; Yukl, 2006). In this model, *initiating structure* describes a leader’s degree of task orientation and authoritarianism, whereas *consideration* describes a leader’s degree of sensitivity to employee’s ideas and feelings and the leader’s efforts to establish mutual trust.

The *Leader Behavior Description Questionnaire* (LBDQ), the research instrument that emerged from the Ohio State studies, has become a traditional measure in the field that has been used to capture leaders’ behavior as others perceive it (Stogdill & Coons, 1957; Bass, 1990; Razik & Swanson, 2001; Yukl, 2006). The *Leader Opinion Questionnaire*, designed to elicit leaders’ perceptions of their leadership style, was also a product of this group of studies. In addition to producing these two classic measures, the Ohio State studies are important for having distinguished *initiating structure* and *consideration* as separate dimensions of leadership behavior that can be found in the behavior of a single individual leader. Thus, these studies established the design of measuring behavior on two distinct axes, rather than on a continuum. As Lunenburg and Ornstein (1991; Razik & Swanson, 2001) pointed out, the constructs of *initiating structure* and *consideration* have since been the basis for a number of subsequent leadership theories, including the leadership grid and situational leadership theory, as discussed below.

Likert (1961; Razik & Swanson, 2001; Yukl, 2006) used the Michigan studies as a basis for his efforts to distinguish effective from ineffective leaders by patterns of management,
distinguishing between employee-centered and job-centered. His research showed that effective leaders were primarily focused on team building, motivation, and other behaviors that express their interest in the human aspects of work. In addition, he found that effective leaders communicated goals and objectives clearly, and then stepped back to let employees do their jobs.

Later in his career, Likert (1987; Razik & Swanson, 2001; Yukl, 2006) was able to conceptualize leadership style as existing along a continuum from exploitative-authoritative to benevolent-authoritative to consultative to participative/democratic. In this later research, Likert found that a consultative or participative leadership style was associated with organizations characterized by a culture of trust, collaborative goal setting, bottom-up communication, and supportive leadership. By contrast, an exploitative-authoritative or benevolent-authoritative leadership style was associated with organizations characterized by threats, fear, punishment, top-down communication, and centralized decision making and control.

More recently, a series of studies of leader behavior has been conducted at the University of Iowa (White & Lippitt, 1990; Razik & Swanson, 2001) to explore the effect of different leadership styles on employees’ attitudes and productivity, using a modification of the Likert approach. In the Iowa studies, leadership style is defined as democratic (characterized by participation and delegation), authoritarian, or laissez-faire (characterized by distributed decision making). White and Lippitt found, not surprisingly, that employees favored a democratic leadership style to a laissez-faire style and to an authoritarian one. The focus in this series of studies, as in others, was on employees’ attitudes and responses, rather than directly on leaders’ behavior. This has become a classic method of investigating leadership and management in organizations. Thus, there is a clear thread running through the literature from the early Michigan studies, through Likert’s work, to the present time.
Among the theories developed to explain how leaders’ behavior operates in organizations are the so-called “alphabet” theories popular in the 1990s: Theory X, Theory Y, and Theory Z. Behavior theorists have attempted to define leadership by constructing models of leader behavior and its effects on followers’ productivity (Razik & Swanson, 1995, 2001). The Theory X-Theory Y model, which is now regarded as classic by management theorists, conceptualizes leaders’ behavior as indicative of their assumptions about employees and their attitudes toward work (McGregor, 1960; Razik & Swanson, 2001; Yukl, 2006).

Theory X leaders assume that employees dislike working and try to avoid it, that they lack ambition, that they tend to avoid responsibility, and that they do not have the ability to solve problems on their own, so that the leader’s primary purpose is to coerce employees into meeting the organization’s goals. Theory Y leaders, by contrast, assume that work comes naturally to employees under the right conditions, that self-control is the means by which the organization’s members will achieve their common goals, and that employees can solve problems creatively, so that motivation is the leader’s primary purpose.

In the Theory X-Theory Y model, Theory X leaders rely on developing and enforcing work procedures designed to control employees and structure their behavior; these leaders are characterized as authoritarian and directive. Theory Y leaders support their employees and facilitate their work in an approach usually characterized as participative.

Ouchi’s (1981; Razik & Swanson, 2001) Theory Z, developed about 20 years after Theory X and Theory Y, views the organization as a structure built out of the informal relationships among people and the goals they share that make up the organization’s culture. Theory Z leaders see their primary purpose as aligning the goals and objectives of the
organization with those of its employees through supporting and reinforcing the relationships that best exemplify these shared goals.

**Leadership and Power**

The constructs of power and influence occur often in leadership and management research. Looked at in positive terms, power derives from various kinds of authority, and not necessarily from an authoritarian approach to leadership. Much research has been devoted to the sources of power in leadership and to its uses in organizations. Yukl (1989, 2006) distinguished between *power* and *influence*, describing power as the capacity to influence others and influence as exerting an effect on the behavior, attitudes, or perceptions of others. Generally, leaders can exert their power in organizations downward, on their subordinates; upward, on their superiors; or laterally, on their peers.

The power conferred on a leader by *position* is highly relative. It depends on the willingness of superiors to delegate authority and control over those aspects of the organization’s work that leaders use to motivate their subordinates—“resources, rewards, punishments, information, and organizational subsystems” (Razik & Swanson, 1995, p. 46). However, what is delegated can be disintegrated, at the whim of the superior, so that position power is insufficient to support leadership in some organizations (Razik & Swanson, 1995, 2001).

*Personal* power is conferred on a leader by subordinates and depends on their degree of respect and commitment to the leader (Razik & Swanson, 1995, 2001). Accordingly, *expert* personal power is defined by Razik and Swanson (1995, 2001) as derived from a leader’s unique abilities, *referent* personal power as derived from the leader’s consideration of subordinates, and *charismatic* personal power as derived from a leader’s ability to motivate subordinates through personality and behavior.
A third kind of leadership power is *political*, derived from the extent to which a leader controls decision making in the organization and delegates it to subordinates in order to increase their commitment (Razik & Swanson, 1995, 2001).

The sources and exercise of power in organizations, as previously noted, have long been persistent themes in the management literature. In the late 1950s, French and Raven (1959; Yukl, 2006) proposed a five-item typology that included coercive power, expert power, legitimate power (derived from position), referent power (derived from personal interaction), and reward power. In the late 1960s, Filley and Grimes (1967) extrapolated 11 power sources from a survey conducted in a professional organization. They found that participants distinguished various forms of power derived from position: responsibility, formal authority, resource control, bureaucratic rules, and tradition rules (referring to the customs and culture of the organization). In a later study, Raven and Kruglanski (1975; Bass, 1990) identified information as a source of power, perhaps foreshadowing the coming Information Age, and Hersey and Goldsmith (1980) found that connections within an organization could constitute an important informal source of power for leaders.

*Contingency and Situational Leadership*

Fiedler (1967; Yukl, 2006), often referred to in the literature as the father of the contingency theory of leadership, has also traditionally been credited with the first attempt to study leadership by examining the people, tasks, and organization that make up its context, or *situation*. He initially hypothesized that leaders become more effective when they are able to modify work situations to fit their leadership styles. The situational factors of importance identified by Fiedler were leaders’ relationships with subordinates (*leader-member relations*),
the extent to which they structure tasks assigned to subordinates (*task structure*), and the leader’s degree of authority that has derived from his position in the organization (*position power*).

The significance of this approach to leadership is that it puts the emphasis on leadership *style*, which is more than behavior but includes a general approach or orientation toward the management of work and people. In his model, Fiedler (1967; Yukl, 2006) classified situations according to the extent to which they were favorable to the leader, and he classified leadership styles as *task-oriented* or *relationship-oriented*.

The *contingency model* developed by Vroom and Yetton (1973; Yukl, 2006) assumes that leaders’ behavior is a result of the interactions between situational variables and leaders’ personal characteristics. In their view, the critical situational variables to be considered were *decision situations*, for which they devised a *decision tree*, a model of the decision-making process by which leaders and their subordinates analyze and solve problems.

The decision tree in the Vroom-Yetton (1973; Yukl, 2006) model was seen by the researchers as a tool managers could use to assess the importance of the problem to be solved, the need for information in order to solve it, how structured the problem and its tasks are, how important it is that subordinates accept the solution to the problem, how likely they are to accept the solution, how important the solution is to the organization’s goals, and how much conflict the solution is likely to provoke among subordinates.

Vroom and Yetton (1973; Yukl, 2006) proposed that there are five leadership styles or approaches to dealing with the problem and its solution, two of them autocratic styles, two consultative, and one democratic. The model was later revised by Vroom and Jago (1988; Yukl, 2006), increasing its complexity with the addition of new steps to the decision tree and a set of equations to be used to determine the subsequent effectiveness of decisions. This model
represents, in a sense, a return to the earlier principles of scientific management, with its introduction of mathematically based analysis to decision making and leader behavior.

Hersey and Blanchard (1969; Yukl, 2006) first developed the situational leadership model at the Center for Leadership Studies in the late 1960s, and they continued to fine-tune it, together and separately, well into the 1980s (Blanchard, Zigarmi, & Zigarmi, 1987; Hersey & Blanchard, 1996; Yukl, 2006). This model extends Fiedler’s work on contingency management to encompass leaders’ differential behavior, not only in different situations, but in interactions with different people.

Hersey and Blanchard (1996; Yukl, 2006) conceived of leadership style as a combination of task orientation and relationship orientation, visualized as a two-dimensional grid with task orientation on one axis and relationship orientation on the other. Their basic assumption was that leadership style is variable because it is defined in terms of behavior, which can be controlled, instead of by personality, which cannot. It is the view of Goldman (1998) that, in the context of school leadership, leadership style communicates the leader’s essential beliefs about education through the leader’s behavior, which is a model for other administrators, principals, teachers, and, ultimately, students. Superintendents rely on their personal beliefs and values to design a vision for the district and on their personal characteristics to encourage others to work together to make that vision a reality.

In the Hersey-Blanchard (1996; Yukl, 2006) model, task behavior is plotted on the horizontal axis from low to high and relationship behavior on the vertical axis, also ordered from low to high, so that leaders’ behavior can be assigned to one of four leadership styles: high task-low relationship (telling), high task-high relationship (selling), high relationship-low task (participating), or low relationship-low task (delegating) (Hersey et al., 1996; Yukl, 2006).
The role of motivation in this situational leadership model is conceived of as the degree of *readiness* on the part of subordinate individuals or groups to accept leaders’ decisions with regard to the tasks involved in carrying them out (Hersey et al., 1996; Yukl, 2006). Readiness is also situation-dependent, which is why variable leadership styles are necessary for effective leadership (Hersey et al., 1996; Yukl, 2006). The major components of readiness are *ability* (skills, knowledge, experience) and *willingness* (motivation, confidence, commitment) (Hersey et al., 1996; Yukl, 2006). When the readiness level is assessed as low, a task-oriented leadership style is indicated; when readiness is high, a relationship-oriented style is considered more effective (Hersey et al., 1996; Yukl, 2006). In this model, readiness can be assessed at four levels: unable and unwilling (*insecure*), unable but willing (*confident*), able but unwilling (*insecure*), or able and willing (*confident*) (Hersey et al., 1996; Yukl, 2006).

The task-oriented axis refers to how structured the task is and how authoritarian the leader is in making task assignments (Hersey et al., 1996; Yukl, 2006). The relationship-oriented axis refers to the leader’s communication behavior and the degree to which the leader is supportive in communicating with subordinates (Hersey et al., 1996; Yukl, 2006).

Blake and McCanse (1991) formulated the leadership grid, based on an earlier model (Blake & Mouton, 1986; Razik & Swanson, 2001; Yukl, 2006), with its roots in the theoretical work done years earlier by Stogdill at Ohio State (Stogdill & Coons, 1957; Bass, 1990), the researchers involved in the Michigan studies (Kahn & Katz, 1960), and Likert (1961). The Blake-McCanse grid (Razik & Swanson, 2001) describes five types of leadership according to production or task orientation (the horizontal axis) or people or relationship orientation (the vertical axis). By plotting leadership behavior along these axes, Blake and McCanse arrived at a style for each quadrant, plus one located in the middle of the grid (Razik & Swanson, 2001).
The *impoverished management* style (low task-low relationship) describes the leader who exerts the least possible effort to complete a task (Razik & Swanson, 2001). The *country club management* style (low task-high relationship) describes the leader who focuses on creating a comfortable, friendly work atmosphere (Razik & Swanson, 2001). The *authority-obedience management* style (high task-low relationship) describes the leader who emphasizes work efficiency with little human interference (Razik & Swanson, 2001). The *team management* style (high task-high relationship) describes the leader who motivates subordinates through trust, respect, and a commitment to common goals (Razik & Swanson, 2001). The *organizational man management* style, in the center of the grid, describes the leader who attempts to balance the demands of the task against the morale of subordinates just enough to accomplish the task (Razik & Swanson, 2001).

When Leithwood and Duke (1998) searched the educational literature for research based on contingency and situational leadership models, the relevant articles they found tended to focus on leadership style as the means by which leaders respond to the situations and problems they deal with in their work, so that the most common approach was a problem-solving orientation. In the articles they reviewed on a problem-solving approach to leadership in education, Leithwood and Duke generally found that they described leadership either as a kind of *reflective practice*, or problem solving based on experience, or as a *cognitive science* approach, based on theoretical models of problem solving.

*Transformational and Transactional Leadership*

Two of the most popular and widely supported leadership models developed during the last 30 years are those of *transactional leadership* and *transformational leadership* (Atwater, personal interview, December, 2005; Avolio, 1999, Brower & Balch, 2005; Burns, 2003; Razik
& Swanson, 2001; Yukl, 2006; Zhu et al., 2005). Transactional leadership describes leading through exchanges between leaders and followers: in exchange for their efforts, followers receive support and rewards from leaders; in exchange for their support and rewards, leaders receive followers’ efforts and commitment to tasks and organizational goals (Burns, 1978, 2003; Avolio, 1999; Bass & Avolio, 1994; Brower & Balch, 2005; Razik & Swanson, 2001; Yukl, 2006; Zhu et al, 2005).

According to Zhu et al., (2005) “transactional leadership helps organizations achieve their current objectives more efficiently by linking job performance to valued rewards and by ensuring that employees have the resources needed to get the job done” (p. 3).

Burns (1978, 2003), who was awarded a Pulitzer Prize for his work on leadership, suggested that such transactions represent only one element of effective leadership, the element that is necessary in order to maintain an organization’s progress toward its goals. In order to bring about real change in an organization, however, transformational leadership is necessary (Atwater, personal interview, December, 2005; Avolio, 1999; Brower & Balch, 2005; Razik & Swanson, 2001; Yukl, 2006; Zhu et al., 2005). Burns (1978, 2003) offered the classic definition of the transformational leader as the individual in an organization who convinces others to substitute common goals for their own individual goals and to motivate each other to become engaged in the work of the organization.

A great deal has been written in recent years about transformation in business organizations; when the term is applied in the context of educational institutions, it usually appears as reform or school improvement (Murray, 2006a). Because modern school superintendents are expected to be leaders in a climate of reform, transformation leadership is of great importance to the current research (Avolio, 1999; Brower & Balch, 2005; Razik &
Swanson, 2001; Yukl, 2006; Zhu et al., 2005). Brower and Balch (2005) extol that “the goal of a leader is to lead the institution in positive and effective ways with a strong sense of vision and purpose for the common good” (p. 16). “Informed leaders of this pedagogy can be assured that if they fully understand the Transformational Laws . . . their leadership will be more effective, consistent, and better understood by those affected as a result of the decisions” (Brower & Balch, 2005, p. 17). “Disagreement and conflict may occur,” the writers continue, “but climates and cultures underscored by transformational decision making will survive short-term obstacles, creating improved capacities for teaching and learning to prosper” (Brower & Balch, 2005, p. 17). Much of the rhetoric on the subject can be extravagant, especially when it refers to leaders’ ability to inspire (Bass & Avolio, 1994; Avolio, 1999; Brower & Balch, 2005; Razik & Swanson, 2001; Sergiovanni, 1992; Yukl, 2006; Zhu et al., 2005) and elevate (Avolio, 1999; Brower & Balch, 2005; Burns, 1978, 2003; Razik & Swanson, 2001; Yukl, 2006; Zhu et al., 2005) followers because transformational leaders are visionaries (Atwater, personal interview, December, 2005; Avolio, 1999; Bass & Avolio, 1994; Brower & Balch, 2005; Burns, 1978, 2003; Konnert & Augenstein, 1995; Yukl, 2006; Zhu et al., 2005). In terms of leadership skills, it is clear from the literature that transformational leaders exert their effects by motivating followers on a higher level than that represented by transactional leadership (Avolio, 1999; Bass & Avolio, 1994; Brower & Balch, 2005; Burns, 1978, 2003; Yukl, 2006; Zhu et al., 2005).

Lunenberg (1995) suggested that transformational leaders motivate their followers by “raising followers’ levels of consciousness about the importance and value” (p. 108) of their mutual goals, convincing them to “transcend their own self-interest for the sake of the team” (p. 109), and by appealing to their need for self-actualization (Avolio, 1999, Brower & Balch, 2005; Burns, 1978, 2003; Yukl, 2006; Zhu et al., 2005).
A number of theorists have included a moral or ethical element in transformational leadership (Greenfield, 1987; Sergiovanni, 1992; Razik & Swanson, 2001). The essential argument in this literature is that values lie at the heart of leadership, and in a business context at least, the leader’s values are assumed to be aligned with the organization’s values. In educational leadership, the term values is often construed to mean cultural norms, which has the effect of widening the definition considerably from a narrow conception of “right” and “wrong”.

Although a detailed discussion of school culture is outside the scope of this review, it is worth noting that school leaders may tend to equate a school’s or district’s culture with the status quo, and use maintenance of the culture as a means of resistance to innovation and reform. As Konnert and Augenstein (1995) have described it, a school’s or district’s culture is expressed in how and what its members communicate, what information is considered important and what is ignored, and, generally, “how things work here”. Sergiovanni (1990; Razik & Swanson, 2001), among others, has addressed the concept of cultural leadership in the context of schools and school districts. In this framework, the school culture is an entity, not an organization that operates by rules imposed by hierarchies of authority and responsibility. As a leader of a cultural entity, then, superintendents are expected to influence the members of the culture to adopt her or his vision for improvement by using the elements of the culture to convince them that they want to, that is by paying respectful attention to the myths, stories, traditions, and norms of the culture while at the same time moving the culture in a different direction (Avolio, 1999; Razik & Swanson, 2001; Yukl, 2006; Zhu et al., 2005).

Schein (1992) believes that changing an organizational culture is not simple, nor is it simply a matter of effective leadership. As he defines the term, culture is “a pattern of shared basic assumptions—-invented, discovered, or developed by a given group as it learns to cope with
its problems . . . that has worked well enough to be considered valid” ([p. 12]; Razik & Swanson, 2001; Yukl, 2006). Attempting to change this pattern can be dangerous for leaders, in the view of Short and Greer (1997, 2002), particularly if the change is seen as threatening to one or more of these basic assumptions and therefore is viewed as a challenge by the members of the culture.

Knutson and Miranda (2000) observed that social interest is a vital personality trait in leaders of organizations undergoing transformation. The authors used the definition of social interest attributed to Ansbacher (1996, as cited in Knutson & Miranda, 2000): an orientation outside of the self expressed by empathy, identifying with others’ interests, cooperation, collaboration, and other similar affective and behavioral characteristics. As a leadership characteristic, Knutson and Miranda (2000) argued that social interest can be a highly influential trait that encourages followers to act in each other’s interest, understand each other’s feelings, and work together for their common goals.

Tichy and Devanna (1990; Yukl, 2006) attributed seven major characteristics to transformational leaders that distinguish them from transactional leaders by describing transformational leaders as individuals who

- clearly identify themselves as change agents;
- are courageous individuals who are risk takers and are willing to take a stand;
- are powerful, yet sensitive to the needs of others and believe in people;
- can articulate a set of core values and exhibit behavior that is consistent with their core values;
- are lifelong learners;
- have an ability to deal with complexity, ambiguity, and uncertainty; and
- are visionaries in that they can visualize an organization’s potential. (Tichy & Devanna, 1990, pp. 84-85)

In the specific context of educational reform, Leithwood (1992) argued that transformational leaders should continuously pursue three goals: “helping district members to develop and maintain a collaborative, professional school culture; helping internal stakeholders to solve their problems together more effectively; and fostering building level and teacher development” (pp. 9-10). He also suggested that the leader use modeling to communicate
expectations. The operative words here are behavioral—*helping* and *fostering*—suggesting again that personal attributes play an important role in transformational leadership (Brower & Balch, 2005; Burns, 2003; Yukl, 2006; Zhu et al., 2005).

Henderson et al. (2000), who conducted a study of the relationship between transformational leadership and organization health in a school context, concluded that while personal attributes play a role in transformational leadership, behavior is more important to followers. However, by suggesting that the transformational leader’s ability to get followers to identify with his or her leadership style and to identify with him or her on a personal level, Henderson et al. are in fact emphasizing the influence of personality traits in this kind of leadership.

Another industrial management model that has become increasingly popular among those attempting to reform education is the technique known as *total quality management (TQM)*, developed by Deming (1988; Razik & Swanson, 2001) as a systemic approach to organizational reform. Deming believed that transforming the organization is a continuous process, and it is from his model that a number of management theorists adopted the concept of transformational leadership. School improvement reformers have adopted Deming concepts such as site-based management, team teaching, cooperative learning, and outcomes-based education.

Deming (1988; Razik & Swanson, 2001) offered 14 principles as a means of transforming an organization, including Principle 7, “Institute Leadership.” In his view, leaders—at every level in an organization—are personally responsible for quality (in the product or service the organization produces), and they cannot rely on testing or other means of evaluation that come from outside the organization to ensure quality. His model recommends that testing be replaced by motivating the organization’s members to cooperate with each other
to solve problems. The appeal for educators is apparent in this model because of its assumption that everyone in the organization cares deeply about quality, knows what constitutes quality, and knows what to do to ensure it.

Gender, Leadership, and the Superintendency

Research on gender issues in school leadership is scarce (Gewertz, 2006), although there are a few indications that interest in the influence of gender on such elements of school reform as innovation, morale, professional development, and school board-superintendent relations may be heightening. Skrla (2000), among others (Gewertz, 2006), has suggested that issues of sexism and sex discrimination in schools have been postponed in wider policy discussions of school reform. The fact remains that school superintendents are nearly all men with certain characteristics who behave in certain ways, so that the general public has come to accept the job of superintendent as a man’s job (Gewertz, 2006; Skrla, 2000). In addition, most of the research on the superintendency has been conducted by men, and most of the professional standards for the position devised by them.

Gender stereotypical expectations are clearly operative in the context of the school superintendency (Gewertz, 2006), which, as noted earlier, is generally seen by society as a masculine role. Skrla (2000) produced a highly detailed analysis of the “gendering” of school leadership roles, observing that most school superintendents come from the teaching ranks, which are 75% female, yet only about 13% of school districts in the U.S. have female superintendents, a proportion that has only been reached once before in the 1930s (McCabe, 2001). Skrla quotes from Bell’s study of school boards’ selection criteria for superintendents:

Given a general cultural preference for male leaders in our society, the tradition of male leadership in schools, and the predominantly male membership of school boards, the most persuasive characteristic a candidate for superintendent could possess seems to be maleness…. Maleness signifies to board members… shared
language and experience, predictability, connection with the power structure, and leadership that satisfies stereotyped preferences (Bell, 1988, p. 50, as quoted in Skrla, 2000, p. 297.)

Skrla (2000) conducted a case study of female superintendents’ perceptions of their social, professional, and gendered roles as leaders. Her in-depth interviews with three former superintendents in Texas raise another critical point about the characteristics of school superintendents—their middle class conservatism. One participant described social expectations in her community that the school superintendent be a “church-going, family-type” man; another described the expectation that the superintendent would not raise taxes; and the third described expectations of a superintendent who “maintained the status quo . . . and kept the business office running straight” (p. 306).

Cline and Necochea (2000) also addressed this theme in their editorial describing the paradox inherent in the current demand for education reform from a class of school administrators who have traditionally kept their positions by maintaining the status quo and pleasing all of their stakeholders, known as a custodial orientation. These authors suggest that social norms constrain school superintendents from becoming innovators and truly transformational leaders.

Eagly and Johannesen-Schmidt (2001; Yukl, 2006) reject the traditional view that women and men exhibit different styles of leadership that can be attributed solely to their gender. Instead, these authors suggest that leadership style is in fact more situation-dependent than gender-dependent, based on social role theory, which asserts that in addition to the expectations that accompany the role of leader in an organization, people have expectations based on socially-constructed gender roles. Eagly and Johannesen-Schmidt (2001; Yukl, 2006) note that society generally has ascribed agentic characteristics to men, expecting them to behave assertively,
dominantly, independently, and competitively, and communal characteristics to women, expecting them to be primarily concerned with others and to behave sympathetically, sensitively, and helpfully. The researchers cite empirical evidence showing that agentic behavior in men and women leaders was determined by the status of the individuals with whom they interacted, but that communal behavior was determined by gender alone, without regard for the status of the participants in interactions.

In turning their attention to men and women leaders with transformational leadership styles, Eagly and Johannesen-Schmidt (2001; Yukl, 2006) point out that this style of leadership may be more congruent with the communal characteristics of women, since gender stereotypes assume that women are more likely to mentor subordinates and pay attention to their individual needs, two hallmarks of the transformational leadership style (Avolio, 1999; Brower & Balch, 2005; Burns, 2003; Yukl, 2006; Zhu et al, 2005). In their study, women managers scored higher than men on transformational measures such as having attributes that followers respected, optimism, and individual consideration, while men scored higher than the women on measures of managing by exception (dealing only with followers’ problems and mistakes).

Personality and Leadership

Jung’s (1923) theory of psychological types was developed as a way to describe the structure of the human consciousness. In Jung’s view, humans are born with the basic ability to gather, store, and retrieve information through observation and experience, and with the ability to reflect on and make decisions based on that information.

The concept of psychological or personality type is based on Jung’s (1923) belief that individuals, by nature, prefer to develop one or the other of these abilities by different methods as they mature. These natural preferences shape an individual’s perspective and the ways in
which the innate abilities are used. For each of the innate abilities (termed *perception* and *judgment*), Jung identified two opposite preferences for the methods by which individuals use these abilities: *perception* may be used through *sensing* or through *intuition*; *judgment* may be used through *thinking* or *feeling*. He then proposed that individuals choose to use one method over its opposite, such as *sensing* rather than *intuition*, more often, thus developing the use of the method more completely and becoming more comfortable with it.

In Jung’s (1923) view, it would be impossible for a single individual to have completely developed both opposite methods equally. The practical application of Jung’s theory is that it provides a fundamental framework for understanding behavior. An individual’s natural preference for a way of perceiving the world (*sensing* or *intuition*) and the individual’s preference for a method of drawing conclusions based on what is perceived (*thinking* or *feeling*) determines what is commonly assumed to comprise the personality: the sum of an individual’s interests, motivations, skills, responses—all of the variations in human behavior. While the Jungian concept of psychological type is of primary interest to the current research because it is the basis for the research instrument used, Jung’s is not the only theory of personality to have been developed in the 20th century, nor is the MBTI® the only personality assessment instrument developed from a theoretical basis.

The so-called Big Five factors of personality—*neuroticism, extraversion, openness to experience, agreeableness,* and *conscientiousness*—are not based on a single personality theory. Work begun on a typology of personality traits in the late 1930s by Allport and Odbert (1936, as cited in McCrae & Costa, 1989) was later expanded by Block and colleagues (1961, as cited in McCrae & Costa, 1989) into five domains, each of which includes an array of distinct personality traits. *Neuroticism*, for example, includes various expressions of unstable, negative
behavior, such as anger and depression. *Extraversion* includes socially positive behaviors such as sociability. The characteristics of imagination, curiosity, and sensitivity are included in the *openness to experience* domain. *Agreeableness* encompasses cooperativeness, trust, and sympathy. Persistence, ethics, and ambition are included in the *conscientiousness* domain.

McCrae and Costa (1989) developed the NEO Personality Inventory in order to operationalize the Big Five (or five-factor) model of personality, initially concentrating on the *neuroticism, extraversion, and openness to experience* domains, adding *agreeableness* and *conscientiousness* at a later time.

In 1998 the NEO-4 personality inventory was created by modifying the Revised NEO Personality Inventory (NEO-PI-R). Test authors removed all items on the Neuroticism scale and created a circle graph that delineates the organization of the four factors (Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) into one of six styles: Interests, Interactions, Activity, Attitudes, Learning, and Character (Costa and McCrae, 1998).

The theory of *interpersonal orientation* proposed by Schutz (1958; Bass, 1990) is based on the assumption that individuals have a basic desire for compatibility with others. From this assumption, Schutz developed a model of three interpersonal needs: the need for inclusion, the need for control, and the need for closeness. The instruments he developed from this theoretical basis, the FIRO and the FIRO-B, have become standard measures of compatibility between individuals and between an individual and a group. Their use in organizations is apparent, either as a substitute for a personality measure or as an adjunctive measure that can be used to determine the “fit” between an individual and the organization (Waterman & Rogers, 2004). Unlike other personality questionnaires, it generates relevant information in twenty minutes or less. The instrument’s benign, non-threatening content of test items reduces test-taking anxiety
that is often associated with psychological testing (Hammer & Schnell, 2000). It is a powerful instrument that can be useful in management development, personal development, and team building and development (Hammer & Schnell, 2000). The FIRO-B™ is more fully described in chapter three.

Methodological Issues

In 1941, Myers and Briggs began developing and testing an instrument based on the Jungian psychological preferences, or types that became the MBTI® personality inventory (Kirby, 1996). Their aim was to operationalize Jung’s theories for practical application. In more than 50 years of use, the MBTI® has amassed an immense empirical history consisting of more than 4,000 studies (Kirby, 1996). In 1990 alone, it was administered more than two million times, and it has been translated into numerous languages (Kirby, 1996).

In design, the MBTI® uses four dimensions of psychological type based on the preferences identified by Jung and further classifies 16 distinct personality types from combinations of those dimensions (Myers et al., 1998). The four scales are Extraversion (E)-Introversion (I), which distinguishes between those whose interests are directed outward toward things and people and those whose interests are directed inward toward their own thoughts and feelings; Sensing (S)-Intuition (N), which distinguishes between those who gather information through their five senses and those who perceive patterns and interrelationships cognitively; Thinking (T)-Feeling (F), which distinguishes between those who reach conclusions through objective logic and those who reach conclusions based on personal and social values; and Judging (J)-Perceiving (P), which distinguishes between those who prefer to use thinking or feeling to deal with the outside world and those who prefer to use sensing or intuition (Myers et al., 1998).
Determining psychological type from the four MBTI® scales is a complex process. The principal advantage of using the results to assess personality type is the simplicity of the dimensions (referred to as function pairs), so that they can be readily made to fit with concepts of management and leadership style (Walck, 1992). Not only do the eight preferences combine to form 16 unique types, but the preferences that respondents do not choose as often and the interaction of preferences may all influence leaders’ behavior, at least in theory. Coe (1992) is among those who have cautioned that the shadow, or less-preferred preferences, may lead to misinterpretation of the MBTI®.

Despite the considerable research that has been conducted on personality type over the past 30 years, the results have been limited and ambiguous, as Furnham and Stringfield (1992) observed. Although studies of the ways in which personality types are distributed in organizations have been convincing, attempts to predict behavior from personality type have produced mixed results.

After reviewing 30 years of research on personality type and management, Walck (1992) concluded that all four of the Jungian preferences probably have some influence on all of the steps in the decision-making process, but that personality type appeared to be less important than situational factors in decision making. The analysis of these relationships is beyond the scope of this study.

Walck (1992) also found little evidence to support the claim that certain personality types have certain leadership styles. She found, for example, some studies showing that sensing and feeling dominant types were more likely to prefer participative decision making, but she also identified studies showing that inhibition, extraversion, and feeling were also correlated with highly interpersonal management styles. Walck (1992) could not find any research supporting
the argument that personality type could predict success in organizations, although she did find evidence that training supports success and that certain personality types are more amenable to certain types of training.

Later, in 1996, Walck concluded that all four functions appear to have some impact on all of the steps of the decision making process. Walck (1996) remains optimistic that new research paradigms will allow type to have a significant impact on leadership practice.

There are alternative measures of personality based on the Jungian psychological types, the Singer-Loomis Type Deployment Inventory (SL-TDI) and the Personal Preferences Self-Description Questionnaire (PPSDQ), both developed in the late 1990s. The SL-TDI (Singer, Loomis, Kirkhart, & Kirkhart, 1996, as cited in Arnau, Thompson, & Rosen, 1999) is based on an earlier 1984 measure and was designed on the assumption that personality attributes are variable, so that the format of the instrument has avoided forced, either-or (dichotomous) choices in its items. The other major feature of the SL-TDI is its treatment of the Jungian concepts of extraversion and introversion. Instead of treating them as separate entities, as the MBTI® does, this instrument combines them with the Jungian perception preferences (sensing and intuition) and judgment preferences (thinking and feeling). This distinction results in a single score on Introverted Thinking, for example, rather than separate scores on Introversion and Thinking. The SL-TDI had not been psychometrically tested until the work of Arnau et al. (1999).

The PPSDQ (Thompson, 1996a, as cited in Arnau et al., 1999) differs from the SL-TDI in that it uses word pairs and sentence items in its format rather than the hypothetical situations employed in the SL-TDI. Each word pair and each sentence offers responders a 7-point Likert-type scale to choose the word in each pair that best describes them or to indicate the extent to
which they agree or disagree with each of the sentences. The PPSDQ has been studied for validity and factor analysis.

In addition to examining the reliability and validity of these instruments, Arnau et al. (1999) also attempted to assess the correlation of the instruments with scores on the NEO Five Factor Inventory (Costa & McCrae, 1991, as cited in Arnau et al., 1999), which is based on the Big Five factors of personality rather than on the Jungian constructs. They found that the two Jungian-based instruments yielded valid, reliable scores that correlated well with each other, suggesting that they could be as useful in personality assessment as the MBTI®. The expected correlations with the NEO instrument were confirmed and unconfirmed; some scales on the SL-TDI and different scales from the PPSDQ were correlated, but the authors were unable to reach firm conclusions.

Table 1 provides a comparison between the Singer-Loomis Type Deployment Inventory, the Myers-Briggs Type Indicator ®, and the NEO-4 Personality Inventory.
### Table 1

*The Singer-Loomis Type Deployment Inventory, the Myers-Briggs Type Indicator®, and the NEO-4 Personality Inventory*

<table>
<thead>
<tr>
<th>Dimensions of Comparison</th>
<th>Singer-Loomis Type Deployment Inventory</th>
<th>Myers-Briggs Type Indicator® - Form M</th>
<th>NEO-4 Personality Inventory</th>
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<tr>
<td>Acronym or reference title</td>
<td>SL-TDI</td>
<td>MTBI</td>
<td>NEO-4</td>
</tr>
<tr>
<td>Initially created</td>
<td>1981</td>
<td>Approx. 1942</td>
<td>1998</td>
</tr>
<tr>
<td>Author(s)</td>
<td>June Singer, Ph.D. &amp; Mary Loomis, Ph.D.</td>
<td>Katherine Briggs (education unknown) &amp; Isabel Briggs-Myers, BA.</td>
<td>Paul Costa, Ph.D. &amp; Robert McCrae, Ph.D.</td>
</tr>
<tr>
<td>Professional training of creator(s)</td>
<td>Psychologists &amp; Jungian Analysts</td>
<td>Pianist / writer</td>
<td>Academic psychologists</td>
</tr>
<tr>
<td>What does it measure?</td>
<td>Yields 8 scores: Introverted or Extraverted for each of 4 functions: Thinking, Feeling, Sensing, &amp; Intuition, plus, Perceiving Judging Introversion Extraversion</td>
<td>Extraversion vs. Introversion; Sensation vs. Intuition; Thinking vs. Feeling; Perceiving vs. Judging</td>
<td>Domains of Extraversion, Openness to Experience, Conscientiousness, and Agreeableness. Each has six sub-scales below it</td>
</tr>
<tr>
<td>How does it measure?</td>
<td>Five-point Likert scales to rate behavior on 8 separate responses for each of 20 scenarios</td>
<td>Four bipolar scales</td>
<td>Four domains, each with six sub-scales (facets) beneath each domain (Items for the four domains are identical to those in the Revised NEO Personality Inventory [NEO PI-R])</td>
</tr>
<tr>
<td>How many items are used overall and in each scale?</td>
<td>160 items overall. Twenty items per the Extraverted and Introverted side of each of four functions (type modes); Forty-item composites per function as well as 80-item measures of perceiving, judging, extraversion and introversion</td>
<td>Form M contains 93 forced-choice items</td>
<td>192 items overall. Twenty-four facet scores for each of the four domains. Six personality styles based on the combinations of the four domains have also been added.</td>
</tr>
<tr>
<td>How are the results created?</td>
<td>The scores are recorded in a pattern related to</td>
<td>Form M: Hand-scored versions use unit</td>
<td>The choices are recorded on a carbon</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions of Comparison</th>
<th>Singer-Loomis Type Deployment Inventory</th>
<th>Myers-Briggs Type Indicator® - Form M</th>
<th>NEO-4 Personality Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>the eight scales. The scale scores are transferred to a different page for compilation to show type mode, function, extraversion and introversion, and judging and perceiving scores. The final step involves calculating percentage scores for each scale and recording them on a visual graphic to show the relative usage of all eight of Jung’s type capacities.</td>
<td>weights for the items, i.e., each response (Extraversion vs. Introversion; Sensing vs. Intuition; Thinking vs. Feeling; Perceiving vs. Judging) is counted as one-point. The points are then summed for each scale. The respondent’s preference on a scale is determined by the pole of the dichotomy with the most points. Form M: computer-scored versions use an item response theory (IRT) scoring method. The IRT scoring provides a more accurate indication of preference, especially around the cutoff points of the scales. The use of IRT in the amelioration of Form M makes it virtually impossible to score at the midpoint of a scale, thus eliminating ties on the scales.</td>
<td>based answer form that simultaneously records the scores on a scoring form. Twenty-four rows of information are added to create the twenty-four facet scores. These totals are, in turn, added together in specific ways to create the four domain scores. Finally the domain and facet scores are shifted to a two sided form (one side female; one side male) that is normed and shows each domain relative to the others and a line graph of the facets associated with each domain. The norms range from very high to very low. The addition of the six styles adds six two-dimensional style graphs that are divided into quadrants with 50T as the intersection point of the axes. The graph also contains three areas that are designated by concentric circles described as inner (T scores between 45 and 55), middle (T scores between 35 and 65), and outer (T scores at the extremes, beyond 35 and 65). Hand-scoring is the only option for the NEO-4. The complex scoring and interpretations are available in the Manual Supplement.</td>
<td></td>
</tr>
<tr>
<td>Dimensions of Comparison</td>
<td>Singer-Loomis Type Deployment Inventory</td>
<td>Myers-Briggs Type Indicator® - Form M</td>
<td>NEO-4 Personality Inventory</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Evidence of reliability and validity</td>
<td>Based on a sample of 1534 cases, α of reliability for the orientations and attitudes are Perceiving = .90; Judging = .89; Extraversion = .90; Introversion = .89. Reliability of the four function scores are: S = .80; N = .84; T = .84; F = .77. The eight Type Mode scale scores are: ES = .68; IS = .67; EN = .79; IN = .73; ET = .72; IT = .74; EF = .76; IF = .59. Validity of bivariate correlations between the SL-TDI/SLIP and like measures on the PPSDOQ were generally low and on the MBTI, the measures were weakly related.</td>
<td>Extensive evidences of reliability have been demonstrated including split-half, coefficient alpha, and test-retest reliabilities which indicate acceptable levels of reliability for the scores. Various evidences of validity have been demonstrated which are aligned with that which is predicted by psychological type theory.</td>
<td>No reliability or validity data for the NEO-4 are presented by the authors in the Manual Supplement. Reliability and validity for the NEO PI-R follow; however, with the elimination of the Neuroticism scale of the instrument, these psychometric properties are expected to change. Based on a sample of 277 cases, Alpha coefficients of reliability for the five domain scales are: N = .93; E = .90; O = .89; A = .95; C = .92. The Alpha coefficients for the various facet scales range from .69 to .86. Validity of aggregate scales, the domains, via factor analysis is not given. Factor analysis has been used with a case sample of 1,000.</td>
</tr>
<tr>
<td>Time to take &amp; hand score</td>
<td>35-45 minutes</td>
<td>20-25 minutes</td>
<td>25-35 minutes</td>
</tr>
<tr>
<td>People who use it most</td>
<td>HRD trainers, clinicians, educators, and researchers</td>
<td>HRD trainers, clinicians, educators, and researchers</td>
<td>Researchers and clinicians</td>
</tr>
<tr>
<td>Purpose of usage</td>
<td>Provides a profile of all eight Type Modes and indicates relative development of each. Yields thousands of possible profiles, each representing a normally functioning individual who legitimately differs from others in specific</td>
<td>1. Identification of the basic preferences on each of the four dichotomies specified or implicit in Jung’s theory. 2. Identification and description of the 16 types that result from the</td>
<td>Newly designed as a four-factor version of the NEO PI-R. Identifies personality traits and shows how the individual relates to a large number of norms.</td>
</tr>
<tr>
<td>Dimensions of Comparison</td>
<td>Singer-Loomis Type Deployment Inventory</td>
<td>Myers-Briggs Type Indicator® - Form M</td>
<td>NEO-4 Personality Inventory</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>ways</td>
<td>interactions among the preferences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical users</td>
<td>Management development, leadership training, team building, career planning, and clinical practice with individuals and families</td>
<td>Management development, leadership training, team building, career planning, and clinical practice with individuals and families.</td>
<td>Clinical practice with individuals</td>
</tr>
<tr>
<td>Access requirements</td>
<td>BA plus tests and measurements’ class or qualification training</td>
<td>BA plus tests and measurements’ class or qualification training</td>
<td>BA plus tests and measurements’ class or qualification training</td>
</tr>
</tbody>
</table>

*Note. Arnau et al., 1999; Bahns (as cited in Plake & Impara, 2001); Henington (as cited in Plake & Impara, 2001); Jackson, Parker, & Dipboye, 1996; Lanning (as cited in Plake & Impara, 2001); Mastrangelo (as cited in Plake & Impara, 2001); Myers et al., 1998; Singer, Loomis, Kirkhart, & Kirkhart, 1996; Thompson, 2000.*
Additionally, and recognizing that it is a departure from the theoretical and empirical foundation of this study because it is neither based on trait theory or the Jungian psychological constructs, a review of the *Minnesota Multiphasic Personality Inventory* (MMPI-2) follows.

The MMPI-2 is a clinical pathology personality test (Butcher & Rouse, 1996, in Pettijohn, T. F., 1999). The original MMPI “was developed to diagnose specific psychological disorders” (Archer, 1992, p.11120972; Pettijohn, T. F., 1999, p. 292). Starke Hathaway, a clinical psychologist, and Charnley McKinley, a neuropsychiatrist developed the test which had a basic purpose of “differentiating between mental patients and normal people” (Archer, 1992, p. 11120972; Pettijohn, T. F., 1999, p. 292). “As an inventory of normal range personality attributes, the MMPI-2 retains all of the weaknesses of its predecessor and will, for most purposes, prove less satisfactory than instruments like the NEO Personality Inventory” (Nichols, 1992, p. 11120972). The MMPI-2 was published after being restandardized in July 1989 (Archer, 1992; Pettijohn, T. F., 1999). The test contains 567 statements and asks the client to respond with true, false, or cannot say. It covers a broad range of topics “including attitudes on religion and sexual practices . . . and displays of symptoms known to be exhibited by certain groups of mentally disturbed people” (Archer, 1992; Pettijohn, T. F., 1999, p. 292). The instrument “provides scores on 10 basic clinical scales-i.e., paranoia and psychopathic deviancy” (Archer, 1992; Pettijohn, T. F., 1999, p. 292) and includes 15 “supplementary scales that help to diagnose such clinical problems as anxiety and dominance” (Archer, 1992; Pettijohn, T. F., 1999, p. 292). Additionally, “there are 15 content scales that measure various aspects of personality including anxiety, bizarre mentation, and low self-esteem” (Archer, 1992; Pettijohn, T. F., 1999). “A growing research literature is also rapidly evolving including studies of the use of the MMPI-2 in populations of college students (Butcher, Graham, Dahlstrom, & Bowman,
1990 in Archer, 1992, p. 11120972), substance abusers (Greene, Arredondo, & Davis, 1991 in Archer, 1992, p. 11120972), and active duty military personnel” (Butcher, Jeffrey, Cayton, Colligan, DeVore, & Minnegawa, 1990 in Archer, 1992, p. 11120972). “Much work on the validity of the scales remains for future researchers” (Archer, 1992, p. 11120972). The reviewers indicate “that at this time there are not enough research studies of the revision to evaluate its effectiveness adequately” (Pettijohn, T. F., 1999). The electronic version of this analysis is located in Appendix D. It has been reprinted by permission of the McGraw-Hill Contemporary Learning Series; Copyright © 1999 by the McGraw-Hill Companies, Inc. All rights reserved.

“In conclusion, the MMPI-2 is a new instrument closely related to the original MMPI. The MMPI-2 and MMPI are not, however, equivalent measures. Until a substantial correlate literature is published for the MMPI-2, the issue of the generalizability of findings from the original test will be very important. As the MMPI-2 ultimately amasses its own independent research base, this issue will assume decreasing emphasis. The MMPI-2 is a reasonable compromise of the old and the new” (Archer, 1992, p. 11120972).

Criticism of the MBTI®

The literature is replete with critical analyses of the MBTI®, some comparing it directly with other instruments developed from other theoretical bases and some examining specific aspects of MBTI® construction and interpretation. While the MBTI® is not, strictly speaking, controversial within the field of personality assessment, it has been the standard measure for so long, and has accumulated so many years of use, that it is a natural target for investigators seeking to improve the science of personality measurement. McCaulley (1989) observed that the widespread use of the instrument had trained the attention of investigators on it.
One of the common criticisms of the MBTI® is actually a criticism of the underlying Jungian theory of psychological types. As Garden (1991) noted, while there is plentiful research that uses the MBTI® to assess personality, there is very little empirical work that substantiates the underlying theory.

Bayne (1997) provided an analysis of and response to recent criticism of the MBTI® that neatly summarizes current thinking about the instrument and the interpretations of it. To those who would object that the MBTI® classifications fail to capture individuality, Bayne noted that the types are for reference, not “pigeon holes” (p. 77), suggesting that the fault here is in the interpretation, not the instrument. To those who would see the MBTI® as only a measure of the way participants take tests, rather than a measure of their personalities, Bayne again noted that interpretation is the key. Personality measures may reveal what an individual is really like, or how an individual sees himself or herself, or how an individual presents himself or herself to others. The objection, Bayne argued, is not to the MBTI® specifically, but to the use of self-reports in personality measurement. Bayne summarized his defense of the MBTI® by observing that assessing types of individuals helps to understand them and that, personality characteristics transcend most situations, so that they are reliable indicators of behavior.

McCrae and Costa (1989) articulated the basic criticism of the MBTI® that goes to the heart of Jung’s theory of psychological types and the structure of the instrument designed to operationalize the theory. First, they questioned the validity of the opposing preferences, which Myers and Briggs interpreted to mean that the 16 types identified by their measure were exclusive and independent types.

Second, McCrae and Costa (1989) questioned the way the MBTI® was structured to show dominant and auxiliary preferences. They objected to this aspect of the instrument
primarily because, in agreement with Garden (1991), they believed that this structural characteristic of the instrument had not been validated empirically.

In addition, McCrae and Costa (1989) questioned the single use of the four preferences as the only determining factors in assigning an individual to one of the 16 unique types. They suggested that if the types were in fact unique, separate scales might have been better able to capture their personality traits. To date, no attempt has been made to devise separate scales for each of the 16 types measured by the MBTI®, nor is there any indication that this revision has been considered.

In general, the arguments against the use of the MBTI® tend to be arguments in favor of another personality measure, rather than against the MBTI®, or they are so arcane on a statistical level that the critic appears to have lost sight of the overall intent of the instrument—to provide individuals in a wide range of organizational settings with a reference point that they can use for recruitment, selection, promotion, and a wide range of other applications.

Summary

The position of the school superintendent has changed radically since its earliest beginnings, gradually evolving into a complex array of roles, in all of which the superintendent is expected to exhibit behavior and characteristics that constitute leadership. While not all of the superintendent’s constituents—principals, school administrators, teachers, parents, students, school board members, community leaders, peers—agree on what leadership means, they would probably all agree that they know it when they see it.

The professional and research literature on effective leadership in the superintendency is relatively sparse (Thomas, as cited in Education Writers Association, 2002; Gewertz, 2006), so that it has been necessary to draw on research conducted by practitioners of a wide range of
disciplines, from psychology to business management, in order to assemble the relevant theoretical and empirical background to the current research. In looking at what has been written about superintendents as leaders, however, it becomes clear that the emphasis is largely on skills, rather than personality traits, suggesting that there is a great need for research into this element of leadership.

Part of the reason for the current emphasis on skills in superintendents must be that they are attempting to exercise leadership in a time of great turmoil in American public education and in an atmosphere of educational reform. As a result, accountability has become a common watchword applied to superintendents and the ways in which they exercise their leadership in administering educational policies and practices and managing the people who comprise their local communities. While there have been recent attempts to professionalize the superintendency, the emphasis has been on developing skills, rather than on cultivating the personality traits that distinguish effective leaders from ineffective ones.

The generic model of leadership currently being applied to school superintendents has its roots in business management and, as such, is based on a long history of theoretical and empirical research. The earliest attempts to develop a conceptual basis for effective business management was “scientific” in the sense that it attempted to reduce leadership practices to a set of skills, policies, and procedures. This aspect of leadership has never entirely disappeared, even from more recent constructs, such as situational or transformational leadership.

The earliest models of leadership were based on certain traits that were thought to be common to strong executives; these gradually evolved into behavioral models and were supported by research conducted at major universities in Michigan and Ohio. These earliest
benchmark studies are still the evident ancestors of more modern theoretical models and have established certain key concepts, which continue to be investigated, such as *leadership style*.

Part of the tradition in leadership research has focused on situations or contingencies that leaders face, suggesting that leadership behavior is not strictly determined by personality traits but can change, depending on the context. Factoring in environmental elements and allowing for variability in leader behavior have, perhaps ironically, led investigators back to a consideration of personality in leadership, on the assumption that personality can determine a leader’s ability to adapt to contingencies.

One of the most popular current models is that of *transformational leadership* (Atwater, personal interview, December, 2005; Brower & Balch, 2005; Yukl, 2006; Zhu et al., 2005), which appears to be particularly congruent with the current state of American education, which is certainly in need of radical transformation and in need of leaders who can convince an institution to transform itself.

Again, based on business models, there is much current talk in education about leaders with *vision* who are capable of motivating their followers (Brower & Balch, 2005; Burns, 2003; Yukl, 2006).

The relationship between personality and leadership has been extensively studied in the last 80 years, but to date no firm conclusions have been reached, partly because some researchers have been investigating style or gender differences in leadership (Eagly & Johannesen-Schmidt, 2001; Skrla, 2000). Although there is little research into the influence of gender on school leadership (Eagly & Johannesen-Schmidt, 2001; Gewertz, 2006; Skrla, 2000), there is clearly a need for such research, given the imbalance between men and women in the field of education,
where the vast majority of practitioners are women and the majority of leadership positions are held by men (Gewertz, 2006; Glass et al., 2000).

The current research is based on the Jungian psychological types, developed in the 1920s, and operationalized in the 1940s in the MBTI®, which remains the standard personality measurement instrument. While there have been some attempts to develop theoretical foundations for personality that do not rely on the Jungian concepts, they continue to dominate the field, as does the MBTI®. Recently, there have been attempts to develop personality measures other than the MBTI®, partly in response to what are considered flaws in its design and construction, but as yet no one instrument has proved to be better at assessing personality, nor has any instrument been used in so many different contexts. For that reason, the MBTI® was the instrument of choice for the current research of leadership in the superintendency. Additional reasons for the selection of the MBTI® for use in this study were:

- There is empirical evidence that it is a reliable instrument designed to measure personality preferences on each of the four dichotomies that are specified or implicit in Jung’s theory
- It is popular among professionals who lack training in psychological assessment
- The measures are popular because they are value neutral and view differences in type preferences as “gifts differing,” e.g., there are no “good or bad, or sick or well” types
- It was available to the researcher, i.e., it was not a guarded level B instrument which restricts use to clinical practice with individuals
- It was easy to administer, score, and interpret
- It was relatively short and could be included in a mail survey
- No one instrument has proved to be better at assessing personality preferences
• Three million MBTI® assessments are administered yearly

• The MBTI® was approved for use in this study by the university’s human subjects’ review board

It is hoped that the use of the instrument will be congruent with the factors that distinguish effective superintendents from others and that the current study will contribute to a field of study greatly in need of expansion.
CHAPTER III. ANALYTICAL TECHNIQUE AND RESEARCH DESIGN

Chapter 3 describes the research methods used in this study to collect and analyze the data needed to address the research questions. In addition, the chapter presents the restatement of the problem. The setting of the study, selection of participants, instrumentation, data collection, and data analyses are also discussed.

Restatement of the Purpose of the Study

The purpose of this study was to examine relationships between leadership styles and personality preference types. In particular, this study examined the relationships between interpersonal leadership styles (as measured by the FIRO-B™) and personality preference types (as measured by the MBTI®) of Michigan superintendents. The study also reported the participants’ educational background, years of experience, type of district, district diversity, gender, age, and years of experience as superintendent.

The researcher found, in the review of the literature, that leadership style and personality type were important attributes for leaders in educational organizations. However, no studies have been conducted on these characteristics in Michigan school superintendents.

Research Design

A correlational research design formed the framework for this study. This design is appropriate when attempting to examine the relationship between variables without determining cause and effect (Bluman, 2001). This type of design (Bluman, 2001) can be used to determine the magnitude and direction of the relationship between two or more quantifiable variables (e.g., superintendents’ interpersonal leadership styles and reported personality preference types; superintendents’ perceived and reported personality preference types; superintendents’ perceived personality preference types and interpersonal leadership styles). The researcher used three
instruments to collect the data: a researcher-developed superintendent demographic sheet, the MBTI® inventory, and the FIRO-B™ inventory.

This type of design is not subject to the same types of threats to internal and external validity that can affect experimental research.

Setting for the Study

The state of Michigan has a total of 515 school districts according to the Michigan Department of Education (2005). Each school district is independent and serves a unique population within its catchment zone. The districts range in size from small (less than 500 students) to very large (more than 100,000 students). The districts are located in rural, suburban, and urban areas.

Population

The population defined for this study is superintendents in Michigan. These superintendents are responsible for overseeing the management of K–12 schools.

Sample

The population of 515 superintendents were grouped into categories based on the enrollment size in their location (urban, suburban, and rural) as designated by the Michigan Department of Education. A stratified random sample of 112 superintendents was asked to participate in the study, with a representative number drawn from each of the groups. To randomly select the 112 superintendents, each superintendent was assigned a number from 000 to 514 (Bluman, 2001). A table of random numbers was used with the beginning number arbitrarily selected. Using the last three digits of the random numbers and referring to the list of superintendents, the superintendent with the corresponding number was identified and placed in the sample. If the last three digits of the number did not match a number in the population, the
number was skipped (Bluman, 2001). This procedure was applied to the numbers that followed the arbitrarily selected number in the list until 112 superintendents were selected.

Table 2 presents the enrollment levels for rural, urban, and suburban school districts in Michigan and the number of superintendents who were included in the sample.

An e-mail message was sent to the 112 superintendents to determine their willingness to participate in the study. The superintendents were asked to respond to the e-mail to inform the researcher if they were unwilling to participate.

Data Collection Procedures

When no responses were received from the superintendents, a packet with appropriate instruments (e.g., the MBTI®: Form M, the FIRO-B™, and a brief demographic questionnaire), cover letter, and preaddressed, postage-paid envelope were mailed via the U.S. Postal Service to each participant. The cover letter to the superintendents indicated the purpose and importance of the study, included directions for completion of the surveys, and provided assurances that all information collected on the instruments would be confidential. The cover letter also provided directions for return of the completed surveys. They were asked to place the completed instruments and the demographic questionnaires in the enclosed preaddressed envelope for confidential return to the researcher.

To protect the confidentiality of respondents, the superintendents were asked not to place their names on any of the documents. Instead, a three-letter alphabetic identification code was assigned to each participant. The researcher recorded the identification code, along with the superintendent’s name and address in a log, which she maintained in a locked file cabinet in her home. As completed instruments were returned, the researcher eliminated the name from the log.
Table 2

*Sampling Distribution of Enrollment in Michigan Rural, Urban, and Suburban School Districts*

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Population Number</th>
<th>Population Percent</th>
<th>Sample Number</th>
<th>Sample Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 500</td>
<td>52</td>
<td>10.0</td>
<td>11</td>
<td>9.8</td>
</tr>
<tr>
<td>500–999</td>
<td>76</td>
<td>15.0</td>
<td>17</td>
<td>15.1</td>
</tr>
<tr>
<td>1,000–1,999</td>
<td>156</td>
<td>30.0</td>
<td>32</td>
<td>29.0</td>
</tr>
<tr>
<td>2,000–2,999</td>
<td>81</td>
<td>16.0</td>
<td>18</td>
<td>16.0</td>
</tr>
<tr>
<td>3,000–3,999</td>
<td>56</td>
<td>10.9</td>
<td>12</td>
<td>10.7</td>
</tr>
<tr>
<td>4,000–4,999</td>
<td>21</td>
<td>4.0</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>5,000–9,999</td>
<td>49</td>
<td>9.5</td>
<td>11</td>
<td>9.8</td>
</tr>
<tr>
<td>10,000–19,999</td>
<td>20</td>
<td>4.0</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>20,000–49,999</td>
<td>3</td>
<td>0.5</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>&gt; 49,999</td>
<td>1</td>
<td>0.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>515</td>
<td>100.0</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The superintendents were asked to complete the questionnaire and instruments within two weeks. One week following initial distribution of the survey packets, the researcher began follow-up on the nonrespondents. An e-mailed follow-up letter was forwarded to request the return of the instruments that were not yet received. Two days after the due date, a second e-mailed message was forwarded to remind the superintendents to complete and return their instruments as soon as possible.

Each respondent was offered a complimentary copy of their leadership profile. The 17-page Leadership Report is based on their responses to the two instruments. This report begins with a snapshot of the superintendents’ leadership style and an Overall Leadership Orientation section that highlights preferences and needs that determine how they lead (Hammer & Schnell, 2000). In addition, they received:
• A brief explanatory overview of their results on the FIRO-B™ and the MBTI®.

• A summary of their leadership style in various arenas (i.e., in interpersonal relationships, as team members, and at the level of the organizational culture).

• A chronology of strengths that they may have and possible challenges they might face in dealing with change and stress.

• An Action Plan that outlined several points that the superintendents may want to include in their personal development agenda.

• A list of resources that included publications to help the superintendents to better understand their results on the FIRO-B™ and the MBTI®, plus listings on the topic of leadership and personality. This item completed the report (Hammer & Schnell, 2000).

Instrumentation

Three instruments were used to collect data for the study: a superintendent demographic sheet, the MBTI®, and the FIRO-B™.

*Myers-Briggs Type Indicator®*

To assess superintendents’ reported personality types, the MBTI®: Form M was used. The indicator contains 93 items that determine preferences on four scales: (a) Extraversion-Introversion, (b) Sensing-Intuition, (c) Thinking-Feeling, and (d) Judging-Perceiving. The various combinations of these preferences result in 16 distinct personality types. The MBTI® inventory is written at a seventh-grade reading level and can be administered to individuals from ages 14 to adult. It is self-administered and requires approximately 15 to 20 minutes to complete. The revised MBTI®: Form M has no scales with different weights for men and women
(Myers et al., 1998). The results from the Form M version of the instrument are also available as continuous scores for use by researchers who wish to correlate the MBTI scores with the scores of other instruments. The continuous scores are the values of theta that result from an item response theory (IRT) scoring method and are only available for the computer scored versions of the Indicator (Myers et al., 1998). The instruments in the present study were computer scored and the continuous scores were used in the analyzing and reporting of the data.

Reliability and validity. Researchers have noted the enhancement in Form M reliabilities over those of Form G, as denoted by the samples that have been collected thus far (Myers et al., 1998). In currently available samples, the internal consistency of the four MBTI® scales is adequate whether computed using logical split-half, consecutive item split-half, or coefficient alpha (Myers et al., 1998). Comprehensive information on split-half and test-retest reliabilities may be found in the MBTI® Manual (Myers et al., 1998). For the educated U.S. adult population (such as those in this leadership study), the reliability coefficients of the samples are consistently +.80 (Myers et al., 1998), an indication of excellent reliability.

The MBTI® Manual (1998) also provides various evidences of validity including the following: correlations of the MBTI® preferences with other reliable instruments which are in the direction that psychological type theory would predict (Myers et al., 1998); observer reports of behavior by type that have been consistent with the foundational theory (Gardner & Martinko, 1996; Myers et al., 1998); research reporting type dissemination in occupations, in specializations within occupations, and in major fields of study, all of which are aligned with that which is predicted by psychological type theory (chi-square [self-selection ratio] distributions that were used in these studies to reveal significant differences from comparative populations; Myers et al., 1998); and research indicating that participants repeatedly tend to select their own
type descriptions, rather than alternative type descriptions, at a statistically highly significant rate (Myers et al., 1998).

The MBTI® is the most widely used personality instrument in the world with approximately three million administrations given each year (Myers et al., 1998). The reliability and validity of this instrument have been clearly demonstrated through extensive research (Myers et al., 1998). A complete review of this literature is beyond the scope of this endeavor; however, additional studies that are relevant to the validity and reliability of the instrument can be found in the MBTI® Manual (Myers et al., 1998). Readers requiring more information in these areas are asked to consult the manual.

Fundamental Interpersonal Relations Orientation-Behavior™

Michigan superintendents’ interpersonal leadership styles were assessed by using the FIRO-B™ (Schutz, 1967). The FIRO-B™ is a 54-item instrument that measures six dimensions of an individual’s behavior toward others: (a) Expressed Inclusion (eI), (b) Expressed Control (eC), (c) Expressed Affection (eA), (d) Wanted Inclusion (wI), (e) Wanted Control (wC), and (f) Wanted Affection (wA). This instrument can be self-administered and also requires approximately 15 to 20 minutes to complete. Schutz (1967) originally developed the tool in the late 1950s to predict how military personnel would work together in groups. He first described his creation in his book, FIRO: A Three-Dimensional Theory of Interpersonal Behavior (Schutz, 1958). Ideas from the works of three distinguished psychologists—T. W. Adorno, Erich Fromm, and Wilfred Bion—are incorporated in the theory that underlies the FIRO-B™ (Schnell & Hammer, 1993, 2004).

Based on a simple model, the FIRO-B™ proposes that individuals are motivated by three interpersonal needs:
1. **Inclusion (I):** a need to maintain relationships with others, to be included in their activities, or to include them in the activities of the individual.

2. **Control (C):** a need to maintain a balance of power and influence in relationships.

3. **Affection (A):** a need to form personal alliances with others (Schnell & Hammer, 1993, 2004).

Additionally, Schutz (1978) proposed that two dimensions of each need can be identified: (a) the extent to which individuals are likely to express the associated interpersonal behaviors toward others and (b) the extent to which individuals want to receive those same interpersonal behaviors from others (Hammer & Schnell, 2000). The interactions between interpersonal needs and expressed and wanted behaviors form the six subscales (Schutz, 1978) that are measured from the client’s responses to each of the included statements. A description of behaviors that are associated with each of the scales is depicted in “Definition of Terms” in chapter 1. A client’s responses to the FIRO-B™ yields 12 scores that are examined when interpreting the FIRO-B™ profile:

- Six individual “cell” scores.
- One Overall Need score.
- Two Total Behavior scores.
- Three Total Need scores (Hammer & Schnell, 2000).

The client’s scores are aggregated across the rows to obtain Total Expressed Behavior and Total Wanted Behavior scores, down each column for the Total Need scores, and over all of the individual cells to provide an Overall Need score (Schnell & Hammer, 1993, 2004). Scores in the six individual cells are estimates of “how much” each of the interpersonal dimensions is
characteristic of the test-taker (Schnell & Hammer, 1993, 2004). The general interpretation of the FIRO-B™ individual cell scores is as follows (Schnell & Hammer, 1993, 2004):

- **0 to 2 (Low):** the behaviors are not characteristic of the test-taker.
- **3 to 6 (Medium):** the behaviors are periodically a noticeable characteristic.
- **7 to 9 (High):** the behaviors are frequently a noticeable characteristic of the test-taker.

The Overall Need score (Overall Need = eI + wI+ eC+ wC+ eA + wA) represents the overall strength of an individual’s interpersonal needs (Hammer & Schnell, 2000). It shows how much a person believes that other people and intimate interaction can be a source of goal attainment and personal achievement (Schnell & Hammer, 1993, 2004). Higher scores indicate that a person is extensively involved with others, whereas lower scores indicate less interpersonal liaisons (Schnell & Hammer, 1993, 2004). The scores are generally interpreted as follows (Hammer & Schnell, 2000):

- **0 to 15 (Low):** Interactions with others are minimal sources of need satisfaction.
- **16 to 26 (Medium–Low):** Once in a while interactions with others are sources of satisfaction.
- **27 to 38 (Medium–High):** Interactions with others are usually sources of satisfaction.
- **39 to 54 (High):** Interactions with others are enjoyable and satisfying.

In addition, the client’s Total Expressed and Total Wanted scores are interpreted. According to Hammer and Schnell (2000), a score from 0 to 7 is considered low. The Total Expressed score indicates that a person is reluctant to initiate social behavior, whereas the Total Wanted score with a score from 0 to 7 indicates that people are reluctant to rely on others for what is needed. These individuals are uninterested in close rapport and are primarily independent. Scores ranging from 8 to 19 are considered moderate. People with Total Expressed and Total Wanted scores in this category generally exercise caution when developing close
rapport. Individuals who have scores in the high category (20 to 27) for Total Expressed enjoy building trust and rapport. Total Wanted scores in the high category reflect people who excel in promoting and building relationships of trust and rapport.

The FIRO-B™ is a psychological instrument that has been constructed to explain how personal needs can affect various interpersonal relationships (Hammer & Schnell, 2000), but the developer has cautioned that there are some factors (i.e., cultural differences) that could affect a person’s responses to the items.

The developers (Hammer & Schnell, 2000) also noted that the scale has no right or wrong answers, and that no passing or failing scores are associated with the results. In addition, Hammer and Schnell (2000) asserted that the scale results should focus on learning and development in a nonjudgmental manner. They indicated that the report may provide understanding regarding the relationships among and between people and illustrate how other people may perceive them.

According to Schnell and Hammer (1993, 2004), practitioners who use the MBTI® and the FIRO-B™ have found that both instruments can influence leaders to broaden their view of others. Rather than considering others as “difficult” or “problematic,” the results of these instruments can be used to establish recognition of differences as opportunities to bring strengths inherent in diverse ways of thinking and behaving together. The instrument uses key components of the client’s personality and hence provides valuable information to leaders about patterns over a variety of activities including communication, decision making, interpersonal relations, and group dynamics (Schnell & Hammer, 1993, 2004). In addition, Schnell and Hammer (1993, 2004) asserted that leaders are presented with opportunities to see that human behavior is
complex enough to demand multiple perspectives, yet predictable enough that it can be
systematized into understandable models, when they integrate the FIRO-B™ with the MBTI®.

**Reliability and validity.** Comprehensive information on the Guttman scaling procedures
which are the construction foundation for the FIRO-B™ instrument, and test-retest reliabilities
can be found in the FIRO-B™ Technical Guide (Hammer & Schnell, 2000). The reliability
coefficients of the samples are consistently described as limited but satisfactory (Hammer &
Schnell, 2000).

The FIRO-B™ is defined as a “powerful psychological instrument” that was developed
by Schutz (as cited in Hammer & Schnell, 2000) “to explain how personal needs affect various
interpersonal relationships” (Hammer & Schnell, 2000, p. 31). A great deal of research has been
conducted regarding the validity and use of the FIRO-B™. The instrument is reported as having
limited but satisfactory psychometric properties in terms of validity (Hammer & Schnell, 2000).

The FIRO-B™ Technical Guide (2000) provides various evidences of validity including
convergent and divergent validity with correlations of the FIRO-B™ and other reliable
instruments which are in the direction that psychological theory would predict (Hammer &
Schnell, 2000). A complete review of that literature is beyond the scope of this manuscript,
however, studies that are relevant to the validity and reliability of the instrument can be found in
the FIRO-B™ Technical Guide (2000). Readers requiring more information in these areas are
asked to consult the Guide.

**Analysis of Data**

The completed instruments on interpersonal leadership styles and personality types were
scored using the publisher’s (Consulting Psychologists Press, Inc.) stated procedures. The
continuous scores of the MBTI® and the FIRO-B™ scores along with the demographic data were entered into a computer file for analysis using SPSS-Windows, version 13.

The data analyses were divided into two sections. The first section of the data analyses used frequency distributions. The second section used inferential statistical analyses to address the research questions.

The superintendents’ perceived, as self-reported on the demographic questionnaire, and reported MBTI® preference categories, as measured by the Consulting Psychologists Press, were crosstabulated. Four chi-square tests were conducted to determine the independence between perceived and reported personality preference types.

Pearson product moment correlation coefficient analyses were used to examine the relationship between the continuous scores for each reported personality preference type and the interpersonal leadership style scores.

Point biserial correlation coefficient analyses were used to determine if the Michigan superintendents’ perceived personality preference types, as self-reported on the demographic questionnaire, were associated with their FIRO-B™ leadership styles.

Summary

The purpose of this study was to examine relationships between interpersonal leadership styles and reported personality types of 112 Michigan superintendents. The research design used correlational research. Participants for the study were randomly selected from a population of 515 superintendents based on the enrollment size in their district locations (urban, suburban, or rural), and conducted so as to obtain a proportionate sampling of superintendents from each grouping. The sampling is displayed in Table 2. Three instruments were used to collect the data about the participants: a superintendent demographic sheet, the MBTI®: Form M inventory, and
the FIRQO-B™ inventory. In accordance with the university’s human subjects’ review board policy, the participants were safeguarded against insufficient privacy, insufficient confidentiality of data, and lack of full disclosure to the fullest extent possible.
CHAPTER IV. DATA COLLECTION AND ANALYSES

The purpose of this study was to compare relationships between interpersonal leadership styles and reported personality preference types of 112 Michigan superintendents. The FIRO-B™, a personality assessment, was used to measure how influential and responsible (Expressed Control, as defined by Waterman & Rogers, 2004) Michigan superintendents wanted to be in their districts and how much leadership and influence (Wanted Control, as defined by Waterman & Rogers, 2004) they wished to accept from other individuals. The MBTI®, a psychological instrument, was used to measure the personality types of the Michigan superintendent participants. The two instruments were computer scored by the publisher, Consulting Psychologists Press, Inc., and the resulting data, hereafter described as reported, were returned to the researcher. This chapter presents the results from the data collection and analyses. A description of the sample is given first, and then each of the research questions is addressed.

Characteristics of the Sample Population

From the population of 515 Michigan superintendents, a stratified random sample of 112 superintendents was selected to participate in the study. Each of the sample subjects was assigned an alphabetical code to ensure confidentiality. The subjects were mailed a letter of introduction and three self-administered instruments (the MBTI®: Form M, the FIRO-B™, and a demographic questionnaire. Also enclosed were a leather bookmark (embossed with the name of the researcher, her university emblem, and the words “Thank You”) and a stamped self-addressed return envelope. The packets were mailed on June 10, 2005, with a requested return date of June 22. A follow-up letter was e-mailed on the 15th and again on the 24th of June to request return of the instruments that were not yet received. Fifty-six of the superintendents returned the instruments for a 50% return rate. Of the 56 responses, four subjects failed to answer
and return the FIRO-B™ instrument, three subjects failed to answer and return the MBTI® instrument, two subjects did not complete their answers to the FIRO-B™ instrument, and three subjects did not complete their responses to the MBTI® instrument. The group response for completion and return of three valid instruments was 44 participants or 39.3%. The number of subjects sampled was very small due to budgetary constraints. Consequently, the number of respondents was quite small as well.

Results of the Demographics

Forty-four Michigan superintendents, 5 (11.4%) female and 39 (88.6%) male, participated in this study. Ninety-six percent (42) of the respondents were Caucasian. One (2.0%) responded as Asian or Pacific Islander. One (2.0%) did not respond to the question of ethnicity.

Table 3 shows the frequency and percent of the participants by age. Table 4 shows the frequency and percent of each superintendent’s years in the district. Table 5 shows the frequency and percent of each respondent’s years in the position of superintendent. Table 6 shows the frequency and percent of the districts’ diversity. Table 7 shows the frequency and percent of the student enrollment size of the district. Table 8 shows the frequency and percent of the location (urban, rural, or suburban) characteristics of the district. Table 9 shows the frequency and percent of each participant’s educational background.

In Table 3, the subjects in the sample were categorized into three age groups. From the sample of 44 superintendents who responded, 4 (9.1%) were between the ages of 36 and 45. Twenty-two (50.0%) of the superintendents were in the 46 to 55 year old category. And, 18 (40.9%) were in the 56 and older category.
Table 3

*Frequency and Percent of Participants’ Ages*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>36–45</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>46–55</td>
<td>22</td>
<td>50.0</td>
</tr>
<tr>
<td>56 and older</td>
<td>18</td>
<td>40.9</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 44.*

Table 4 presents the frequency and percent of each superintendent’s number of years in the district. Twenty (45.5%) of the responding Michigan superintendents had been in their districts for five or fewer years.

Table 4

*Frequency and Percent of Years in District*

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–5</td>
<td>20</td>
<td>45.5</td>
</tr>
<tr>
<td>6–10</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>11–15</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>16–20</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>21 or more</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 44.*

Table 5 categorizes each respondent by the total number of years that he or she had been in the position of superintendent. Twenty-one (47.7%) of the Michigan superintendents had been in their position for five or fewer years. Twelve (27.3%) had been in the position from 6 to 10 years. Six (13.6%) had been in their position for 11 to 15 years. Four (9.1%) had been in the
position of superintendent for 16 to 20 years. One (2.3 %) respondent reported having been in the position of superintendent for 21 or more years.

Table 5

*Frequency and Percent of Years in Position*

<table>
<thead>
<tr>
<th>Years in Position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–5</td>
<td>21</td>
<td>47.7</td>
</tr>
<tr>
<td>6–10</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>11–15</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>16–20</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>21 or more</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 44.*

The Michigan superintendents were asked to describe the diversity (racial/ethnic/socioeconomic) of their districts. Table 6 displays their responses to the question. Five (11.4%) of the respondents indicated that they led highly diverse districts. Twelve (27.3%) superintendents indicated that the district they led was somewhat diverse. Twenty-seven (61.4%) Michigan superintendents described the district they led as having little or no diversity.

Sixteen (36.4%) of the Michigan superintendent respondents further indicated that they led a district population of 1,000 to 1,999 when they were asked to denote the number of students in their districts. Eight (18.2%) superintendents indicated that they led districts with 500 to 999 students. Six (13.6%) responding districts had 2,000 to 2,999 students. Five (11.4%) reported having student populations of 5,000 to 9,999. Four (9.1%) superintendents led districts
with 3,000 to 3,999 students. Two (4.5%) superintendents reported populations of 10,000 to
19,999; two (4.5%) other superintendents indicated that their districts had less than 500 students.
One (2.3%) Michigan superintendent respondent led a district with a student population of
20,000 to 49,999. Table 7 displays the number of students in the districts of the respondents.

Table 6

*Frequency and Percent of Diversity in Superintendent’s District*

<table>
<thead>
<tr>
<th>Diversity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td>Somewhat</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>Little or none</td>
<td>27</td>
<td>61.4</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 44.*

Table 7

*Frequency and Percent of Student Enrollment Size of the Districts*

<table>
<thead>
<tr>
<th>Size</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000–49,000</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>10,000–19,999</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>5,000–9,999</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td>4,000–4,999</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>3,000–3,999</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>2,000–2,999</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>1,000–1,999</td>
<td>16</td>
<td>36.4</td>
</tr>
<tr>
<td>500–999</td>
<td>8</td>
<td>18.2</td>
</tr>
<tr>
<td>&lt; 500</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 44.*
The Michigan superintendent respondents additionally characterized their districts as being an urban, rural, or suburban setting. Table 8 displays their responses.

Table 8

Frequency and Percent of District Location Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Rural</td>
<td>31</td>
<td>70.5</td>
</tr>
<tr>
<td>Suburban</td>
<td>11</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. N = 44.

Two (4.5%) of the Michigan superintendents described their districts as urban; 31 (70.5%) described the districts that they led as rural, and 11 (25.0%) described their districts as suburban.

All (100%) 44 superintendent respondents indicated that they worked 41 or more hours per week leading their Michigan school districts.

In addition, each (100%) of the respondents reported having an advanced degree (i.e., education beyond a bachelor’s degree) when asked to describe their educational background. Table 9 summarizes their responses.

The master’s degree was the highest degree held by 20 (45.5%) of the responding Michigan superintendents. Eleven (25.0%) held a specialist degree, and 13 (29.5%) held an earned doctoral degree.
Table 9

*Frequency and Percent of Educational Background*

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>20</td>
<td>45.5</td>
</tr>
<tr>
<td>Specialist</td>
<td>11</td>
<td>25.0</td>
</tr>
<tr>
<td>Doctorate</td>
<td>13</td>
<td>29.5</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note.* $N = 44.$

*Summary of the Demographic Information*

The majority of the responding superintendents were male (88.6%) and Caucasian (96%); one (2.0%) responded as Asian or Pacific Islander. These Michigan superintendent data findings coincide with national studies, which indicate females represent less than 20% of all superintendents in the United States (Glass, Bjork, & Brunner, 2000). The findings confirm that there is an historical underrepresentation of two groups (women and minorities) and mirror the findings of Glass et al. (2000), who indicated that “the extraordinary disparity between men and women in the superintendency is paradoxical in the field of education, an enterprise dominated by women serving as teachers, principals, and central office staff” (p. 15). “The United States Census Bureau has characterized the superintendency as being the most male-dominated executive position of any profession in the United States” (Glass et al., 2000, p. 17).

Twenty-two (50%) of the superintendents were between the ages of 46 and 55; and 21 (47.7%) had been in their positions for five or fewer years. Twenty-seven (61.4%) of those responding led a district that had little to no diversity (racial/ethnic/socioeconomic). Sixteen (36.4%) led districts with a student population of 1,000 to 1,999. Thirty-one (70.5%) of the
respondents defined their district characteristics as rural. All (100%) of the superintendents indicated that they worked 41 or more hours per week leading their Michigan school districts, and each (100%) of them reported to hold degrees beyond the bachelor’s degree. Twenty (45.5%) reported that the master’s degree was the highest they held; 11 (25%) held a specialist degree; and 13 (29.5%) held an earned doctoral degree.

**Summary of the FIRO-B™**

The FIRO-B™ is a psychological self-report instrument that measures leadership styles. The Michigan superintendents completed the instrument. Two of the scales on the survey, Expressed Control (the extent to which superintendents wanted to be influential and responsible in their school districts) and Wanted Control (the extent to which superintendents desired others to assume leadership and be influential in the school districts) were used in this study. Each of the scales is categorized into scores described as low, medium, and high. The scores reflect the strength of each interpersonal need (Waterman & Rogers, 2004). The results were crosstabulated to indicate the association between the Expressed Control and Wanted Control levels. Table 10 presents the results of these analyses.

**Table 10**

*Crosstabulations: FIRO-B™ Expressed Control by Wanted Control*

<table>
<thead>
<tr>
<th>Expressed Control</th>
<th>Wanted Control</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Low (0–2)</td>
<td>12</td>
<td>6</td>
<td>30.0</td>
<td>0</td>
<td>0.0</td>
<td>18</td>
<td>40.9</td>
</tr>
<tr>
<td>Medium (3–6)</td>
<td>8</td>
<td>10</td>
<td>50.0</td>
<td>0</td>
<td>0.0</td>
<td>18</td>
<td>40.9</td>
</tr>
<tr>
<td>High (7–9)</td>
<td>4</td>
<td>4</td>
<td>20.0</td>
<td>0</td>
<td>0.0</td>
<td>8</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>20</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 44.*
Twenty-four Michigan superintendent respondents had scores indicating low Wanted Control. Twelve (50%) of the 24 respondents, or 27% of the sample, had scores indicating low Expressed Control and low Wanted Control behaviors. Eight (33.3%) of the 24 respondents had scores indicating medium Expressed Control and low Wanted Control behaviors. Four (16.7%) of the 24 participants had scores indicating high Expressed Control and low Wanted Control behaviors.

Twenty superintendent respondents had scores indicating medium Wanted Control. Six (30.0%) of those 20 had scores indicating low Expressed Control and medium Wanted Control behaviors. Ten (50.0%) of the 20 participants, or 23% of the sample, had scores indicating medium Expressed Control and medium Wanted Control behaviors. Four (20.0%) of the 20 superintendent respondents had scores indicating high Expressed Control and medium Wanted Control behaviors. No Michigan superintendent respondent had scores indicating high Wanted Control for any of the Expressed Control categories.

Table 11 displays the frequency and percent of the FIRO-B™ interpersonal Total Need for Control (Expressed Control and Wanted Control) scores for the Michigan superintendent respondents. The scores are somewhat balanced between low (52.3%) and medium (47.7%). No superintendent respondent had high Total Need for Control scores.
Table 11

*Frequency and Percent of the FIRO-B™ Total Need for Control Scores*

<table>
<thead>
<tr>
<th>Total Need for Control Score</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (0–5)</td>
<td>23</td>
<td>52.3</td>
</tr>
<tr>
<td>Medium (6–12)</td>
<td>21</td>
<td>47.7</td>
</tr>
<tr>
<td>High (13–18)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note.* $N = 44.$

Summary of Michigan Superintendents’ Perceived and Reported MBTI® Types

Table 12 gives the frequency and percent of the perceived MBTI® types. The Michigan superintendent participants (25%) perceived themselves, as self-reported on the demographic questionnaire, as being Extraversion-Sensing-Thinking-Perceiving types most often.

Table 13 provides the frequency and percent of the reported MBTI® types of the Michigan superintendent respondents. The reported MBTI® types were provided by the publisher, Consulting Psychologists Press, Inc., who computer scored the instruments and returned the data to the researcher. The largest reported group (22.7%) was Introversion-Sensing-Thinking-Judging types. The second largest group (20.5%) was reported as being Extraversion-Sensing-Thinking-Judging types. No superintendent was reported as an Introvert-Sensing-Feeling-Perception type, and no superintendent was reported as an Extravert-Intuitive-Feeling-Judging type.
Table 12

*Frequency and Percent of Michigan Superintendents’ Perceived MBTI® Types*

<table>
<thead>
<tr>
<th>Perceived</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENFP</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>ENTJ</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>ENTP</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>ESTJ</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>ESTP</td>
<td>11</td>
<td>25.0</td>
</tr>
<tr>
<td>INTJ</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>INTP</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>ISFP</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>ISTJ</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td>ISTP</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 13

*Frequency and Percent of Michigan Superintendents’ Reported MBTI® Types*

<table>
<thead>
<tr>
<th>Perceived</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENFP</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>ENTJ</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>ENTP</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>ESFJ</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>ESFP</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>ESTJ</td>
<td>9</td>
<td>20.5</td>
</tr>
<tr>
<td>ESTP</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>INFJ</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>INFP</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>INTJ</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>INTP</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>ISFJ</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>ISTJ</td>
<td>10</td>
<td>22.7</td>
</tr>
<tr>
<td>ISTP</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results of the Research Questions

Three research questions were developed for this study. Inferential statistical analyses were used to address these questions. All decisions on the statistical significance of the findings were made using a criterion alpha level of .05.

Research Question 1

The first research question examined the relationship between the FIRO-B™ leadership styles (Expressed Control and Wanted Control) and the continuous scores from the MBTI® reported personality preference types (Extraversion-Introversion/Sensing-Intuition/Thinking-Feeling/Judging-Perception). Pearson product moment correlation coefficient analyses were used to examine the relationship between each respondent’s scores for each leadership style and their continuous scores for each personality preference type in order to determine if a correlation existed between interpersonal leadership style and personality type as measured by the selected instruments. Table 14 shows the correlations. None of these relationships was statistically significant, but it is worthy to note that three of them: Sensing-Intuition, Thinking-Feeling, and Judging-Perception are in the same direction as national samples (Hammer & Schnell, 2000).

Table 14

<table>
<thead>
<tr>
<th>FIRO-B™</th>
<th>E-I</th>
<th>S-N</th>
<th>T-F</th>
<th>J-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>eC</td>
<td>.01</td>
<td>.12</td>
<td>-.11</td>
<td>.02</td>
</tr>
<tr>
<td>wC</td>
<td>-.14</td>
<td>-.08</td>
<td>.11</td>
<td>-.08</td>
</tr>
</tbody>
</table>

Note. N = 44. ns. Positive correlations are associated with MBTI® preferences I, N, F, and P, whereas negative coefficients are in the direction of MBTI® preferences E, S, T, and J. E-I = Extraversion-Introversion; S-N = Sensing-Intuition; T-F = Thinking-Feeling; J-P = Judging-Perception; eC = Expressed Control; wC = Wanted Control.
Research Question 2

The second research question examined the relationship between perceived, as self-reported on the demographic questionnaire and CPP, Inc. reported MBTI® preferences Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perception. The perceived and reported MBTI® preference categories were crosstabulated. Four chi-square tests were conducted to determine the independence between perceived and reported personality preference types. Table 15 presents the results of these analyses. There were no statistically significant associations found between the reported and perceived MBTI® personality types. Based on these findings, the reported and perceived personality preference types are independent of one another. There appears to be no relationship between the perceived and reported MBTI® types.

Table 15

Crosstabulations for MBTI® Perceived and Reported Categories

<table>
<thead>
<tr>
<th>Perceived MBTI</th>
<th>Reported MBTI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Extraversion/Introversion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>15</td>
<td>68.2</td>
</tr>
<tr>
<td>Introversion</td>
<td>7</td>
<td>31.8</td>
</tr>
<tr>
<td>$\chi^2 (1) = 2.32$, ns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensing/Intuition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensing</td>
<td>18</td>
<td>66.7</td>
</tr>
<tr>
<td>Intuition</td>
<td>9</td>
<td>33.3</td>
</tr>
<tr>
<td>$\chi^2 (1) = .83$, ns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking/Feeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking</td>
<td>30</td>
<td>90.9</td>
</tr>
<tr>
<td>Feeling</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>$\chi^2 (1) = .68$, ns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judging/Perceiving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judging</td>
<td>9</td>
<td>29.0</td>
</tr>
<tr>
<td>Perceiving</td>
<td>22</td>
<td>71.0</td>
</tr>
<tr>
<td>$\chi^2 (1) = .38$, ns</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $N = 44$. 
Research Question 3

The third research question examined the relationship between the FIRO-B™ leadership styles (Expressed Control and Wanted Control) and the MBTI® perceived personality preference types (Extraversion-Introversion/Sensing-Intuition/Thinking-Feeling/Judging-Perception) as self-reported on the demographic questionnaire. Point biserial correlation coefficient analyses were used to examine the relationships. Table 16 presents the correlations where one significant relationship was found between the MBTI® perceived preference types Sensing-Intuition and the FIRO-B™ leadership style Expressed Control. Superintendent respondents with the MBTI® preference for Sensing expressed a greater need to be influential and responsible in their districts than other preference types. The interpretation for this conclusion was derived from the standard language descriptors for Expressed Control and Wanted Control, as outlined by Waterman and Rogers (2004, p. 2).

Table 16

Correlations between FIRO-B™ Leadership Styles with Perceived MBTI® Personality Type Components

<table>
<thead>
<tr>
<th></th>
<th>E-I</th>
<th>S-N</th>
<th>T-F</th>
<th>J-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRO-B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eC</td>
<td>.22</td>
<td>-.33*</td>
<td>.03*</td>
<td>-.17</td>
</tr>
<tr>
<td>wC</td>
<td>.03</td>
<td>.07</td>
<td>.67</td>
<td>-.13</td>
</tr>
</tbody>
</table>

Note. N = 44. Positive correlations are associated with MBTI® preferences I, N, F, and P, whereas negative coefficients are in the direction of MBTI® preferences E, S, T, and J. E-I = Extraversion-Introversion; S-N = Sensing-Intuition; T-F = Thinking-Feeling; J-P = Judging-Perception; eC = Expressed Control; wC = Wanted Control.

*p < .05.
No other relationship was statistically significant. The reader is reminded that there is no relationship between the Michigan superintendent respondents’ perceived and reported preference types.

Summary

Chapter 4 presented the results of the analyses of data. It included an introduction, the description of the sample, the results of the demographic data, a summary of the results of the demographic data, and the results of the data from the research questions.

The data from the research questions are summarized as follows: No statistically significant relationships were found between the Michigan superintendents’ FIRO-B™ interpersonal leadership styles and their reported MBTI® personality preference types, but it is worthy to note that three of the preference scales: Sensing-Intuition, Thinking-Feeling, and Judging-Perception are in the same direction as national samples (Hammer & Schnell, 2000).

Four chi-square tests were conducted to determine the independence between perceived and reported personality preference types. Table 15 presented the results of these analyses. There were no statistically significant associations found between the reported and perceived MBTI® personality preference types. Based on these findings, the reported and perceived personality preference types are independent of one another.

Point biserial correlation coefficient analyses were used to examine the relationships between the superintendents’ FIRO-B™ interpersonal leadership styles and their perceived personality preference types as measured by the MBTI®. Table 16 presented the correlations, where one statistically significant relationship was found between the MBTI® preference types Sensing-Intuition and the FIRO-B™ leadership style Expressed Control. Michigan superintendent respondents with the MBTI® preference for Sensing expressed a greater need to
be influential and responsible in their districts than other preference types. The interpretation for this conclusion was derived from the standard language descriptors for Expressed Control and Wanted Control, as outlined by Waterman and Rogers (2004, p. 2).

Twenty-five percent (11) of the Michigan superintendent respondents perceived that their MBTI® type was Extravert-Sensing-Thinking-Perception most often, but the majorities were reported as being Extravert-Sensing-Thinking-Judging types (20.5%) and as Introvert-Sensing-Thinking-Judging types (22.7%).

Twenty-seven percent of the sample had scores indicating a need for low Expressed Control and low Wanted Control. According to Waterman and Rogers (2004), these data suggest that the respondents “may prefer to work in an environment where they can do things in their own way, at their own pace, and without close supervision, structure, or rules” (p. 19). It is not clear if the descriptors, as defined by the authors, are also descriptors for individuals who are in the position of superintendent.

Eighteen percent of the respondents in the sample had scores indicating a need for medium Expressed Control and low Wanted Control. According to Waterman and Rogers (2004), this data suggests that the superintendent respondents “may enjoy working in an environment where their flexibility either to take directions or be the leader is valued. Even though (or more likely, because) they do not need to control people, they are probably well suited to leadership roles” (p. 22).

Nine percent of the superintendent respondents had scores indicating a need for high Expressed Control and low Wanted Control. Waterman and Rogers (2004) describe these individuals as ones who may enjoy working in an environment where they are trusted to accomplish tasks with minimal supervision, even when this involves high risk. They are likely to enjoy
positions of influence, leadership, and power and will find it frustrating when they cannot have their say. Opportunities to influence others . . . may be essential in order to feel motivated and happy in their work. (p. 25)

Additionally, 23% of the Michigan respondents had scores indicating a need for medium Expressed Control and medium Wanted Control. According to Waterman and Rogers (2004), this data indicates that these Michigan superintendent respondents “prefer to work in an environment in which they can influence decisions or lead, but one that also provides a democratic atmosphere where they share responsibility for success and failure; the respondents are likely team players who are happiest making decisions with support and input from others” (p. 23).

Nine percent of the sample had scores indicating a need for high Expressed Control and medium Wanted Control. According to Waterman and Rogers (2004), these individuals “may prefer to work in an environment where they can individually distinguish themselves but where responsibilities can be rotated or shared. These respondents are likely to enjoy influencing and being an influential and powerful group member and thrive in positions that give them authority to manage or supervise others” (p. 26).

When the scales (Expressed Control and Wanted Control) are combined for the FIRO-B™ Total Need for Control scores (Table 11) the superintendent participants are somewhat balanced between low (52.3%) and medium (47.7%) scores.

There were no respondents with high Total Need for Control (Expressed Control and Wanted Control) scores.
CHAPTER V. DISCUSSION

Introduction

The purpose of this chapter is to present a summary of the investigation and its contribution to the area of educational leadership. This chapter includes a synopsis of the literature review used to justify the study, the procedures employed by the researcher, and an interpretation of the results in terms of their implications for future research.

Summary

*Summary of the Literature on Leadership and the Superintendency*

The term *leadership* is ubiquitous in the current wave of theoretical, empirical, practitioner, and popular literature on education reform, yet there is an evident lack of consensus about what the term means as it applies to school superintendents (Hill, P. and Lewis, A. as cited in Education Writers Association, 2002). According to Chalker (1992), school superintendents must be strategic planners, exceptional communicators, team builders, organizational managers, and instructional leaders. The American Association of School Administrators lists leadership and district culture as the first standard under *General Professional Standards for the Superintendency*. As is clear from this terminology, and as a review of the literature shows, today’s superintendent is required to simulate the superlative CEO of a large, complex corporation (Goodman, as cited in Education Writers Association, 2002). Chalker’s portrayal of an excellent school superintendent reflects Bennis’ (1984a; Razik & Swanson, 2001; Yukl, 2006) model of exemplary leadership qualities. However, despite the sizable body of research on leadership in business organizations, there have been few systematic studies of educational leadership.
The position of the school superintendent has changed radically since its earliest beginnings, gradually evolving into a complex array of roles, in all of which the superintendent is expected to exhibit behavior and characteristics that constitute leadership. While not all of the superintendent’s constituents—principals, school administrators, teachers, parents, students, school board members, community leaders, peers—agree on what leadership means, they would probably all agree that they know it when they see it.

The professional and research literature on leadership in the superintendency is relatively sparse (Thomas, as cited in Education Writers Association, 2002), so that it has been necessary to draw on research conducted by practitioners of a wide range of disciplines, from psychology to business management, in order to assemble the relevant theoretical and empirical background to the current research. In looking at what has been written about superintendents as leaders, however, it becomes clear that the emphasis is largely on skills (Thomas, J., as cited in Education Writers Association, 2002), rather than on personality traits or “effective leadership characteristics and have not linked leadership styles to district or student performance” (p. 5), suggesting that there is a great need for research into this element of leadership.

Part of the reason for the current emphasis on skills in superintendents (Shibley, 2002) may be that they are attempting to exercise leadership in a time of great turmoil in American public education and in an atmosphere of educational reform (AASA, 1993; Murray, 2006a). As a result, accountability has become a common watchword applied to superintendents and the ways in which they exercise their leadership in administering educational policies and practices and managing the people who comprise their local communities. While there have been recent attempts to professionalize the superintendency, there, too, the emphasis has been on developing
skills, rather than on cultivating the personality traits that distinguish effective leaders from ineffective ones.

The generic model of leadership currently being applied to school superintendents has its roots in business management and, as such, is based on a long history of theoretical and empirical research. The earliest attempt to develop a conceptual basis for effective business management was “scientific” in the sense that it attempted to reduce leadership practices to a set of skills, policies, and procedures. Conceived in the manufacturing age of the early 20th century, Taylor’s (1916; Razik & Swanson, 2001) concept of scientific management has never entirely disappeared from leadership studies. Aspects of scientific management persist even in recent constructs such as situational or transformational leadership (Siegrist, 2000).

The earliest models of leadership were based on certain traits thought to be common to strong executives. Gradually evolving into behavioral models that found empirical support, the early benchmark studies are the ancestors of more modern theoretical models and are credited with establishing certain key concepts such as leadership style that remain prominent in leadership research.

Part of the tradition in leadership research focuses on situations or contingencies that leaders face, and suggests that leadership behavior is not strictly determined by personality traits, but can change, depending on the context (Gardner & Martinko, 1996). Factoring in environmental elements, and allowing for variability in leader behavior has, perhaps ironically, led investigators back to a consideration of personality in leadership, on the assumption that personality can determine a leader’s ability to adapt to contingencies (Gardner & Martinko, 1996).
Currently (Atwater, personal interview, December, 2005; Brower & Balch, 2005; Burns, 2003; Yukl, 2006; Zhu et al., 2005), one popular model is *transformational leadership*, which is particularly congruent with the principles of education reform and aptly suited to an educational system in need of radical transformation and in need of leaders who can induce organizational transformation (Atwater, personal interview, December, 2005; Bass and Avolio, 1994; Brower & Balch, 2005; Burns, 2003; Walck, 1992; Yukl, 2006; Zhu et al., 2005).

Again, based on business models, there is much current talk in education about leaders with *vision* who are capable of motivating their followers (Brower & Balch, 2005; Burns, 2003; Shibley, 2002; Yukl, 2006).

The relationship between personality and leadership has been extensively studied in the last 80 years (Myers et al., 1998; Hammer, 1996). However, no firm conclusions have been reached (Hammer, 1996). Researchers may have developed interest in style or gender differences in leadership. Although there is little research into the influence of gender on school leadership, there is clearly a need for such research (Gewertz, 2006; Skrla, 2000). The educational system is marked by a persistent imbalance in power whereby the vast majority of practitioners are women whereas the majority of leadership positions are held by men (Gewertz, 2006; Glass et al., 2000).

The present study is based on the Jungian psychological types, developed in the 1920s, and operationalized in the 1940s in the MBTI®, which remains the standard personality measurement instrument. While there have been some attempts to develop theoretical foundations for personality that do not rely on the Jungian concepts, they continue to dominate the field, as does the MBTI®. Recently, there have been attempts to develop personality measures other than the MBTI®, partly in response to what are considered flaws in its design and construction, but as yet no one instrument has proved to be better at assessing personality,
nor has any instrument been used in so many different contexts (Gardner & Martinko, 1996; Myers et al., 1998;). For that reason, the MBTI® was the instrument of choice for the current research into leadership in the superintendency. Sample questions from the MBTI®: Form M are located in Appendix C.

Summary of Research on the FIRO-B™ and the MBTI®

The theory of interpersonal orientation, proposed by Schutz (1958), is based on the assumption that individuals have a basic desire for camaraderie. Schutz developed a model of three interpersonal needs: the need for inclusion, the need for control, and the need for affection. From this theoretical basis, he developed the FIRO-B™. The instrument has since become a standard measure of compatibility between individuals and between an individual and a group (Hammer & Schnell, 2000). Its use in organizations is apparent, either as a substitute for a personality measure or as an adjunctive measure that can be used to determine the “fit” between an individual and the organization (Hammer & Schnell, 2000).

Sample questions from the FIRO-B™ are located in Appendix C. Readers who are interested in more background on the FIRO-B™ instrument are referred to the FIRO-B™ Technical Guide (Hammer & Schnell, 2000).

In 1941, Myers and Briggs began developing and testing an instrument based on Jungian psychological preferences, or types, that became the MBTI® personality inventory. Their aim was to operationalize Jung’s theories for practical application. In more than 50 years of use, the MBTI® has amassed an immense empirical history consisting of more than 4,000 studies (Myers et al., 1998). In 1990 alone, it was administered more than two million times, and it has been translated into numerous languages (Kirby, 1996).
In design, the MBTI® uses four dimensions of psychological type based on the preferences identified by Jung and further classifies 16 distinct personality types from combinations of those dimensions. The four scales are *Extraversion-Introversion*, which distinguishes between those whose interests are directed outward toward things and people and those whose interests are directed inward toward their own thoughts and feelings; *Sensing-Intuition*, which distinguishes between those who gather information through their five senses and those who perceive patterns and interrelationships cognitively; *Thinking-Feeling*, which distinguishes between those who reach conclusions through objective logic and those who reach conclusions based on personal and social values; and *Judging-Perceiving*, which distinguishes between those who prefer to use thinking or feeling to deal with the outside world and those who prefer to use sensing or intuition.

Determining psychological type from the four MBTI® scales is a complex process. The principal advantage of using the results to assess personality type is the simplicity of the dimensions (referred to as *function pairs*) that can be readily applied to concepts of management and leadership style (Walck, 1992). Not only do the eight preferences combine to form 16 unique types, but the nondominant preferences and the interaction of preferences are thought to influence leadership behavior as well.

The literature is replete with critical analyses of the MBTI®, some comparing it directly with instruments developed from other theoretical bases and some examining specific aspects of MBTI® construction and interpretation. While the MBTI® is not, strictly speaking, controversial within the field of personality assessment, it has been the standard measure for so long, and has accumulated so many years of use, that it is a natural target for investigators seeking to improve the science of personality measurement (McCaulley, 1989).
In general, the arguments against the use of the MBTI® tend to be arguments in favor of another personality measure, rather than against the MBTI®, or they are so arcane on a statistical level that the critic appears to have lost sight of the overall intent of the instrument—to provide individuals in a wide range of organizational settings with a reference point they can use for recruitment, selection, promotion, and a wide range of other applications (Bayne, 1997).

Summary of Findings

A total of 44 Michigan school superintendents completed the study. The low number of female respondents ($n = 5; 11.4\%$) precluded the exploration of gender differences in leadership, although it confirmed the inequitable balance of power in educational leadership. Likewise, the predominance of Caucasian superintendents (96\%) precluded examination of ethnic differences while supporting the need for recruiting minority leaders for increasingly diverse school populations. More than one third of the superintendents (38.7\%) reported leading a district characterized by some degree of racial/ethnic and/or socioeconomic diversity. The largest proportion of superintendents (36\%) led districts within the range of 1,000 to 2,000 students.

Only four respondents (9.1\%) were under 46 years of age, highlighting the experience needed for attaining the position of school superintendent. One half the respondents were between the ages of 46 and 55, with the remaining 40.9\% aged 56 and older. Most respondents had held the superintendency in their districts a fairly short time; close to one half (47.7\%) had been in their positions for five years or less and 27.3\% had been in their positions from 6 to 10 years. The remaining superintendents had been in the position for 11 to 15 years (13.6\%), 16 to 20 years (9.1\%), or 21 years or more (2.3\%).
Not unexpectedly, the school superintendents had high educational levels. The majority of respondents held graduate or postgraduate degrees, with 46% having attained a master’s degree and 30% holding a doctoral degree. One-fourth of respondents held specialist degrees.

The MBTI® test scores indicated that 50% of the responding Michigan superintendents exhibited the Extraversion preference and 50% exhibited the Introversion preference. This finding indicates a slightly higher proportion of introverts than the general American population, which is estimated to be 55% to 60% extraverts (Gardner & Martinko, 1996). On the dimension of Sensing versus Intuition, 61% of the superintendents are classified as Sensing types, corresponding to general population figures, while preferences for Thinking versus Feeling (75%) and Judging versus Perception (70%) both exceeded general population estimates. The largest proportion of respondents (23%) fit the MBTI® profile of Introvert-Sensing-Thinking-Judging, followed by Extraversion-Sensing-Thinking-Judging, describing 21% of the superintendents. In sharp contrast, none of the superintendents reflected the profiles of Introversion-Sensing-Feeling-Perception or Extraversion-Intuition-Feeling-Judging.

On the FIRO-B™ interpersonal leadership style scores, 41% of the responding superintendents exhibited low Expressed Control characteristics and an identical proportion (41%) exhibited medium Expressed Control attributes. Only 18% of the Michigan superintendents displayed high Expressed Control behaviors.

The results were crosstabulated to indicate the association between the Expressed and Wanted control levels. Twenty-four Michigan superintendent respondents had scores indicating low Wanted Control. On the dimension of low Expressed Control and low Wanted Control, 50% of the 24 superintendents or 27% of the sample, exhibited the aspects, 33% of the 24 exhibited
medium Expressed Control and low Wanted Control characteristics, and 17% of the 24 exhibited high Expressed Control and low Wanted Control.

Twenty superintendent respondents had scores indicating medium Wanted Control. Thirty percent of the 20 superintendent respondents exhibited low Expressed Control and medium Wanted Control characteristics, 50% of the 20, or 23% of the sample, exhibited medium Expressed Control and medium Wanted Control attributes, and 20% of the 20 participants exhibited high Expressed Control and medium Wanted Control behaviors. No Michigan superintendent respondent had scores indicating high levels for the interpersonal leadership style of Wanted Control for any of the Expressed Control categories.

On the dimension of Total Need for Control, the respondents were relatively divided between the middle and low range of the scores; 52.3% of the superintendents’ exhibited behaviors associated with the low range of scores and 47.7% exhibited behaviors reflecting the medium range of scores. Analogous to the results for the interpersonal leadership style of Wanted Control, none of the Michigan superintendent respondents was classified as high on the FIRO-B™ Total Need for Control measures.

Conclusions

Three research questions were developed for this study. The first research question examined the relationship between the FIRO-B™ leadership scores and the continuous scores from the MBTI® reported personality preference types (Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving). No statistically significant differences were found between the scores on the two measures but it is worthy to note that three of the scales: Sensing-Intuition, Thinking-Feeling, and Judging-Perception are in the expected directions and align with national samples (see Table 29, Hammer & Schnell, 2000, p. 49). The
finding of no statistically significant differences may have been due to the small sample size. Thompson (1994, in Glaser, 1999) “provides the apt retort: How did you know the results were not trying to avoid being statistically significant?” (p. 3) “So, instead of claiming marginal significance on an a posteriori basis, researchers should report the effect size and let the results carry their own weight” (Glaser, 1999, p. 3). “Cohen (1988) warns, that these effect sizes should be used only as guidelines and not as blind convention, because sometimes small effects may indeed be clinically important (e.g., decreased mortality)” (in Glaser, 1999, p. 3).

Accordingly, then, the finding in the first research question suggests that the 16 personality types, which the empirical research in this study was not designed to measure, are more descriptive of leadership styles than were the individual preference scales (i.e., Extrovert-Introvert, Sensing-Intuition, Thinking-Feeling, or Judging-Perception). Table 13 indicated that almost one half (43.2%) of the present sample are reported as Sensing-Thinking-Judging personality types. This finding also aligns with national samples on leadership style and personality types, which have reported an overrepresentation of Sensing-Thinking-Judging types in leadership positions (Gardner & Martinko, 1996; Hammer, 1996; Hammer & Schnell, 2000; Myers et al., 1998).

Walck (1992) maintained that personality type has a limited influence on leadership style, arguing instead that situational factors are more important in leadership decision making. This study was designed to assess MBTI® personality preference indicators (Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perception) and leadership styles (Expressed Control and Wanted Control) and did not address situational models of leadership.

In 1996, Walck found that 30 years of MBTI® research substantiate a few conclusions. All four functions appear to have some impact on all steps of the decision making process and
some of the attempts to predict behavior using the MBTI® may have been partly due to methodological problems (Walck, 1996). Despite disappointing empirical results, Walck (1996) remains optimistic, as does the present researcher, that new research paradigms will allow type to have a significant impact on superintendent and leadership practice.

Nonetheless, one may wish to argue from the other tack that finding only one significant correlation between personality type and leadership style may erroneously suggest to practitioners and future researchers that perhaps the MBTI® and the FIRO-B™ don’t establish correlations and this line of research probably isn’t worth pursuing.

In response, the researcher provides that the data in this study are in the expected directions of national studies and offers that the fifth edition of *Educational Research* (Gay, 1996) states that “Even if the coefficient was only .11, for example, it would still indicate the existence of a relationship, a low one, but a relationship just the same” (p. 299). “When interpreting a correlation coefficient you must always keep in mind that you are talking about a relationship only, not a cause-effect relationship” (p. 300). “We cannot establish the existence or absence of any inherent cause-and-effect relationship between…variables. The cause-and-effect issue is best considered by the professionals in the different fields, such as psychologists, sociologists, biologists, and so on” (Triola, 1989, p. 512). The empirical research in this study did not examine the entire FIRO-B™ or MBTI® instruments, nor was it designed to examine issues of cause-and-effect. The researcher measured the Expressed Control and Wanted Control scores, only, from the FIRO-B™ and the eight *preference* scores, only, from the MBTI®. It follows, then, that to resolve the interesting and important question(s) as raised above, will require additional research that is beyond the scope of this endeavor.
The second question examined the relationship between perceived, as self-reported on the demographic questionnaire and reported preferences on the MBTI® as measured by Consulting Psychologists Press. Analyses indicated that there was no relationship between the two. Although this finding may appear paradoxical, it is not unusual in leadership research. Some organizational researchers have argued that managers may “falsify” their MBTI® responses to portray themselves as possessing more desirable managerial characteristics (Gardner & Martinko, 1996). With the increasing emphasis on transformational leadership (Atwater, personal interview, December, 2005; Avolio, 1999; Brower & Balch, 2005; Burns, 2003; Yukl, 2006; Zhu et al., 2005), there is evidence that managers may portray themselves as high on transformational leadership behaviors while their actions suggest otherwise. For that reason, the study of leadership typically includes the responses of both leaders and their subordinates (Bass & Avolio, 1994; Yukl, 2006). Discrepancies between the two sets of responses are not uncommon.

It is intriguing that 25% of the superintendents perceived themselves as Extravert-Sensing-Thinking-Perception types but were reported most often as being Extravert-Sensing-Thinking-Judging types (20.5%) and as Introvert-Sensing-Thinking-Judging types (22.7%). Higher scores on perceiving are associated with creativity, exploration, and openness to new ideas (Hammer, 1996; Myers et al., 1998), which are associated with excellent leadership by theorists such as Bennis (1984a; Razik & Swanson, 2001; Yukl, 2006)). In addition, a preference for Perceiving over Judging may be viewed as more advantageous for exercising leadership in the turbulent and unpredictable climate of current education reforms. Ironically, there is some evidence that Judging types may actually be superior educational leaders (Gardner & Martinko, 1996; Hammer & Schnell, 2000).
Research on general population samples has indicated that Extraverts comprise 55% to 60% of the overall U.S. population (Gardner & Martinko, 1996). Extraverts are thought to be sociable and gregarious (Myers et al., 1998), personality traits that are valued in our society. Thus it is not surprising that individuals may perceive themselves as being more extraverted than they actually are. In actual practice, the dimensions of Introversion and Extraversion have negligible impact on managerial effectiveness (Gardner & Martinko, 1996).

The third research question examined the relationship between the FIRO-B™ interpersonal leadership styles Expressed Control and Wanted Control and the MBTI® perceived personality preference types. The only statistically significant relationship emerged between the interpersonal leadership style Expressed Control on the FIRO-B™ and the perceived scores on the Sensing-Intuiting dimension of the MBTI®. Michigan superintendent respondents with the perceived MBTI® preference for Sensing expressed a greater need to be influential and responsible in their districts than other preference types, as determined from the standard descriptors for Expressed Control defined by Waterman and Rogers (2004). This relationship had not been found in previous studies (Hammer & Schnell, 2000), but care must be taken in interpreting these results because this sample size was too small to draw clear conclusions. No other relationship was statistically significant.

It was interesting to find the seemingly paradoxical relationships between the perceived MBTI® types, as self-reported on the demographic questionnaire, and the CPP, Inc. reported MBTI® types. Perhaps the respondents do not know themselves all that well or they may have responded as more collaborative types in order to align with possible district expectations. More research is needed that will investigate the relationship between superintendents’ leadership styles, personality types, and school district performance.
The FIRO-B™ is one of the most widely used instruments for helping individuals to better understand themselves and how they can work more productively with others (Waterman & Rogers, 2004). It has been used in research on educational administration, work-group conformity, and interpersonal group dynamics (Hammer & Schnell, 2000; Schnell & Hammer, 1993, 2004). One of its goals is to increase productivity through familiarity of the interpersonal dynamics in the workplace (Hammer & Schnell, 2000; Schnell & Hammer, 1993, 2004).

The finding of low Expressed Control and low Wanted Control leadership style scores defines 27% of the sample. According to Waterman and Rogers (2004) these data suggest that the respondents “may prefer to work in an environment where they can do things in their own way, at their own pace, and without close supervision, structure, or rules” (p. 19). But, it is not clear if these are also descriptors of individuals in the role of superintendents.

Additionally, 23% of the Michigan respondents had scores indicating a need for medium Expressed Control and medium Wanted Control. According to Waterman and Rogers (2004), this data indicates that these Michigan superintendent respondents “prefer to work in an environment in which they can influence decisions or lead, but one that also provides a democratic atmosphere where they share responsibility for success and failure; the respondents are likely team players who are happiest making decisions with support and input from others” (p. 23).

A complimentary copy of the seventeen-page Leadership Report using the FIRO-B™ and the MBTI® has been provided to each of the respondents. The document is described in chapter three and has provided each respondent with valuable insight into vital areas of her or his personality and behavior such as decision-making, problem-solving, and communication. Based on their individual scores, superintendent respondents are able to review their leadership
approaches, how interactions affect their leadership, what they show first in leadership roles, what their bases of power and influence are, and what influence they have on the organizational culture (Hammer & Schnell, 2000). The report additionally describes the respondent’s leadership style in a variety of circumstances including interpersonal relationships, in teams, and at the level of organizational culture (Hammer & Schnell, 2000).

Readers are urged to be cautious in the extent to which they make generalizations from these findings. The sample size is small and it is unclear if its results are representative of other Michigan superintendents.

Discussion and Implications

The MBTI® profiles of the Michigan school superintendents are quite similar to those that predominate in business literature. Although all personality types appear in managerial samples, there is a notable preponderance of Thinking-Judging types among business managers (Gardner & Martinko, 1996; Hammer, 2000; Walck, 1996). This profile reflects the traditional concept of the leader as rational decision maker expounded in theories of scientific management. Thus, on the MBTI®, the Michigan school superintendents do not differ from their counterparts in the corporate sector.

Shibley (2002) indicated that “there are times when a superintendent must assume the dual role of leader and manager” (p. 21). AASA (1993) standards 4 (Organizational Management), 6 (Instructional Management), and 7 (Human Resources Management) speak specifically to the superintendent’s role of manager. The dimensions of Introversion and Extraversion appear to have minimal impact on managerial behavior (Gardner & Martinko, 1996; Myers et al., 1998). The even distribution of Introverts and Extraverts among the school superintendents in the present study may simply be an oddity of the sample. Alternately, it is
possible that the higher proportion of Introverts (albeit small) than is customarily reported may reflect a personality preference among individuals who pursue educational leadership as opposed to leadership in other endeavors. This topic may be of interest for future research. Characteristics associated with introversion include reflection and introspection (Myers et al, 1998; Hammer & Schnell, 2000), which are often recommended as professional development strategies for educational leadership. Although there is no indication that tendencies toward Introversion or Extraversion affect the outcomes of educational decision making, these preferences may influence the processes by which decisions are made (Gardner & Martinko, 1996; Walek, 1996; Walck, 1992). Research in this area is very limited in educational literature.

In a study of school principals cited by Gardner and Martinko (1996), Introverts engaged in decision-making activities and processed paperwork more frequently than Extraverts whereas Extraverts were more amenable to socializing and politicking than their more reflective counterparts. This finding is quite consistent with the predictions of the Jungian typology. Paradoxically, however, the more introverted principals engaged more often in interactions with outsiders than their more extraverted colleagues. This counterintuitive finding led the authors to caution that attempts to explain managerial behavior on the basis of personality profiles “are speculative and require more research” (Gardner & Martinko, 1996, p. 73).

To date, most research on educational leadership has focused on leadership at the building level. Although most studies have focused on principals’ leadership styles and behavior, teacher leadership is gaining increasing prominence. Leadership at the district level or above remains relatively unexplored. The Thinking-Judging profiles of the Michigan superintendents correspond to the profiles of an overwhelming proportion of business managers, and the preference for Sensing reported by 61% of the sample is representative of both the general
population and of business managers (Hammer, 1996). However, while organizational researchers have found that Sensing types comprise the majority of middle and lower level managers, Intuitors predominate at the executive level (Gardner & Martinko, 1996; Hammer and Schnell, 2000; Myers et al., 1998). In corporations, there is evidence that the proportion of Intuitive types increases at each level of the organizational hierarchy. In fact, studies including educational administrators have found a higher proportion of Sensors among school principals but a higher proportion of Intuitors among school superintendents (Hammer & Schnell, 2000; Myers et al., 1998).

According to Gardner and Martinko (1996), the higher proportion of Intuitors among top managers is consistent with the idea that executive decision making requires innovative, strategic, holistic thinking (Shibley, 2002), characteristics associated with Intuiting over Sensing. These qualities are also reflected in Bennis’ (1984b; Razik & Swanson, 2001; Yukl, 2006) concept of leadership. The question arises of whether Intuitors possess conceptual skills that lead to greater promotion to executive positions, or whether individuals develop these skills as they advance up the hierarchical ladder and encounter situations that demand more complex decision-making processes. Gardner and Martinko (1996) suggested that each explanation may be equally valid, or the dynamics may be interactive. They conceded that given the available research, the answer is purely speculative. This is especially true in the area of educational leadership where there is a notable dearth of research on district level (or higher) administration (Thomas, as cited in Education Writers Association, 2000). The findings of the present study contrast with those reporting a higher percentage of Intuitors among school superintendents, but the limited number of such studies makes any conclusion speculative (Myers et al, 1998).
The Judging-Perceiving dimension of the MBTI® has been given the least attention in managerial research (Myers et al., 1998). Consistent with the characteristics of Judging versus Perceiving, there is some indication that managers who score high on Judging are more concerned with structure and control than Perceivers, who are less likely to emphasize organization and control (Gardner & Martinko, 1996; Hammer & Schnell, 2000). In a 1990 study of school principals, Gardner and Martinko (1996) found a disproportionate number of Judging types among high performing principals (84%), compared to 67% of moderate performing principals. However, their study of principals, like the present study of school superintendents, points to the higher proportion of Judging types among educational leaders. In their principal study, Gardner and Martinko (1996) proposed that “the planned and orderly nature of organizations provides the type of environment in which Js may thrive, while Ps become frustrated” (p. 77). Although the authors acknowledged that some organizational environments may favor the more creative and less orderly preferences of Perceivers (research and development, for example), the fact that Judging types tend to flourish in educational leadership is directly relevant to the present study of Michigan school superintendents.

Given this research, the discrepancy between the Michigan school superintendents’ perceived preferences for Perceiving, as self-reported on the demographic questionnaire, and their CPP, Inc. reported preferences for Judging is particularly intriguing. In view of the powerful impact exerted by situational factors on leadership behavior (Walck, 1992), it is possible that school superintendents feel that Perceivers have an advantage. One potential explanation is that the current literature on education reform emphasizes concepts such as innovation (Murray, 2006a), experimentation, and diversity (Shibley, 2002), which are more congruent with the characteristics of Perceiving than Judging. Some superintendents may prefer
to view themselves as possessing qualities they deem more socially attractive. Alternately, the
environment of educational administration has undergone a radical transformation from one
where success was equated with a reliance on traditional practices to one marked by change,
uncertainty, and rampant restructuring and reforms (Houston, as cited in Education Writers
Association, 2002; Murray, 2006a). Individuals with a preference for Perceiving may indeed
have an advantage in educational leadership that is recognized by today’s superintendents
(Myers et al, 1998).

Demographically, it is interesting to note the differences between the ages of the
Michigan superintendents and the duration of their experience in their current positions. On one
hand, this may simply be a logical reflection of the experience required to earn a position as a
school superintendent. On the other hand, it implies that the majority of school superintendents
gained most of their training and experience in a much more stable environment and one where
the roles of educational stakeholders were more clearly defined (Shibley, 2002). While there is
general consensus that personality affects individual responses to change, there is no precise
mechanism for assessing the interaction between the two (Walck, 1992). The question posed by
Gardner and Martinko (1996) is especially pertinent in the context of education reform. That is,
does the predominance of Intuiting (or other qualities) at higher levels of management mean that
individuals possessing these qualities are more likely to be promoted, or that they develop them
in accordance with the demands of new situations?

It would be interesting to conduct a follow-up study of the responding Michigan
superintendents, particularly those with the least experience in their current positions, to assess
their responses after they have had more experience in their districts. Would there be greater
congruence between their perceived and reported MBTI® scores? Would the respondents exhibit
higher preferences for Intuiting, consistent with the assumption that Intuitors are better suited for the complex decisions required at higher levels of administration (Hammer, & Schnell, 2000; Myers et al, 1998)? Would the respondents score higher on Perceiving after navigating current school reform initiatives (Murray, 2006a)? As Gardner and Martinko (1996) observed, there are few such available studies in organizational research.

Frymier (1996) observed marked distinctions in the way school superintendents interpret accountability. Some school superintendents use accountability as a threat, so that it “blunts enthusiasm, stifles initiative, or thwarts creativity” (p. 13), while others use it to improve school quality at the expense of the principals, teachers, and staff who must meet the standards imposed on them. Ideally, accountability should serve as a mechanism for promoting high professional standards and fostering individual and collective responsibility for educational outcomes. Collegiality is typically characteristic of effective schools as is strong district support.

The FIRO-B™ leadership style profiles of the Michigan superintendents suggest that the vast majority would be amenable to collaborative leadership. Indeed, a preference for total control would be counterproductive for administrators who are accountable to multiple stakeholder groups (Gardner & Martinko, 1996; Shibley, 2002; Gewertz, 2006). Successfully assuming the role of a district leader demands a degree of flexibility and adaptability to different demands. A possible explanation for Frymier’s (1996) observation that some school superintendents feel compelled to suppress innovation in the name of accountability suggests that they feel their own position is threatened if schools in their district do not meet the designated standards. Bennis (1989; Razik & Swanson, 2001; Yukl, 2006) described in detail how the impositions of external demands (i.e., the Michigan Education Assessment Program (MEAP), the national No Child Left Behind Act initiatives, worries about the avian flu, etc.) inhibit
managers from displaying the characteristics of excellent leadership. Ironically, while managers often revert to controlling behaviors when faced with uncertainty, they actually undermine organizational outcomes. Reports of schools that strive to meet accountability standards by “teaching to the test” yet fail to meet the desired outcomes illustrate this point.

In 1993, the AASA proposed the *Professional Standards for the Superintendency* with the goal of establishing benchmarks for selecting, training, and developing school superintendents. The standards were derived from extensive interviews as well as comprehensive review of the existing literature. The eight proposed standards emphasize roles and responsibilities rather than personal or leadership characteristics; thus they must be read carefully to disclose clues about the type of person and the type of behavior expected of a professional school superintendent. For example, Standard 1, “Leadership and District Culture,” includes references to empowering others and expressing multicultural understanding and Standard 3, “Communications and Community Relations,” refers to building consensus. Standard 4 “Organizational Management,” and Standard 7, “Human Resources Management,” are focused strictly on skills and make no mention of standards for personal interaction.

Overall, the AASA Standards are remarkably similar to the managerial qualities expected in business organizations. Therefore, it is not unexpected that the MBTI® personality profiles of the Michigan school superintendents are consistent with those commonly found in organizational literature. In general, there is a predominance of Sensing-Thinking-Judging types in business management (Hammer, 1996; Hammer & Schnell, 2000; Walck, 1996) as in the present study of superintendents.

Coe (1992) is among the theorists who have cautioned that the shadow, or less-preferred preferences, may lead to misinterpretation of the MBTI®. Alternately, some human resources
professionals have advocated that individuals work to develop the less dominant preference on each dimension. Virtually all studies have reported a predominance of Thinking over Feeling types in organizational management (Gardner & Martinko, 1996; Hammer & Schnell, 2000; Myers et al., 1998). However, if one looks at the AASA Standards, roles and tasks involving empowerment, multicultural understanding, communication, and consensus building clearly draw on behaviors associated with Feeling (Myers et al., 1998; Hammer & Schnell, 2000). This is not especially different from the emphasis in transformational leadership on empowering subordinates through transformational decision making (Brower & Balch, 2005), respecting the uniqueness of organizational members, and inspiring commitment to shared values and goals (Avolio, 1999; Bass & Avolio, 1994; Brower & Balch, 2005; Yukl, 2006; Zhu et al., 2005). In particular, school superintendents are called upon for community building activities and are required to negotiate with a variety of stakeholder groups representing different interests and often with competing agendas (Gewertz, 2006; Murray, 2006a; Shibley, 2002).

There is no evidence that either Thinking or Feeling types make more effective managers, although interestingly, the only study Gardner and Martinko (1996) found to report a direct relationship between the Thinking-Feeling dimension and managerial effectiveness consisted of school principals. There was a definite overrepresentation of Thinking types among high-performing principals. Whether this finding applies to school superintendents is speculative and may be a topic for future research. However, standards of excellence for leaders in education as well as other endeavors suggest that it may be advantageous for school superintendents with a strong preference for Thinking to cultivate Feeling behaviors as well (Hammer & Schnell, 2000; Myers et al., 1998).
The leadership styles profiles of the school superintendents suggest that they can adapt their control behaviors to the demands of the situation. The contingency model developed by Vroom and Yetton (1973; Yukl, 2006) assumes that the leader’s behavior is a result of the interactions between situational variables and his or her personal characteristics. The MBTI® profiles of the superintendents in the current study are congruent with those reported in managerial research, and there is no disparity between their MBTI® profiles and their FIRO-B™ leadership style profiles. The extensive research review conducted by Gardner and Martinko (1996) shows that successful managers display a range of personality types, although the predominance of Sensing-Thinking-Judging types in the present study reflects the findings of a majority of organizational studies. The present study did not attempt to correlate the personality profiles or leadership styles of the superintendents with the educational outcomes of their respective districts. Gardner and Martinko (1996) have conducted several studies examining the relationship between the MBTI® profiles and performance of school principals, with the finding that Sensing-Thinking-Judging types tend to be more effective principals. If the superintendents in this study had earned their positions by virtue of being successful principals, it would suggest a relationship. Since the study did not delve into the prior experience of the respondents, this is purely speculative. However, the findings of this study, in conjunction with those reported by Gardner and Martinko (1996), indicate that school principals and school superintendents tend to have common personality profiles (Hammer & Schnell, 2000; Myers et al, 1998).

Recommendations

Analogous to the explosion of leadership research that accompanied the rampant restructuring of business organizations during the 1980s and 1990s, current school reform initiatives have generated an upsurge of interest in educational leadership. Most research to date
is on principal and teacher leadership, with an emphasis on transformational leadership (Atwater, personal interview, December, 2005; Brower & Balch, 2005; Burns, 2003; Siegrist, 2000; Yukl, 2006; Zhu et al., 2005). Ironically, while school superintendents occupy a more powerful position in the educational system, there is a scarcity of research on leadership among school superintendents. Both the MBTI® and the FIRO-B™ are valuable instruments for assessing the characteristics of school superintendents. There are a few studies applying the MBTI® to the characteristics of school superintendents; however, these were conducted from the perspective of organizational psychology rather than educational leadership per se (Hammer & Schnell, 2000; Myers et al., 1998). At least until very recently, principals as well seem to have drawn the attention of organizational researchers more than educational researchers, who focus more on teachers and students.

It is widely recognized that a major barrier to nationwide education reform is the fact that the U.S. educational system is governed by state and local mandates as well as federal legislation. There is remarkable variation among the practices of local school districts. Furthermore, even a single school district can display considerable diversity. The marked differences among school districts strongly imply a need for more extensive research on the situational factors involved in leadership decisions. While the personality profiles of school superintendents may be fairly homogenous (that is, a predominance of Sensing-Thinking-Judging types), the issues they face in serving constituents and meeting accountability standards can be dramatically different. The quality of district leadership would benefit by systematic research on the interaction of superintendents’ behavior and educational outcomes (Shibley, 2002; Thomas, as cited in Education Writers Association, 2002). The systematic accumulation of
empirical research could aid in selecting candidates who are best suited to the needs of particular school districts.

As Gardner and Martinko (1996) pointed out, while there is no “one” effective managerial personality profile, individuals with different personality profiles may be better suited to particular situations. Similarly, Atwater (personal interview, December, 2005), Avolio (1999), Bass and Avolio (1994), Brower & Balch (2005), Burns (2003), Yukl (2006), and Zhu et al. (2005) emphasize that transformational leadership can take a variety of forms. “According to Bass (1996, 1997 as cited in Yukl, 2006, pp. 264-265), transformational leadership is considered effective in any situation or culture. The theory does not specify any conditions under which authentic transformational leadership is irrelevant or ineffective. In support of this position, the positive relationship between transformational leadership and effectiveness has been replicated for many leaders at different levels of authority, in different types of organizations, and in different countries” (Bass, 1997, 1998 as cited in Yukl, 2006, p. 265). With respect to the MBTI®, Judging types may thrive in a more stable environment whereas Perceivers may be ideally suited for school districts in the midst of major upheavals (Hammer & Schnell, 2000; Myers et al, 1998). Despite their underrepresentation among superintendents, Feeling types may be especially effective in culturally diverse school districts where community and consensus building are top priorities (Hammer & Schnell, 2000; Myers et al., 1998). Intuitors might be ideal candidates for school districts where superintendents are required to make intensive strategic decisions whereas Sensors are successful in superintendent positions that rely on traditional management skills (Hammer & Schnell, 2000; Myers et al., 1998).

Ironically, there exists a plethora of instruments for examining leadership characteristics and behaviors, yet a dearth of applications of these instruments to studying school
superintendents (Gardner & Martinko, 1996; Thomas, as cited in Education Writers Association, 2002; Gewertz, 2006). There is increasing recognition that the successful implementation of school reform measures requires strong district support (Murray, 2006a). Given this recognition, it is important to understand the qualities of a successful district leader from a variety of perspectives (Shibley, 2002; Thomas, as cited in Education Writers Association, 2002). The present study demonstrates that school superintendents do not differ on personality profiles from their counterparts in other administrative positions (i.e., school principals [Gardner & Martinko, 1996]; or private sector organizations [Hammer, 1996]). However, the situations faced by school superintendents differ significantly from those confronted by managers in private sector organizations. In an environment of radical school restructuring and reforms (Murray, 2006a), there is a definite need for exploring the attributes of school superintendents and their relationship to situational factors and educational (organizational) outcomes (Hammer & Schnell, 2000; Thomas, as cited in Education Writers Association, 2002; Walck, 1996; Zhu et al., 2005).

The present study jump-starts the exploration. Leadership style and personality types are superintendent attributes that cannot be “isolated in a person” (Hartzler, McAlpine, Haas, 2005, p. 3). “Therefore, our observations of a preference may be distorted by the effects of the person’s complete psyche” and/or “the observer’s own filters” (Hartzler et al., 2005, p. 3). Both the FIRO-B™ and the MBTI® contribute significantly to our understanding of leadership orientations and behaviors (Schnell, 1999), but all instruments have limitations (Schnell & Hammer, 2004). “The FIRO-B assessment is not a comprehensive personality test, a judgment about “bad” or “good” behaviors or “bad” or “good” people, or a measure of abilities, career interests, or achievement” (Schnell & Hammer, 2004, p. 2). Similarly, Myers et al., (1998)
admonish that “as with all psychological instruments, the reader (practitioners, future researchers, et al) should keep in mind that self-reports from a limited number of questions, no matter how carefully validated, cannot completely describe any human being” (p. 123). The single intent of this study was limited to reporting the leadership styles and personality preference types of 44 Michigan superintendent participants. The empirical research in this study did not examine the entire FIRO-B™ or MBTI® instruments, nor was it designed to examine issues of cause-and-effect, job effectiveness or performance, or how to screen for hiring new superintendents. One of its strengths is: the MBTI® profiles of the superintendents in the current study are congruent with those reported in managerial research (Gardner & Martinko, 1996; Hammer & Schnell, 2000; Myers et al, 1998), and there is no disparity between their MBTI® profiles and their FIRO-B™ leadership style profiles. The present study did not attempt to correlate the personality preference profiles or leadership styles of the superintendents with situational variables or the educational outcomes of their respective districts. The researcher measured the Expressed Control and Wanted Control scores, only, from the FIRO-B™ and the eight preference scores, only, from the MBTI®. It follows, then, that the resolution to the aforementioned dilemmas will require additional research that is beyond the scope of this endeavor.

The existent study supports the professional use of the MBTI® and FIRO-B™ instruments. For that purpose, the following important interpretation guidelines and principles are recommended by Consulting Psychologists Press, Inc., the publishers of the instruments that are used in this study (Schnell, 1999):

- “The results are not evaluations or skill assessments” (Schnell, 1999, p. 2)
• “The results should be interpreted with a neutral tone and without personal judgment (of “positive” or “negative” results) or with language that connotes abnormality, diagnosis, or clinical labeling” (Schnell, 1999, p. 2)

• “Interpretive statements are treated as hypotheses to test with the participants” (Schnell, 1999, p. 2)

• “The participant is engaged as a joint investigator who can provide additional rationale that supports or denies an interpretation” (Schnell, 1999, p. 2)

• “Caution should be used when making generalizations from report interpretations to estimations about effectiveness (that is, specific knowledge of the performance conditions and context is required)” (Schnell, 1999, p. 2)

• “Readers (practitioners, future researchers, et al) should not conclude that differences between the results and the research are an indicator of dysfunction” (Schnell, 1999, p. 2). “The MBTI® identifies preferences, not abilities or skills;” “…Each type has something to offer and something to learn that could enhance its contribution to the organization” (Hirsh & Kummerow, 1998, p. 9).

Lastly, “a separate individual interpretation of these results is not necessary to benefit from the individualized 17-page Leadership Report(s) using the FIRO-B™ and the MBTI® that are described in chapter three and have been received by each of the superintendent participants, but if participants become curious about other applications,” the publishers recommend that they “please consult the References and Resources on page 17 of the referenced report, or arrange for a private interpretation with a personal coach, counselor, or training and development professional” (Schnell, 2000, p. 5).
Glanz (2003) reiterates what Gardner and Martinko (1996) pointed out, that effective organizations need all types of leaders and there is no “one” effective managerial personality profile, but individuals with different personality profiles may be better suited to particular situations.

As a cautionary note, future researchers are advised that while pre-employment testing, as a means of identifying effective leaders, may be making a comeback (Rudder, C., 2001), based on the findings from the current study and the guidelines and principles from the publishers of the instruments, the personality preference types from the MBTI® or the interpersonal leadership style scales from the FIRO-B™ may not be independently appropriate for exclusively hiring district superintendents. With an ever increasing number of assessment devices being used for hiring to select from, interested researchers are advised to (Rudder, C., 2001): (1) make sure that the theory of personality supporting the assessment device they select, is adequately comprehensive; (2) be certain that the instrument bestows a list of research studies demonstrating its reliability and validity; and (3) ascertain that the selected assessment device is adequately adapted to the particular hiring needs of the district. To avoid legal entanglements, it is advised that the effectiveness of the selected instrument should be documented by statistical evidence which substantiates that the assessment accurately measures the qualities that the district is seeking, that it is job-related, and nondiscriminatory.

Additionally, the Standards for Educational and Psychological Testing (1999) provide that: (1) “If tests are to be used to make job classification decisions (e.g., the pattern of predictor scores will be used to make differential job assignments), evidence that scores are linked to different levels or likelihoods of success among jobs or job groups is needed” (Standard 14.7, p.160); (2) “When evidence of validity based on test content is a primary source of validity
evidence in support of the use of a test in selection or promotion, a close link between test content and job content should be demonstrated” (Standard 14.9, p. 160); (3) “When evidence of validity based on test content is presented, the rationale for defining and describing a specific job content domain in a particular way (e.g., in terms of tasks to be performed or knowledge, skills, abilities, or other personal characteristics) should be stated clearly” (Standard 14.10, p. 160); (4) “If evidence based on test content is a primary source of validity evidence supporting the use of a test for selection into a particular job, a similar inference should be made about the test in a new situation only if the critical job content factors are substantially the same (as is determined by a job analysis), the reading level of the test material does not exceed that appropriate for the new job, and there are no discernible features of the new situation that would substantially change the original meaning of the test material” (Standard 14.11, p. 160); (5) “Estimates of the reliability of test-based credentialing decisions should be provided” (Standard 14.15, p. 162); (6) “Rules and procedures used to combine scores on multiple assessments to determine the overall outcome of a credentialing test should be reported to test-takers, preferably before the test is taken” (Standard 14.16, p. 162); and (7) “The level of performance required for passing a credentialing test should depend on the knowledge and skills necessary for acceptable performance in the occupation or profession and should not be adjusted to regulate the number or proportion of persons passing the test” (Standard 14.17, p. 162).

Psychological testing may prove to be an effective tool for improving job-performance and enhancing hiring skills but its implementation will require extensive planning and future research.
REFERENCES


APPENDIX A. LETTER TO SUPERINTENDENTS
Dear Michigan Superintendent:

My name is Ann Gracia and I am a doctoral candidate at Bowling Green State University, in the department of: Education Administration and Supervision. I am currently conducting research for my dissertation that focuses on whether, and to what degree, a relationship exists between two or more quantifiable variables, e.g., superintendents’ interpersonal leadership styles and reported personality preference types; superintendents’ perceived and reported MBTI® personality preference types; and superintendents’ perceived personality preference types and their interpersonal leadership styles.

You have been randomly selected to participate in this study. To discover your personality preference type, you are being asked to complete the Myers-Briggs Type Indicator®: Form M. It contains 93 items and should take about twenty (20) minutes to complete.

To discover your interpersonal leadership style, you are asked to complete the FIRO-B™ (Fundamental Interpersonal Relations Orientation-Behavior) instrument, which contains only fifty-four (54) items and should also take about twenty (20) minutes to complete. Please do NOT write below question number 54, i.e., the area labeled: MBTI Preferences will be completed for you at the scoring center.

Lastly, there is a brief demographic data/information questionnaire that contains twelve (12) questions and should take less than five (05) minutes to complete.

Please follow the developers’ instructions located on the front of each instrument and kindly return the completed surveys in the enclosed self-addressed envelope by <DUE DATE>. You may indicate your desire to receive a complimentary two-page copy of your personality type and a 17-page copy of your interpersonal leadership style results, which includes an individualized Action Plan, by checking the “YES” box on the data/information sheet.

Please be assured that the alphabetical coding of the assessment instruments is strictly for return identification purposes. I will also need the coding in order to return your complimentary reports. Please do not remove the alphabetical code. Thanks.

Your participation in this study is voluntary and much appreciated. A leather bookmark embossed with my “Thanks” is also yours to keep as a token of my appreciation for participating in this study. It will be forwarded to you as soon as your instruments are returned to me. Know that the identity of all participants will remain confidential, e.g., no school, individual, or district will be identified in the collection, analyses, or reporting of results. However, if you have any questions or concerns, you may contact Ann at 248/432-0128 or her doctoral dissertation committee chairperson, Dr. Leigh Chiarelott at 419/372-7352. In addition, you may contact the Human Subject Review Board Chair at 419/ 372-2481 if any concerns arise over your treatment as a subject. Thank you, again, for your participation.

Sincerely,

Ann Gracia

NOTE: Should you decide to not participate in this study, please return the instruments in the postage paid envelope that has been provided. THANKS.
APPENDIX B. DEMOGRAPHIC QUESTIONNAIRE
Superintendents’ DEMOGRAPHIC QUESTIONS

Instructions:
These surveys will ask you for your attitude(s) about your leadership style [FIRO-B™ (Fundamental Interpersonal Relations Orientation-Behavior)] and personality type [Myers-Briggs Type Indicator®: Form M (MBTI)]. Please follow the developers’ instructions for completing the same. Please do not remove the alphabetic code that is printed on the instruments. It is needed to ensure that you get the correct reports returned to you when the study is completed. Remember that your results will remain confidential.

You may complete these surveys in about 20 minutes (each).
Once completed, please place the survey packet into the stamped return envelope provided and send through the U.S. Mail. Your complimentary leather bookmark embossed with my THANKS will be forwarded as soon as the packet is received.
If you wish to receive a complimentary two-page report of your personality type and a 17-page report of your leadership style, which includes an individualized Action Plan, please check the appropriate line at the end of this questionnaire.
Again, THANK YOU for participating. Please answer [by placing an “X” in the box of the appropriate choice] and return the following:

1. What is your gender?
   - Female (1)
   - Male (2)

2. What is your age?
   - 18-25 years (1)
   - 26-35 years (2)
   - 36-45 years (3)
   - 46-55 years (4)
   - 56 and older (5)

3. How many years have you been with your district?
   - 00-05 years (1)
   - 06-10 years (2)
   - 11-15 years (3)
   - 16-20 years (4)
   - 21 or more years (5)

4. How many years have you been in your position?
   - 00-05 years (1)
   - 06-10 years (2)
   - 11-15 years (3)
   - 16-20 years (4)
   - 21 or more years (5)

5. How diverse (racial/ethnic/socio-economic) is your district?
   - Highly diverse (1)
   - Somewhat diverse (2)
   - Little or no diversity (3)
Superintendents’ DEMOGRAPHIC QUESTIONS

6. Please describe the size of your district:
   - 20,000 – 49,999 (1)
   - 10,000 – 19,999 (2)
   - 5,000 – 9,999 (3)
   - 4,000 – 4,999 (4)
   - 3,000 – 3,999 (5)
   - 2,000 – 2,999 (6)
   - 1,000 – 1,999 (7)
   - 500 – 999 (8)
   - □ □ 500 (9)

7. Which term best characterizes your district?
   - Urban (1)
   - Rural (2)
   - Suburban (3)

8. What is your Educational background?
   - Bachelor’s Degree
     - Field___________________________________________ (1)
   - Master’s Degree
     - Field____________________________________________ (2)
   - Specialist Degree
     - Field____________________________________________ (3)
   - Doctorate Degree
     - Field____________________________________________ (4)

9. Where do you prefer to center your attention and get energy? [Please make one selection]
   - Extraversion [The outer world of people and activity] (1)
   - Introversion [The inner world of ideas and experiences] (2)

10. Do you prefer to obtain data using: [Please make one selection]
    - Sensing (1)
    - Intuition (2)

11. Do you evaluate data using: [Please make one selection]
    - Thinking (1)
    - Feeling (2)

12. Do you maneuver in the outer world using: [Please make one selection]
    - Judging (1)
    - Perceiving (2)

Lastly, I wish to receive my complimentary reports. □ Yes □ No
APPENDIX C. MBTI AND FIRO-B
Sample Items
From the
Myers-Briggs Type Indicator Instrument® Form M
By Katharine C. Briggs and Isabel Briggs-Myers

Your answers will help show you how you like to look at things and how you like to go about deciding things. There are no “right” and “wrong” answers to these questions. Knowing your own preferences and learning about other people’s can help you understand what your strengths are, what kinds of work you might enjoy, and how people with different preferences can relate to one another and contribute to society.

Part I: Which answer comes closest to telling how you usually feel or act?

16. Are you inclined to:
   A. value sentiment more than logic,
   Or
   B. value logic more than sentiment?

20. Do you prefer to:
   A. arrange dates, parties, etc., well in advance,
   Or
   B. be free to do whatever looks like fun when the time comes?

Part II: Which word in each pair appeals to you more? Think about what the words mean, not about how they look or sound.

36. A. systematic
    B. casual

58. A. sensible
    B. fascinating

Part III: Which answer comes closest to describing how you usually feel or act?

59. When you start a big project that is due in a week, do you:
   A. take time to list the separate things to be done and the order of doing them,
   Or
   B. plunge right in?

67. At parties do you:
   A. do much of the talking,
   Or
   B. let others do most of the talking?
Sample Items
From the
Myers-Briggs Type Indicator Instrument® Form M

By Katharine C. Briggs and Isabel Briggs-Myers

Part IV: Which word in each pair appeals to you more? Think about what words mean, not about how they look or how they sound.

79. A. imaginative
    B. realistic

91. A. devoted
    B. determined

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You may change the format of these items to your needs, but the wording may not be altered. You may not present these items to your readers as any kind of “mini-assessment.” This permission only allows you to use these copyrighted items as an illustrative sample of items from this instrument. We have provided these items as samples so that we may maintain control over which items appear in the published media. This avoids an entire instrument appearing at once or in segments which may be pieced together to form a working instrument, protecting the validity and reliability for the instrument. Thank you for your cooperation.

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SAMPLE ITEMS FROM THE

FIRO-B® Instrument
by Will Schutz, Ph. D.

Directions: This questionnaire explores the typical ways you interact with people. There are no right or wrong answers. Sometimes people are tempted to answer questions like these in terms of what they think a person should do. This is not what is wanted here. We would like to know how you actually behave. Some items may seem similar to others. However, each item is different so please answer each one without regard to the others. There is no time limit, but do not debate long over any item.

Expressed Behavior

For each statement below, decide which of the following answers best applies to you. Place the number of the answer to the left of the statement. Please be as honest as you can.

1. never  2. rarely  3. occasionally  4. sometimes  5. often  6. usually

**Control**

_____ I try to be the dominant person when I am with people.

**Inclusion**

_____ I try to include other people in my plans.

**Affection**

_____ I try to have close relationships with people.

Wanted Behavior

For each of the next group of statements, choose one of the following answers:

1. nobody  2. 1 or 2  3. a few  4. some  5. many  6. most people

**Control**

_____ I let other people control my actions.

**Inclusion**

_____ I like people to include me in their activities.

**Affection**

_____ I like people to act close and personal with me.

From the *Fundamental Interpersonal Relations Orientation - Behavior™ (FIRO-B®)* by Will Schutz, Ph.D. Copyright 1989 by CPP, Inc. All rights reserved. Further reproduction is prohibited without the Publisher's consent.
APPENDIX D. DEVELOPMENT OF THE MMPI-2
Development of the MMPI-2

The MMPI-2 (Minnesota Multiphasic Personality Inventory) is the most widely used objective clinical personality test in use today (Butcher & Rouse, 1996). Since its conception in the early 1940s, over 6,000 studies have been published about it. What is the MMPI-2 and what does it do?

The original MMPI was developed to diagnose specific psychological disorders, such as depression and schizophrenia (a disorder of thinking and emotion that is discussed in chapter 13, "Psychological Disorders"). Starke Hathaway, a clinical psychologist, and Charnley McKinley, a neuropsychiatrist, the test's developers, read hundreds of short statements to mentally disturbed patients. They then noted which statements the patients agreed with. The basic purpose of the test was to differentiate among various types of mental patients, as well as to distinguish between mental patients and normal people. The MMPI did indeed do that; certain types of people tend to give certain responses on the test. Thus, the test was used to diagnose problems by first determining who actually had them.

In July 1989 the updated and restandardized MMPI-2 was published. Because the original MMPI was so widely used, great care was taken to improve the original while still keeping the revision compatible. The restandardization was based on a representative sample of 2,600 men and women ranging from 18 to 84 years of age. The sample included Asians, African Americans, Hispanics, Native Americans, and Caucasians. Other sample characteristics included educational, marital, occupational, and economic status. The original 550 items (with 82 reworded to eliminate sex bias and outdated topics), along with 154 new items, were included in an experimental form used in testing. Eventually, 567 items were selected for the MMPI-2 (370 items are used for the basic scales and 197 for the supplementary scales). The MMPI-2 is available in booklet form, on audio cassettes, and on CD-ROM.

The MMPI-2 consists of 567 statements to which the subject responds with true, false, or cannot say. It was designed primarily for adults and has not yet been used for children (although the 1992 MMPI-A was designed for adolescents). The items cover a wide range of topics, including attitudes on religion and sexual practices, perceptions of health, political ideas, information on family, education, and occupation, and displays of symptoms known to be exhibited by certain groups of mentally disturbed people.

The test provides scores on 10 basic clinical scales--hypochondriasis (exaggerated concern about physical health), depression, hysteria, masculinity-femininity, paranoia, hypomania (excitability), psychopathic deviancy, psychasthenia (irrational fears and compulsive actions), schizophrenia (form of psychosis), and social introversion (withdrawal). The MMPI-2 includes 10 supplementary scales that help diagnose such clinical problems as anxiety, repression, ego strength, alcoholism, hostility, dominance, social responsibility, college maladjustment, gender-role, and posttraumatic stress disorder. There are also 15 content scales that measure various aspects of personality. They include: anxiety, fears, obsessiveness, depression, health concerns, bizarre mentation, anger, cynicism, antisocial practices, Type-A personality, low self-esteem, social discomfort, family problems, work interference, and negative treatment indicators.

The MMPI-2 norms are more representative of the normal population, reducing one of the major criticisms of the original MMPI. The revisions strove to eliminate sexist language, cultural bias, and objectionable questions about sex and religion. Because the majority of questions were unchanged, it is possible to compare responses on the old and new forms. At the present time, we do not have enough research studies of the revision to evaluate its effectiveness adequately. Preliminary research suggests that the MMPI-2 will continue to be a useful tool in personality assessment.