PRINCIPAL PERSONALITY AND SCHOOL TRUST

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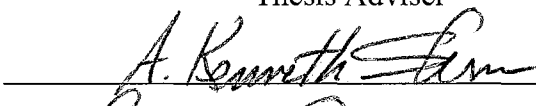

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PREFACE

This study was conducted to provide knowledge pertinent to understanding how the personality of a school principal can predict the level of trust stakeholders place in him or her and the school. Principal personality types were determined by having each principal complete the Myers Briggs Type Inventory. Perceived trust scores in the principal and the school were acquired from parent, student, and teacher surveys. A post *hoc* analysis was conducted to determine how school level related to both parent trust in the principal and school and student trust in the principal.

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NOMENCLATURE

MBTI	Myers-Briggs Type Inventory
I	Introversion
N	Intuition
F	Feeling
P	Perceiving

Chapter One

Introduction

Societies must have trust to function. The foundations of society: families, churches, schools, businesses, communities, and government are dependent on trust between its members. With trust present husbands and wives communicate authentically, store owners treat customers fairly, and government officials conduct their business honestly. Without trust, relationships are weakened or severed and, consequently, the foundations of society can crumble.

Schools are affected by trust and mistrust. Similar to other organizations, a large part of what is accomplished in schools involves personal relationships. Whether the relationships are professional (teacher to principal), parental (parent to student), cordial (parent to teacher and principal), or authoritative (student to teacher and principal), the relationships are either strengthened or weakened by the presence of trust or mistrust. Consequently, a school's success is dependent on trust.

Research has shown how trust is influential in many school relationships. For example, for a school to be effective, teachers need to trust each other and the administration (Hoy, Sabo, & Barnes, 1996). Furthermore, parents with higher levels of trust in teachers are more involved with the schools (Adams & Christenson, 1998). Research has also shown that principals must have trust in the faculty for schools to be successful (Kratzer, 1997). Thus, there is evidence that trust is related to various school relationships and subsequently to the success of the school.

Since the principal is the administrator in charge of the school, stakeholders might argue that their relationships with the principal are among the most important ones.

Furthermore, since trust is critical to relationships the principal must be perceived as being trustworthy to maintain these important stakeholder relationships. Are there principal behaviors or actions that make him or her trustworthy? There is research on the principal behavior. First, the leadership actions of principals affect how much they are trusted. One study found that principal support was highly correlated ($r = .82$) with faculty trust in the principal (Hoffman, Sabo, Bliss, and Hoy, 1994). Another study found teachers' perceptions of principal authenticity correlated with their trust in the principal, organization, and colleagues (Hoy and Kupersmith, 1984). Thus, others' perceptions of a principal's character affect trust. Principal behavior also affects trust. The more frequently principals collaborated with faculty and parents, the more likely faculty and parents were to trust the principal (Tschannen-Moran, 2001). Thus, a principal's actions and behaviors affect trust. What about the principal's personality traits? Is the principal's personality important to school success and to the trust others place in him or her?

Jung (1971) developed the theory of personality type. Jung reasoned that people's seemingly random behavior could be logically explained based on how they perceived and judged their environment (Briggs Myers, McCaulley, Quenk, & Hammer, 1998). He recognized that individuals could be categorized into two attitude fields, extroversion and introversion, and four functions: sensing, intuition, thinking, and feeling. In the 1950's Myers and Briggs built upon Jung's theory by contributing two additional attitudes, judging and perceiving, that supported an individuals dominant function (Briggs Myers et al). The four attitudes and the four functions account for 16 personality types.

Some research provides evidence that principal personality has influence at school. For instance, one study revealed the best performing principals (as determined by supervisor, peer, and teacher evaluations) were the ones with "assertive, imaginative, self-sufficient, and warmhearted" personalities (Lunenburg, 1990, p. 13). Furthermore, other research suggests that one's personality attributes are related to perceived trustworthiness (Butler, 1991). Thus, principal personality has been shown to affect his or her effectiveness and an individual's personality traits have been related to perceived trustworthiness; but, does the principal's personality affect his or her perceived trustworthiness? More specifically, does the personality of the principal affect the parents', students' and/or faculty's level of trust in the administrator? Since no apparent studies have investigated the relationship between principal personality and stakeholder trust in the principal this study aims to fill a knowledge gap in this area as well as answer the aforementioned questions.

Problem Statement and Purpose Statement

Previous research suggests that trust is an important part of successful schools. Studies by Adams and Christenson (2000), for example, have focused on the parent-teacher trust relationship and how this relationship benefits education. However, little research has been conducted on factors influencing trust of principals. More specifically, no studies have investigated the relationship between a principal's personality type and the parent, teacher, and student trust in the school and/or the principal. Therefore, the purpose of this study is to identify principal personality types related to parent, teacher, and student trust in the principal and the school.

Research Questions

Does a principal's personality type predict the trust parents, teachers, and students place in the principal? Does principal personality type predict the trust parents place in the school?

Chapter Two

Literature Review

Introduction

The scholarly literature presents numerous definitions and conceptual approaches to trust. Many definitions of trust refer specifically to a workplace context while others refer to personal and professional relationships. For example, Hoy and Kupersmith (1995) defined trust in an organizational context by stating that trust in an organization is "a generalized expectancy held by the work group that the word, promise, and written or oral statement of another individual, group, or organization can be relied upon." (p. 82) Or put another way, a co-worker's word is his or her bond. Another organizational definition by Baier (1986) states that trust "is a reliance on others' competence and willingness to look after, rather than harm, things one cares about which are entrusted to their care" (p. 259). Baier's definition relates to a school context when parents place their children in the trusting care of a teacher.

Some definitions of trust apply to both personal and professional relationships. Gambetta (1998), for example, defined trust in the following way.

> When we say we trust someone or that someone is trustworthy, we implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him. (p. 217)

While not specifically mentioning organizations, Gambetta refers to "action" – a familiar organizational concept. Similarly, Mishra's (1996) definition of trust, "one party's willingness to be vulnerable to another party based on the belief that the latter party is (a)

competent, (b) open, (c) concerned, and (d) reliable" (p. 265) is a definition that applies to attributes valued in both personal and professional relationships. Once more, Frost, Stimpson, and Maughan (1978) defined trust "as an expectancy held by an individual that the behavior of another person or a group would be altruistic and personally beneficial" (p. 103). This definition relates to individuals fostering productive personal and organizational relationships. Thus, trust is valued in both personal and professional relationships, and the definitions of trust can often be applied to both contexts.

The evolution of the definition and study of trust has been quite involved. In the Cold War in 1950's and 1960's the country was involved in a time of escalating mistrust. During this time Deutsch conducted the first empirical studies involving trust. Deutsch (1958) defined trust this way.

> An individual may be said to have trust in the occurrence of an event if he expects its occurrence and his expectation leads to behavior which he perceives to have greater negative motivational consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed. (p. 266)

Deutsch conducted lab experiments involving individuals interacting with strangers in a mixed-motive situation. Trust was manifested when an individual exhibited mutually beneficial behaviors toward a stranger while knowing the possibility of exploitation existed. Similarly, Zand (1971), following in the footsteps of Deutsch, defined trust behaviorally in his experiment involving trust and managers' problem-solving effectiveness. Zand defined trust as

> consisting of actions that increase one's vulnerability to another whose behavior is not under one's control in a situation in which the penalty one suffers if the

> other abuses that vulnerability is greater than the benefit one gains if the other does not abuse that vulnerability. (p. 230)

Thus, both Deutsch and Zand held to definitions of trust that emphasized the manifestation of trusting behaviors in a climate of vulnerability and risk in order to gain some benefit.

In the late 1960's a new scale for measuring interpersonal trust emerged. Rotter (1967), interested in the distrust young adults had for certain institutions and organizations in society, studied trust within the context of communication. Instead of defining trust as a behavior, Rotter defined trust as "an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon." (p. 652) Unlike Deutsch and Zand who defined trust behaviorally, Rotter defined trust in more general terms. Trust is an *expectancy* one person has for another that the first party's communication can be relied upon.

Similar to Rotter, researchers in the 1970's moved on from the behavioral definitions of trust and defined and measured trust as a judgment or attitude rather than a behavior. Taggart, Stimpson, and Maughan (1978) defined trust as "an expectancy held by an individual that the behavior (verbal or nonverbal) of another individual or group of individuals would be altruistic and personally beneficial to himself." (p. 104) They studied trust by having undergraduate students assigned to groups in which they interacted for approximately 35 hours. The students then completed questionnaires wherein they made specific judgments about how much they trusted the other group members. The results showed that a trusted person is influential, has high self-esteem, does not need to control others, and is willing to be influenced by others.

Since the 1990's studies and definitions of trust began to focus on facets of trust. Cummings and Bromiley (1996) created the Organizational Trust Inventory (OTI). Their three-faceted definition of trusted was

> an individual's belief or a common belief among a group of individuals that another individual or group (a) makes good-faith efforts to behave in accordance with any commitments both explicit or implicit, (b) is honest in whatever negotiations preceded such commitments, and (c) does not take excessive advantage of another even when the opportunity is available. (p. 302)

Thus, Cummings and Bromiley's definition focuses on the facets of honesty, not taking advantage of others and behaving in a manner so as to keep one's commitments.

Bryk and Schneider (2002) studied the social context of trust in schools. By conducting field observations in Chicago elementary schools and studying the literature on trust the researchers realized the importance of "interpersonal social exchanges" (p. 12). Bryk and Schneider further noted that four "considerations" (p. 23), or facets, affected the level of trust in school relationships. The four considerations were respect, competence, personal regard for others, and integrity.

Last, Mishra (1996) too identified four dimensions of trust. Mishra interviewed managers of organizations and reviewed recent studies about trust and found that four common elements of trust consistently emerged. From his findings Mishra defined trust as a multidimensional construct that is "one party's willingness to be vulnerable to another party based on the belief that the latter party is (a) competent, (b) open, (c) concerned, and (d) reliable." (p. 265)

For this study trust is defined as "an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (Hoy & Tschannen-Moran, 1999, p. 189). Similar to Mishra's (1996) definition of trust, Hoy and Tschannen-Moran's definition added the attribute of honesty and replaced the concept of "concerned" with "benevolent." Hoy and Tschannen-Moran's definition of trust is appropriate for a study involving schools first because it encompasses the personal values of benevolence, honesty, and openness that are essential to bolstering the personal relationships present in schools, and second, the definition emphasizes the valued professional attributes of reliability and competency.

Trust Research

Trust is a critical factor in organizational relationships and organizational climate. Mishra and Morrisey (1990) surveyed corporate managers in Michigan to determine their attitudes toward trust in employee/employer relationships. As part of the study the managers were asked to rank (1 to 6) how much they agreed with four proposed definitions of trust. The four definitions of trust included the concepts of integrity, character, confidence, ability, support, commitment, and openness. All four definitions of trust were accepted at a rate of 80% or better. Furthermore, the study showed several advantages of trust in organizations. The list of benefits included improved communication, less employee conflict, less employee turnover, more predictability and confidence, and a willingness to accept criticism. As trust has benefits for businesses, it also has advantages in schools. For instance, Hoy, Sabo, and Barnes (1996) found faculty trust in the principal, defined as "the faculty has confidence that the principal will keep his or her word and act in the best interest of the teachers" (p. 23), and faculty trust

in the teachers, defined as "the faculty believes that teachers can depend on each other in difficult situations and that teachers can rely on the integrity of their colleagues" (p. 23), are related to the organizational health of middle schools. (Organizational health was defined as the school climate or the "internal circumstances" (p. 24) that influence school members' behavior.) Similarly, research has shown that trust is critical in the teacher-administrator relationship (Ceyanes & MacNeil, 1998). Defining trust as "the reliability of the relationship that exists between people, developed over time caused by the behaviors that are formed by the principles and competencies of a person" (p. 6), Ceyanes and MacNeil surveyed school administrators to identify factors that led them to trust the faculty. Besides identifying the faculty's trust-provoking behaviors, the results indicated that trust is important in the teacher-administrator relationship. Furthermore, in a case study of an underachieving school trying to better connect teachers, parents, the community and the principal Henkin and Dee (2001) discovered that trust was the single most important factor to the success of the school. Finally, an action-research study found one of the rewards of trust between teachers and administrators is an improved school climate (Ferris, 1994). Thus, trust must be present for a school to be successful and effective.

Teachers and trust

As in any business, trust between co-workers is vital to the productivity of the organization. Two studies using the same trust scales developed by Hoy and Kupersmith (1985) have shown that trust in colleagues, defined as "a generalized expectancy held by teachers that the word, action, and written or oral statement of others can be relied upon" (p. 39), is related to school effectiveness (Tarter, Sabo, & Hoy 1995; Hoy, Tarter, &

Witkoskie, 1992). However, this trust does not just happen by chance. Tschannen-Moran and Hoy (1998) found that the level of trust teachers have in their colleagues is directly related to the behaviors they exhibit toward one another. Not surprising, one of these behaviors is openness. According to Tarter, Bliss, & Hoy (1989), the more open the climate of a secondary school the greater the level of faculty trust in colleagues. Similarly, Ceyanes and MacNeil (1998) ,although using a different trust measure than Tschannen-Moran and Hoy and Tarter, Bliss, and Hoy, found that teachers who were honest and open with students, friendly, loyal, competent, responsible, and good communicators with parents gained the trust of their principals. Thus, teachers can strengthen the level of trust at a school by the behaviors they exhibit.

Teacher trust is a powerful attribute in schools. First, student achievement is related to the teachers' trust in students and parents. Goddard, Tschannen-Moran, and Hoy, (2001) conducted a study of elementary teachers in third and fourth graders in a large Midwest school district. Using a 15-item trust survey tapping the five teacher-perceived dimensions of trust (honesty, reliability, benevolence, openness, and vulnerability) of parents and students the researchers compared the results with student scores on the Metropolitan Achievement Test. The researchers found that the level of teachers' trust in elementary students and parents can positively predict student achievement.

Teacher trust in colleagues is related to trust in the organization. Hoy and Kupersmith surveyed 944 teachers in 46 rural and suburban elementary schools about trust in colleagues and the organization. The teachers' trust in their colleagues was defined as "the faculty believes that they can depend on each other in difficult situations;

teachers can rely on the integrity of their colleagues" (1984, p. 82). Teacher trust in the organization was defined as "the school district can rely on the school district to act in its best interest and can count on the administration to be fair" (p. 82). Teacher trust in colleagues significantly correlated with trust in the organization.

Teacher trust also affects the level of parental participation at school. Hoy and Tschannen-Moran (1999) surveyed 898 elementary teachers from a large Midwest school district. Half the teachers answered trust questions about parental benevolence, reliability, competence, honesty and openness. The other half answered questions about parental collaboration. The researchers stated that, "trust in clients overwhelmingly explains the degree of parental collaboration in school decision making" (p. 203). Thus, when teachers trust the parents, the parents are more likely to be actively involved at the school.

Parents and trust

What about stakeholders outside of school? Do parents need to trust the teachers and administration? It should first be pointed out that parents and educators might have different meanings for the concept of trust. Gareau and Sawatzy (1995) state, "for parents trusting the school means knowing that the teachers will be able and willing to look after their children's needs and recognize each child's uniqueness" (468). Educators see trust, as it relates to parents and teachers, "as a basic belief in each other's good intention" (468). The parents' definition of trust displays their focus on their child's needs while the educators' emphasis is on doing their professional best for all the students.

The levels of trust parents have in teachers and the levels of trust teachers have in parents sometimes differ. Adams and Christenson (2000) studied trust in the family-school relationship. They defined trust as "confidence that another person will act in a way to benefit or sustain the relationship...to achieve positive outcomes for the students" (p. 480). In the study parents and teachers completed forms of the Family-School Relationship Survey measuring trust and frequency and nature of interaction. The results indicated that the level of trust parents have in the teachers and the level of teacher trust in the parents are higher at the elementary level that at the upper levels. This result may be due in part because parents and teachers are in much closer contact at the elementary schools than at middle and high schools. It is important to notice however that Adams and Christenson (2000) found parents' trust in the teachers dropped significantly between elementary and middle school and then dropped slightly more from middle to high school. Interestingly, in an earlier study Adams and Christenson (1998) found parents of middle school students trust teachers at a higher level than teachers trust parents. Even though parents' trust drops significantly over time it is not as low as the teachers' trust of the parents.

Parental involvement at schools is also related to trust. Adams and Christenson (1998) found that parents with the highest levels of trust were more involved with the school than parents with lower levels of trust. They also discovered higher parental trust levels when the students were receiving higher levels of special education services. Young (2000) found the level of trust between home and school affected the development of parental involvement and its longevity. Thus, trusting parents are involved in school activities more and stay involved longer than distrusting parents.

Why is it important for parents to be involved in the schools? Parent involvement and empowerment has been positively correlated to student criterion reference test performance (Griffith, 1996). Furthermore, Adams and Christenson (2000) found, for high-school aged students, that number of credits earned, grade point average, and attendance all significantly related to parents' trust in teachers. This study does not indicate if the parents' trust influences their students' performance or if it is simply that parents of high achieving students automatically trust the teachers more. However, the finding of most importance from these studies is that parent trust in teachers is directly related to student attendance, achievement and higher test scores.

Studies have shown some practices that increase trust between home and school. Epstein (1984) studied third and fifth graders and found that students whose teachers were leaders in using parent involvement made greater gains on reading test scores than other students. While this study does not give any specific practices to bolster parental involvement, it does show the benevolent consequences of teacher efforts to involve parents. Continuing, Young (2000), in an effort to identify measures that would bolster parental trust in the school, conducted a qualitative study of a Mexican-American elementary school in Texas. Young, studying trust from the parents' perspective, defined trust as:

> confidence that personnel at the school will act in the best interest of their children; confidence that teachers are qualified to teach their children; confidence that school personnel will treat them fairly; and confidence that school personnel will keep their word. (p. 6)

The study revealed that at least in one school, communicating, collaborating, sharing power, and helping parents develop participation skills all contributed to the level of trust between the school and the home. Last, Adams and Christenson (2000) found that parents' "satisfaction and student grade" (p. 489) were two variables capable of predicting parent trust. Thus, promoting communication, collaboration, and parental satisfaction bolsters parent trust.

Students and trust

Student trust of their teachers is related to age, gender, and teacher communication style. First, a study of fourth to eighth graders found that student trust of teacher is influenced by grade level and gender. Gathman, Many, and Many (1977) studied students in this age group and found that the trust of sixth graders is significantly stronger than that of eighth graders. Gathman et al. also found that student trust of their teachers is higher among girls than boys. Second, the communication style of the teacher has bearing on student levels of trust. Wooten and McCroskey (1996) studied the trust levels university students have for their professors in relation to the instructor communication styles. This study showed that instructors classified as having a "highly responsive" (p. 98) communication style were trusted significantly more than teachers not "highly responsive" (p. 98).

A benefit of student trust is that it may promote classroom cooperation. Kratzer (1997) conducted a one-year case study of an exceptional urban elementary school in southern California. Observations, teacher interviews, and school and classroom documents were collected to analyze trust in the school. Kratzer found that trust played a key role in students helping each other and sharing resources in the classroom.

Student trust also influences test-taking skills. A study by Schwarzer and Buchwald (2000) analyzed the trust between college education students and their oral examiners. The researchers discovered a positive correlation between interpersonal trust and the students' coping strategies during the oral exams. Thus, the level of trust between the examiners and examinees helped the students during their exams.

Principal and trust

Teacher trust in the principal influences co-worker trust in each other and school achievement. First, teachers' trust in the principal is related to teachers trusting each other. Hoy and Kupersmith (1984) found that elementary teachers' trust in their principals was correlated with their trust in colleagues and organization. Second, teachers' trust in the principal influences school effectiveness. Tarter et al. (1995) surveyed teachers from 87 middle schools and found that faculty trust in the principal was positively related to school effectiveness. The trustworthiness of the principal is therefore an important aspect of school success and the trust colleagues have for one another.

Trust and gender

A review of studies regarding trust and gender in superior/subordinate relationships has yielded conflicting results. First, Bulach and Peterson (1999) defined trust as "an interpersonal condition that exists when interpersonal relationships are characterized by an assured reliance or confident dependence on the character, ability, truthfulness, confidentiality and predictability of other in the group." (p. 4) Using the Group Openness and Trust Scale teachers were asked to evaluate the extent to which their principals expected them to be open and trusting. Bulach and Peterson predicted that

females would be more trusting than males; however, the results showed no statistical difference. Second, Jeanquart-Barone and Sekaran (1994), defining trust as "the unquestioning belief in or reliance upon someone or something so as to achieve a desired objective in a risky situation." (p. 253), sent questionnaires to university employees asking them to rate the trust they have in their superiors. The results indicated that women reporting to men had significantly higher levels of trust than women reporting to women. Third, a study of program agent's perception of trust toward his or her supervisor revealed that agents reporting to a supervisor of the same sex had significantly higher trust in their superior than did agents reporting to a supervisor of the opposite sex (Scott, 1983). Interestingly, Scott, using the same definition of trust as Jeanquart-Barone and Sekaran, found contrasting results.

Theory of Trust

Trust has been shown to be vital in organizations. Although trust appears to be valuable and desirable, the level of trust varies in both relationships and organizations (Adams and Christenson, 1998). There is some empirical support for three categories of trusting relationships: "high trust," "medium trust," and "low trust" (Rempel, Ross, and Holmes, 2001, p.58). Individuals with high trust "feel secure and confident that their partner can be counted on to care for them and be responsive to their needs" (Rempel et al, p. 58). Furthermore, the communication in such relationships is structured in a way as to insure a continual positive relationship. This type of relationship is fostered in positive feeling, communication, and assurance of benevolent actions from both parties. Middle trust relationships are characterized as having some feelings of dissatisfaction but still maintaining hope for a closer relationship. Last, a low trust relationship involves

individuals with little concern for the other person. The needs of one party rarely affect the actions of the other party and problems between the two are rarely resolved (Rempel et al).

These characteristics of trust in personal relationships can be carried over to schools in that faculty, administration, parents, and students maintain relationships and work together in the educational process. More specifically, the relationships these stakeholders have with the principal are of special significance since the principal is the head of the school. Certainly students, teachers, and parents would want to have a "high trust" (Rempel et al, p. 58) relationship with the principal so they can feel confident the principal is going to try to meet their specific needs. If, however, the principal displays personality characteristics or behaviors that are perceived as being a detriment to trust, then the relationship may not reach the "high trust" (p. 58) level.

How does teacher trust in schools relate to organizational theory? Ouchi (1981) developed his Theory Z by studying effective businesses. Z-organizations are like "clans" (p. 70) where individuals are a part of a larger unified group that emphasizes open communication, trust, and commitment. Workers in Z-organizations are committed to working together toward a common goal. Fellow employees trust one another and show concern for each other's well-being. Thus, positive outcomes such as commitment, loyalty, and production occur in such an environment (Ouchi).

Although schools are not businesses, they function in many ways like corporate organizations. The characteristics of Ouchi's (1981) Z-organizations can be seen in effective schools: working together toward a common goal (the education of children), emphasizing open communication, trusting one another, and being committed to the job.

A breakdown in any of these critical elements could negatively affect the climate and performance of the school. More specifically, if the principal's personality type or behaviors caused teachers to perceive him or her as not being trustworthy then the school may no longer function as a Z-organization.

Jung's Personality Theory

Jung (1971) affirms that individuals can be categorized into two attitude fields, extroversion and introversion. An extrovert focuses energy toward the object, or outer world (Sharp, 1987). In doing so, Jung attests that the extrovert feels a need to be involved in people's lives. Thus, the extrovert will initially appear more personable and friendly. An introvert focuses energy on the subject and inner world. Because of his or her inward focus, an introvert will not easily interact with others and may appear standoffish and cold (Jung).

Jung's theory couples the two attitudes of introversion and extroversion with four function types or "modes of orientation" (Sharp, p. 12). The four functions are sensing, thinking, feeling, and intuition (Jung, 1971). The functions influence how an individual gathers and makes sense of information. Furthermore, whether a person is introvert or extrovert will affect the role of the functions (Jung). Thus, when paired together, individuals can be categorized in one of eight personality types.

Myers-Briggs Type Theory

In the 1950's Myers and Briggs built upon Jung's ideas about the way the four functions interact. In his writings Jung described an "auxiliary function that supported and complemented the dominant function in every type" (Briggs Myers et al., p. 22). In their research, Myers and Briggs identified the judging and perceiving dichotomy that

identifies the "dominant and auxiliary functions for each type" (p. 22). The addition of the J-P dichotomy thus created the 16 personality types in the Myers-Briggs Type Indicator (MBTI). Each of the 16 personality types has specific characteristics. The instrument they developed to sort personality types, the MBTI, provides an accurate and detailed description of an individual's personality type.

The theory behind the MBTI is that human personality differences are not due to chance but to observable preferences (Briggs Myers et al., 1998). These preferences are evident in an individual's application of the four functions: sensing, intuition, thinking, and feeling. Depending on the individual's personality type, one dominant function emerges. A person's dominant function type will then determine the strength of the other functions. For example, a *sensing* person's weakest function will be intuition, the opposite of sensing, with thinking and feeling falling somewhere between the two (Briggs Myers et al.).

More specifically, the functions of sensing and intuition are categorized as *perceiving* functions (Briggs Myers et al., 1998). These functions influence how an individual becomes aware of "things, people, events, or ideas" (Briggs Myers et al., p. 24). A person with the dominant function of sensing uses the senses to become aware of the environment. Conversely, an intuitive person uses "possibilities, meanings, and relationships" (Briggs Myers et al., p. 24) to perceive the environment. As an example of these two functions, a *sensing* person describing an apple would use words like "juicy," "red," and "crisp" while an *intuitive* individual might say "like my grandmother's pie" or "keeps the doctor away" (Briggs Myers et al., p. 24). Besides the two *perceiving* functions of sensing and intuition, there are also two *judging* functions.

Thinking and feeling are the two kinds of *judging* functions. *Judging* is the way a person comes to a conclusion about what is perceived (Briggs Myers et al., 1998). A thinking person will logically and objectively connect ideas to make a decision about a perception. In contrast, a feeling individual will subjectively "weigh relative values and merits of issues" (Briggs Myers et al., p. 24) before making a decision. As an example of these two functions the thought processes of an employer's hiring practices will be analyzed. A *thinking* employer will objectively look at the applicant's qualifications and compare them with established criteria to determine if the applicant would be an effective worker. A *feeling* employer would consider the qualifications for the job, the personal characteristics of both the applicant and current employees, and how the hiring will affect the work group. As a last resort the *feeling* employer would develop a list of criteria to aid in the decision (Briggs Myers et al.).

Besides the four basic functions, four attitudes also exist: extraversion, introversion, judging, and perceiving. These four attitudes help understand how the four functions interrelate (Briggs Myers et al., 1998). Jung (1971) described extraversion and introversion as attitudes of energy that dictate how a person approaches life. An *extrovert* will allow energy and attention to flow out in the environment. This type of person is talkative, action-oriented and open to new experiences (Briggs Myers et al.). An *introvert* however "is drawn from the environment toward inner experience and reflection" (Briggs Myers et al., p. 26). This type of person enjoys solitude and will think before talking.

Myers and Briggs classify judging and perceiving as "attitudes or orientations to the outer world" (Briggs Myers et al., 1998, p. 26). Judging and perceiving relate to the

four basic functions of: sensing, intuition, thinking, and feeling. Some people favor the judging functions of thinking and feeling while others favor the perceiving functions of sensing and feeling. Thus, a *perceiving* person will dwell longer in the realm of "the observing attitude because it is more comfortable and natural for them" (Briggs Myers et al., p. 26). A *judging* person will move quickly through perception so they can reach conclusions and obtain closure (Briggs Myers et al.).

By combining the four attitudes (extroversion, introversion, judging, and perceiving) with the four functions (sensing, intuition, thinking, and feeling), an individual's personality type can be described. The MBTI uses four letters to represent personality type. The middle two letters display the two primary functions and the first and fourth letters are the attitudes. For example, a person could have the personality type of ESTJ. *J* means this individual primarily demonstrates a judging function. The judging function in ESTJ is *T*, thinking. *S*, sensing, is this individual's introverted, or auxiliary function. *E* describes the individual's preferred attitude, extroversion. Thus, this person *extraverts* his or her dominant function, thinking (Briggs Myers et al., 1998). An ESTJ could then be described as being a practical, decisive, and forceful organizer who is efficient and systematic.

In summary, individuals differ in how they act, think about, and judge reality. Observing behaviors can logically identify these personality differences. These behaviors are rooted in four basic functions and four attitudes. The MBTI is an instrument that provides a four-letter designation describing a person's personality type.

The Principal and Personality

Principals have a significant influence in the schools. How they lead and how they act can alter the school's climate and the strength of the faculty's trust. Although the literature reveals no studies examining the relationship between principals' personality type and trust, numerous studies have investigated principals' and other leaders' personality types, behaviors, leadership styles, and the effects thereof.

Leadership styles

There are many documented styles of leadership. For example, "promoters" (Bulach, Lunenburg, and McCallon, 1994, p. 7) are outgoing principals that are involved with people. Bulach et al. discovered that promoters generate more parent and community involvement in the schools than principals with other leadership styles. Second, transformational leaders can have a beneficial influence on schools as well. Bass and Avolio define transformational leadership as a leadership style that emphasizes the future, vision, conquering problems, confidence building, trust building and challenging old assumptions (as cited in Mannion, 1998). Mannion (1998) found that in secondary schools a significant positive correlation exists between the faculty's trust in the principal and the principal's degree of transformational leadership. Third, authentic leaders are principals who maintain consistent behavior, take acceptance for personal and organizational actions, and are non-manipulative (Hoy & Kupersmith, 1984). In their study Hoy and Kupersmith found that teachers' perceptions of principal-authenticity correlated with their trust in the principal, organization, and colleagues.

Principals can also be classified as being supportive leaders. Supportive principals extol praise, carefully give criticism, show respect for the faculty, and display

professional and personal concern for teachers (Hoy et al., 1992). Hoffman et al. (1994) found that supportive principals (rather than directive or restrictive ones) had the highest correlation ($r = .82$) with faculty trust in the principal. Furthermore, Tarter et al. (1995) discovered that supportive principal behavior is not only positively related to teacher trust but is also positively correlated with collegial teacher behavior. And again, Hoy et al. (1992) investigated elementary principals and found that supportive principal behavior correlates with effective schools. In contrast, the domineering leadership style in which principals closely monitor the teachers and have an "iron fist" correlates negatively with teacher trust in the principal (Tarter et al., 1989, p. 299).

Principals' behaviors and personalities

Besides examining leadership styles, researchers have studied administrator behaviors in relation to trust. Principal behavior can influence the level of trust in his or her relationship with the faculty. Hoffman et al. (1994) found principal openness was strongly related to the teachers' trust in the principal. Tarter et al. (1989) found that supportive principal behavior i.e., listening to teachers, demonstrating concern, being open, praising frequently and criticizing rarely is positively related to faculty trust in the principal. In a study of supervisory climate Bulach, Booth, and Michael (1999) found that principals' behaviors most often exhibited to promote a positive supervisory climate were related to trust (i.e. not using coercion, not displaying a lack of trust, follows his own rules, and does not correct the faculty in the presence of others). Furthermore, principals who exhibit "collegial" (p. 33) behaviors foster more trust from their faculties (Hoy et al., 1996). More specifically, a study by Tschannen-Moran (2001) found that the more a principal collaborated with faculty and parents the more likely the faculty and

parents were to trust the principal. Similarly, a principal who "actively seeks to involve teachers . . . in the school, enhances the formation and sustenance of trust" (Byrk and Schneider, 1996, p. 28). The same results held true for when the principal collaborated with parents (Tschannen-Moran, 2001). Thus, the behaviors the administrator exhibits – particularly supportive and involvement behaviors -- are related to the levels of trust parents and faculty have in the principal.

In contrast to the number of studies linking principal behavior and trust, no studies of principal's personality type and trust were found. Several studies have been located involving managers and supervisors and trust however. One study analyzed the personality traits of hospital administrators and the level of trust they had in their subordinates (Saccardi, 1996). However, this study does not investigate the trust subordinates have in the administrator. In another study researchers looked at 20 extroverted and introverted elementary principals in Kentucky and found no relationship between these two variables and the schools' climates (Bulach et al., 1994). Although this study analyzed a trust-related issue, school climate, the sample was quite small and isolated in that only 20 elementary principals in Kentucky were sampled. Furthermore, school-climate is a far broader variable than trust. In summary, there are several related studies but no existing works that have investigated principal personality type, as determined by the MBTI, and trust. In particular no apparent studies have been conducted linking principals' personality types and faculty, student, or parent trust.

Although no studies have been located involving principal personality type and perceived trust, researchers have analyzed various relationships in conjunction with the principal's personality type. First, the personality of the principal can make a difference

in principal effectiveness. Research has shown how extroverted principal personality traits are related to effectiveness. For example, a study utilizing the Sixteen Personality Factor Questionnaire (Cattell, Eber, & Tatsuoka, 1986) found the best performing principals (as determined by supervisor, peer, and teacher evaluations) were the ones with "assertive, imaginative, self-sufficient, and warmhearted" personalities (Lunenburg, 1990, p. 13). As revealed by this study, a commonality of effective principals is an assertive, or extraverted, personality.

Second, research has shown that personality type is a major determinant in principal problem-solving behavior. Lueder (1983) used the MBTI to study 86 elementary school principals to discover if Sensing principals' problem-solving strategies differed significantly from Intuitive principals' strategies and if Thinking principals' problem-solving strategies differed significantly from Feeling principals' strategies. Results from the study found significant differences in how principals both perceived and judged a problem based on the principals' personality type. In comparing the Sensing principals with the Intuitive principals, Lueder found the Sensing principals "generally limited their perceptions to the immediate situation using the facts that were given." (p. 15) These principals also tended to follow school policy in handling the situation. Conversely, the Intuitive principals "perceived the problem situation in broader terms" (p. 15) and considered district-wide and future implications. A look at the Thinking and Feeling principals revealed that Thinking principals preferred to make decisions in an impersonal, rational, and logical way while Feeling principals attempted to involve others in the decision-making process and valued personal warmth and harmony. Thus,

principals' problem-solving strategies and behaviors vary greatly as a result of the principal's personality type.

Besides analyzing the relationships between school principals and personality, researchers have studied successful persons in other leadership positions and the relationship of their success to their personality types. Johnson (1976) studied the relationship between various personality traits of university physical education department chairpersons and their faculty's perception of the chairperson's administrative role and success. The administrator's personality traits were measured using the Thurstone Temperament Schedule. Johnson found that both faculty members and administrators view those with higher scores on the "Stable" (p. 7) personality trait (characterized by being cheerful and having a cheerful disposition) as being more successful than individuals with a lower score on this trait. Another study conducted in the Australian military revealed surprising results. In this study researchers investigated how army officers' personality traits, as determined by the Five-Factor Model, related to their leadership effectiveness, as rated by their superior officers (McCormack & Mellor, 2002). Results from this study showed that officers scoring high in "conscientiousness" and low in "extraversion" (p. 192) predicted leadership effectiveness and a likelihood of attending a promotion course. Furthermore, those scoring high in "openness" (p. 187) were also likely to attend the promotion course. All these studies provide evidence that leaders' personality traits and types can be related to leadership success.

Finally, demographic studies of principals' personality types also reveal interesting trends. There is evidence that most school administrators have similar personality types. Hetrick (1993) studied rural and suburban school administrators in

Michigan. Using the MBTI, he found that 40% of the administrators were ESTJ (extrovert, sensing, thinking, judging) or ESFJ (extrovert, sensing, feeling, judging). In a nationwide study of female administrators' personality types, ESFJ's and ESTJ's accounted for 23.8% of the principals' personality types (Cline, Richardson, Wallman, & Prickett, 1990). These studies indicate that persons with the ESFJ or ESTJ personality type are common in school administrative positions.

Chapter Three

Rationale and Hypotheses

To investigate the role principal personality plays in the formation of the school's trust environment, trust both inside and outside the school walls is relevant. Although no studies linking the principal's personality and perceived trust in a school setting have been located, studies exist showing behaviors and personal attributes that foster trust. Hall, Dugan, Zheng, and Mishra (2001) summarized numerous studies about the trust between physicians and their patients. In their summary the authors found "the strongest predictors of [patient] trust are physician personality and behavior" (p. 628). Research by Roberts and Aruguete (2000) studied how patients reacted to a physician's behavior. When the physician greeted the patient warmly, smiled, used a friendly voice, and appeared concerned, the patients trusted the doctor significantly more than when these behaviors were not present. These caring characteristics can be logically related to the Myers-Briggs ESFJ personality type. An ESFJ is a person associated with being "warmhearted" (Briggs-Myers, et al., p. 64).

Studies linking personal attributes, behavior and trust have also been conducted in other organizational environments including education. A trust study in schools found that supportive principal behavior is positively related to faculty trust in the principal (Tarter et al., 1995). Here, a supportive principal is described as one who promotes healthy work relations and offers frequent and genuine praise. Briggs Myers et al. (1998) describe a person with the ESFP personality type as an individual who wants to make work fun and enjoys working with others. Furthermore, an ESFJ person is described as

being loyal and trying to meet the needs of others. These characteristics logically relate to a supportive principal.

Frost et al. (1978) tried to identify personality and behavioral attributes that correlated with trust. In this study trust was defined as "an expectancy held by an individual that the behavior of another person or a group would be altruistic and personally beneficial" (Frost, et al., p. 103). The researchers found that a trusted person is influential, feels in control of his or her future, and does not need to control others. An individual with these characteristics could logically be identified with individuals with the INTJ personality type. These individuals "have original minds and great drive for implementing their ideas and achieving their goals" (Briggs Myers et al., 1998, p. 64).

A study involving 84 managers of diverse firms generated a list of "conditions of trust" (Butler, 1991, p. 648). The managers were first asked to identify the characteristics of two types of people -- those they trusted and those they mistrusted. They were also asked to identify incidents that led to the building of trust and the destruction of trust. A content analysis of ideas revealed 10 conditions of trust: "availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise fulfillment, and receptivity." (Butler, p. 648) Some of these trust conditions are aspects of personality traits. For example, personal loyalty is a characteristic of both ISFJ and ISFP personality types (Briggs Myers et al., 1998).

Studies relating the principal's personality type and perceived trustworthiness have not been located in the literature. The following hypotheses have been generated by logically connecting personality, behavior, and trust studies taken from other

organizational environments or from studies in the education field but not specifically related to personality type of the principal.

In schools the principal and teachers have a supervisor/employee relationship. This relationship is similar to a supervisor/employee relationship at a company. Butler's (1991) study found that business managers identified loyalty as a condition of trust, and loyalty is a characteristic of two Myers-Briggs personality types (Briggs Myers et al., 1998). Moving from business studies to an educational study, Tarter et al. (1995) found that supportive principal behavior evokes teacher trust. Characteristics of certain personality types are more prone to supportive behavior than others.

Since the schools sampled vary in both size and level these two variables will be controlled in an effort to account for the effect of intervening variables. Controlling for school level is common and reasonable in this type of research. Goddard et al. (2001) studied trust in elementary schools. Since their study involved only elementary level schools they did not have to control for school level. However, in the study's methodology description, the researchers noted that had their sample included middle and high schools they would have controlled for the intervening effect of school level because the "organizational structure varies between elementary, middle and secondary schools." (p. 8) Furthermore, school size will be controlled to account for its possible intervening effects.

H1: Controlling for school size and level, principal personality will predict teacher trust in the principal.

Parents and students have a different relationship with the school principal than do the teachers. The school's primary role is to provide a service (education) to the

clients (students) with the parents having a keen interest in their child's education. In other words, instead of an employee/supervisor relationship the parents and students are more like the clients of the school and principal. Research conducted in the medical field is similar to this provider/client relationship where the patient is the client and the doctor is the provider. As mentioned, studies by Hall, Dugan, Zheng, and Mishra (2001) and by Roberts and Aruguete (2000) showed that doctors' behaviors and personalities affected the level of trust patients place in their physicians. Thus the provider's actions and personality affected the level of trust the client placed in him or her.

Aside from looking at the relationship between parents, students, and the school there are behaviors individuals exhibit that relate to his or her trustworthiness. For example, supportive principal behavior is positively related to faculty trust (Tarter et al., 1995). Also, Butler (1991) found that the characteristics of openness, discreetness, and receptivity were related to trustworthiness. Based on these findings additional hypotheses are presented.

H2: Controlling for school size and level, principal personality will predict parent trust of the school.

H3: Controlling for school size and level, principal personality will predict parent trust in the principal.

H4: Controlling for school size and level, principal personality will predict student trust in the principal.

Chapter Four

Methodology

Population, Sample, and Sampling Procedure

To test the relationships between principal personality type and school trust environment, survey data were collected from 79 schools. The populations of the study were principals, teachers, students, and parents from the 836 public schools in the northeastern quadrant of Oklahoma (505 elementary, 160 middle, and 182 high schools). From these 836 schools 60 elementary, 60 middle, and 60 high schools were randomly selected to participate. Thus the initial sample consisted of 180 schools. For a school to participate in the study approval had to be obtained first from the school district's superintendent and then from each school's principal. Refusal to participate by the superintendent resulted in no schools from that district being considered in the study. Refusal by the principal to participate resulted only in that one school not participating. Principals from the sampled schools whose districts had approved the research, were asked to participate in the study. District permission was obtained by asking district superintendents to sign and return a statement of informed consent. After accounting for nonparticipating school districts and individual schools, a total of 79 schools (out of the original sample of 180) remained in the study.

At each participating school site, data were solicited in survey form from the principal and randomly selected certified staff (10), parents (15), and students (15). Random number tables were used to select the students, parents, and teachers. Typically the 5^{th}, 7^{th}, and 11^{th} graders and parents of 5^{th}, 7^{th}, or 11^{th} graders were selected from each school. In elementary schools ending at the fourth grade, they participated in the study

and not fifth graders. The teachers were selected from among the certified full-time faculty. To generate the parent and student samples the random number table was used twice with a student list. The parent sample was selected independently of the student sample. It was possible, however, for a student and his or her parents both to be randomly selected for data collection in a given school.

The procedure for the sampling technique of the participating schools and subjects within the schools was as follows. From the population of the 836 public schools in Northeastern Oklahoma a random sample of 180 was selected. A large sample was chosen because it was anticipated some districts and schools would choose not to participate. The sample was stratified resulting in 60 schools selected from each level – elementary, middle, and high school.

At each site all students and parents of students in the 5^{th}, 7^{th}, or 11^{th} grades were eligible for selection. Furthermore, all full-time certified faculty at each site were eligible for sample selection. Thus, once the total number of students and teachers at each site was known the subjects could be sampled using the procedures appropriate for a random number table.

In summary, by using random sampling techniques no public school in northeast Oklahoma had a greater chance of being sampled than any other school of its type. Furthermore, the faculty, students, and parents at each school were randomly sampled from a list of possible candidates.

Instruments

The principal at each school site completed one survey, the MBTI form M (Briggs Myers et al., 1998). The MBTI form M, enhanced in 1998, is an instrument used to

describe an individual's personality type. Personality Type is an individual's interaction of his or her four basic "dichotomies" (Briggs Meyers et al., 1998, p. 6). Dichotomies are "opposite domains of mental functioning or attitudes" (Briggs Myers et al., p. 390). The MBTI is divided into four dichotomies: Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving. The instrument consists of 93 "forced choice" (Briggs Myers et al., p. 15) questions. "Forced choice" questions are in an either/or format. The principal had only 2 choices on each question. The reliability of the MBTI form M tested at alpha coefficients of .91 (extrovert-introvert), .92 (sensing-intuition), .91 (thinking-feeling), and .92 (judging-perceiving) from a national sample of 2,859 randomly sampled males and females (Briggs Myers et al., 1998).

The MBTI form M has both construct and criterion related validity. Construct validity refers to the instrument's scales accuracy in measuring an individual's personality type according to Jung's and Myers' psychological theory (Briggs Myers et al., 1998). One method to determine construct validity is to compare MBTI scores with other personality and psychological tests. When compared with eleven other prominent instruments (Adjective Check List, Career Factors Inventory, Coping Resources Inventory, FIRO-B™, Maslach Burnout Inventory, Saliency Inventory, State-Trait Anxiety Inventory, Strong Interest Inventory®, Skills Confidence Inventory, Values Scale, and Work Environment Scale instruments) collectively the correlations from these instruments and the MBTI are consistent with Type Theory and support construct validity (Briggs Myers et al.). Furthermore, criterion-related validity compares an individual's self-reported type with the results from the MBTI. The agreement between form M and self-reported type ranged between 58% and 78% (Briggs Myers et al.).

Concerns about differing responses from men and women from the Myers-Briggs form G (the previous version of the MBTI) resulted in changes in form M (Briggs Myers et al., 1998). Differential Item Functioning (DIF) is an analytic technique used to determine if a subgroup's responses differed on MBTI responses. The results of the DIF analysis reveal "that there does not appear to be any appreciable cumulative DIF on the basis of age or gender across the four MBTI scales" (Briggs Myers, p. 153).

At each site the teachers completed one section of the Internal School Trust Scales (Hoy and Tschannen-Moran, 1999). The Faculty Trust in the Principal scale is one of three in the Internal School Trust Scales. This instrument measured the trust that faculty place in the principal. Trust is defined as an "individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (Hoy and Tschennan-Moran, p.189). Each of the 11 Likert-scale items is scored 1-6 depending on the degree of trust in the principal. The higher the number indicated the greater the trust. The scores can range from 11 to 66. The reliability of the three scales ranges from .92 to .95 with the Trust in Principal Scale at .95 (Hoy and Tschennan-Moran). Results from this study found the instrument's reliability to be .94. The validity of the Internal School Trust Scales was examined by determining the measures' "ability to distinguish trust from other related constructs. Determinant validity of the measures of trust was strong" (Hoy and Tschennan-Moran, p. 196).

Parents associated with each school site completed the Parental Trust of School Scale (Forsyth, Adams and Barnes, 2002) and the Parental Trust of Principal Scale (Barnes, Forsyth and Adams, 2002). For both instruments trust is defined as an

"individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (Hoy and Tschennan-Moran, 1999, p. 189). The Parental Trust of Principal Scale is a Likert scale 15-item survey that is scored from 1 to 8 depending on the agreement or disagreement the parent has with an item. The higher the score the greater the amount of trust parents have in the principal. The range of scores can be from 15 to 120. The internal consistency for the Trust of Principal instrument is .97. The validity for the Parent Trust of Principal Scale is enforced "by the strong loading of items on a single factor, confirming the theoretical integrity of the multidimensional nature of trust" (Barnes et al., p. 7). Furthermore, the survey items were written from a parents' perspective in a manner used in previously validated trust studies (Barnes et al.). Results from this study showed this instrument's reliability at .99. The Parental Trust of School Scale is a 10-item survey that is scored from 1 to 8 depending on the agreement or disagreement with the item. The higher the score the greater the amount of trust parents have in the school. The scores can range from 10 to 80. The internal consistency for this instrument is .95. Similar to the Trust of Principal Survey, the validity is strengthened in that the theoretical nature of trust is confirmed and items are written from a parent's perspective in a manner similar to other validated trust studies (Forsyth et al.). Results from this study showed the Parent Trust of School Survey's reliability alpha level at .97.

The students at each site completed the Student Trust of Principal Scale. This 21-item instrument measured the level of trust students have in their principal. The student survey is similar to the Parental Trust of Principal Scale (Barnes et al., 2002) except that the language of the parent survey was modified slightly to accommodate a fifth grader's

vocabulary. For example, two items from the student survey read, "The principal at my school is fair." and "The principal at my school can be trusted." Also, instead of the students circling a number on a Likert-scale to indicate their choice, they marked one of the following categories: *Always, Most of the time, Some of the time,* and *Never*. For scoring, the choices were translated to numerical value – *Always* (4), *Most of the time* (3), S*ome of the time* (2), and *Never* (1). The higher the score the greater the trust students have in the principal. The reliability of this instrument was confirmed in data analysis with an alpha of .96.

Data Collection

All subjects at the 79 schools were asked to complete surveys. At each school site 10 teachers received the 11-item Internal School Trust Scales (Hoy and Tschannen-Moran, 1999). The surveys were delivered to the teachers in the manner suggested by the principal. Most principals preferred to have the teacher surveys hand delivered to each teacher. Fifteen students at each site (either 5^{th}, 7^{th}, or 11^{th} graders depending on the site) received the Student Trust of Principal Scale (Barnes, Forsyth, & Adams, 2004) consisting of 21 items. This instrument was distributed to students in the schools in a manner chosen by the principal. Again, most of these surveys were hand delivered in the schools. Along with the survey each student was given two parent-consent forms for the parents to sign therein giving parental permission for their son or daughter to participate in the study. One form was for the parents' records; the other was to be returned to the researchers with the survey. Next, 15 parents of either 5^{th}, 7^{th}, or 11^{th} grade students received through the mail the Parental Trust of School Scale (Forsyth et al., 2002) and the Parental Trust of Principal Scale (Barnes et al., 2002) totaling 15 questions. Last, the

principal at each school received the MBTI (Briggs Myers et al., 1998) form M totaling 93 questions. All subjects were provided with stamped self-addressed envelopes to return their surveys. Follow-up surveys were sent to non-respondents by mail or hand delivered to the schools.

Two schools in the sample had to have a second random sampling because of a low return rate on the initial and follow-up instrument distribution. Also, three of the 79 principals did not return their MBTI's and thus these cases had to be dropped from the study.

To insure anonymity a code number identified each survey. The code numbers were created by assigning each school in the study a code number. Then, the subjects at each school site received code numbers. Code number 1 being the principal, 2-16 being students, 17-31 being parents, and 32-41 being teachers. Each distributed survey was pre-coded with the school and participant's code. Besides insuring anonymity, the code numbers also aided in tracking non-respondents.

Lists of students' and teachers' names were used for assigning code numbers and distributing surveys. At each site a list of the sampled students' names was used for the sample selection and distribution of surveys. Also student addresses of participating parents were secured and used to mail parent surveys. The teacher list was used in the teacher survey distribution. After the study was completed all lists were destroyed and no names have been tied to any part of the study.

Method of Data Analysis

Separate comparisons were made between the principals' raw scores from the MBTI (Briggs Meyers et al. 1998) and responses parents, teachers, and students provided

from their specific instruments. Parents completed the Parent Trust in School Scale (Forsyth et al., 2002) and the Parent Trust of Principal Scale (Barnes et al., 2002). Teachers completed the Internal School Trust Scales instrument that measures the teachers' trust in the principal (Hoy and Tschannen-Moran, 1999). Students completed the Trust of Principal Scale (Barnes et al., 2002).

Responses from the MBTI form M were tallied into continuous raw scores for each of the four attitudes (Extraversion, Introversion, Judging, and Perceiving) and four functions (Sensing, Intuition, Thinking, and Feeling). Principals' personality types were scored according to four dichotomies: EI, SN, TF, JP. The raw scores for the following items were used for analysis: I (Introversion), N (Intuition), F (Feeling), and P (Perceiving). The higher the raw score on these items the stronger the personality attribute.

Using the raw scores from the MBTI responses is a proven method for quantitative analysis. This study replicated the scoring method Thorne and Harrison (1991) used in a major study of professionals in various fields. Utilizing the MBTI the researchers opted to use the four continuous scales I, N, F, P for their statistical analysis. The raw scores from these four continuous variables (I, N, F, P) were also the ones used in this study.

The independent continuous variable, principal personality type, and the continuous dependent variables, parents' trust in the school, parents' trust in the principal, students' trust in the principal, and teachers' trust in the principal were analyzed with separate regressions. Multiple regression was the appropriate method of data analysis because (a) the continuous raw scores from the MBTI were the source of

the independent variable, (b) the dependent variable trust scores were also continuous, and (c) multiple regression allowed for school size and school level to be controlled.

Chapter Five

Results

The first step of data analysis was to test the psychometric properties of the Student Trust of Principal and the Parent Trust of Principal scale through an exploratory factor analysis. An exploratory factor analysis examines the association of a set of variables (in this case the items of the instrument) for the purpose of constructing common factors that account for these variables (Stapleton, 1997). Since these two trust of principal scales had not previously been used in research independent of the scale development, a factor analysis using principal axis factoring (the same procedure used for the scale's development, as well as with the development of the internal Trust Scale), was performed. For the Student Trust of Principal scale only one factor had an eigen value greater than 1 and this one factor explained 68 percent of the variance. Item loadings ranged from .76 to .85. For the Parent Trust of Principal scale only one factor had an eigen value greater than 1 and this one factor explained 85 percent of the variance. Item loadings ranged from .89 to .95. [For a psychometric analysis of the Parent Trust of School scale see Adams (2003) and for an analysis of the Teacher Trust of Principal scale see Hoy and Tschannen-Moran (1999)]. A factor analysis of the MBTI was not conducted for two reasons. First, the MBTI has been used extensively in prior studies and is an established instrument. Second, previous factor analyses (Thompson and Borrello, 1986; Briggs Myers et al., 1998) resulted in strong support of the MBTI's construct validity.

Since school was the unit of analysis for this study, the second step of data analysis involved procedures to aggregate individual cases to the school level. Individual

data were first entered in an Excel data base for tracking purposes then imported to SPSS in order to remove instruments from the data that were returned but not completed, to replace missing values in the data, to recode reversed scored items, to compute a total score for individual subject instruments, and to aggregate individual subjects scores to the school level. A total of 18 parent and 25 teacher instruments were returned without responses and thus removed from the sample. Treating missing values in the data required replacing the missing value with the series mean. For continuous variables it is acceptable to replace missing values with the series mean if less than 15 percent of the data are missing. If more than 15 percent of the data are missing, it is recommended that the case be extracted from the analysis (George and Mallery, 2000). Data from four teacher instruments exceeded the 15 percent rule and were removed from the sample.

After taking out the unusable data, negatively worded items in the instruments were reversed scored. Recoding reversed scored items allowed for the cumulative high score on the scale to indicate the presence of the construct. Once this step was completed, a total score on each measure was computed for each individual case. Total scores from the individual cases were then aggregated to the school level. Aggregation produced a school mean and standard deviation for trust of principal and parent trust of school. School level and school size were already school level variables and did not need to be aggregated.

Seventy-nine schools participated in the study; however, 3 principals did not return instruments thus 76 schools were analyzed. The study produced a 54% return rate for the instruments distributed. The return rates were as follows: 76 principals (95%), 619 students (52%), 572 parents (48%), and 529 teachers (67%) (see Table 1).

Table 1

Frequencies of Instrument Return and Number of Schools (N = 79)

TTP		PTS		PTP		STP		MB	
freq	schls	freq	schls	freq	schls	freq	schls	freq	schls
0	0	0	0	0	0	0	0	0	3
1	0	1	1	1	1	1	0	1	76
2	2	2	1	2	1	2	1		
3	1	3	5	3	5	3	0		
4	4	4	7	4	7	4	4		
5	16	5	10	5	12	5	4		
6	21	6	5	6	7	6	8		
7	14	7	12	7	12	7	8		
8	9	8	12	8	8	8	26		
9	8	9	14	9	14	9	12		
10	4	10	6	10	6	10	6		
		11	4	11	5	11	9		
		12	2	12	1	12	1		
		13	0	13	0	13	0		
		14	0	14	0	14	0		
		15	0	15	0	15	0		

Note. TTP = Teacher Trust of Principal. PTS = Parent Trust of School; PTP = Parent Trust of Principal; STP = Student Trust of Principal; MB = Myers Briggs Type Indicator

Of the 76 principals in the study, 35 or 47% were classified as I (introvert), 34 or 45% were classified as N (intuitive), 40 or 53% were classified as F (feeling), and 31 or 41% were classified as P (perceiving). The principals' continuous MBTI scores were as follows: I, mean = 9.88 (SD = 6.26); N, mean = 11.63 (SD = 7.50); F, mean = 11.76 (SD = 7.37); and P, mean = 9.41 (SD = 7.21).

A bivariate correlation analysis was performed to measure the relationships among the personality variables, trust variables, school size, and school level. The intercorrelations of the principals' MBTI scores and the dimensions of trust revealed only one significant finding, that being between N (intuition) and parents trust of the school (see Table 2).

Table 2

Correlations Between Principals' MBTI Scores, Trust Measures, School Size, and School Level (N = 76)

	I	N	F	P	TTP	STP	PTS	PTP	Lev	Enrl
I	1	-.34**	-.25*	-.06	-.08	-.12	-.08	-.19	-.10	.04
N	-.34**	1	.52**	.58**	.02	.10	.30	.21	-.05	.51
F	-.25*	.52**	1	.48**	.18	.07	.18	.18	-.14	.06
P	-.06	.58**	.48**	1	.02	-.12	.04	-.04	.06	.19
TTP	-.08	.02	.18	.02	1	.34**	.34**	.65**	.06	-.08
STP	-.12	.10	.07	-.12	.34**	1	.43**	.51**	-.57**	-.37**
PTS	-.08	.30	.18	.04	.34**	.43**	1	.66**	-.49**	-.05
PTP	-.19	.21	.18	-.04	.65**	.51**	.66**	1	-.38**	-.18
Lev	-.10	-.05	-.14	.06	.06	-.57**	-.49**	-.38**	1	.17
Enrl	.04	.51	.06	.19	-.08	-.37**	-.05	-.18	.17	1

Note. I = Introversion; N = Intuition; F = Feeling; P = Perceiving; TTP = teacher trust of principal; STP = student trust of principal; PTS = parent trust of school; PTP = parent trust of principal; Lev = school level; Enrl = enrollment

*$p<.05$, **$p<.01$.

To test each of the four hypotheses separate hierarchical multiple regression runs were conducted. This approach allowed for the effect of school size and level to be controlled when analyzing the effect of the principal's personality type on the various trust variables.

Hypothesis one stated that controlling for school size and level, principal personality will predict teacher trust in the principal. The results show that principal's personality type (I, N, F, P) does not explain a significant amount of the variability in teacher trust of the principal. The change of the R square from .02 to .06 (R square change = .04, $p > .05$) when the personality variables were entered into the model was not significant. In addition the total explained variance in teacher trust of principal was not

significant (R = .25), p > .05. The total variance of teacher trust of principal explained by the predictors was only 6% (see Table 3).

Table 3

Summary of Hierarchical Regression Analysis for Principal Personality Type Predicting Teacher Trust in the Principal (N = 76)

Variable	β	ρ
Step 1		
School level	-.12	.32
School size	-.07	.57
R = .15, R square = .02.		
Step 2	β	ρ
School level	-.10	.41
School size	-.07	.56
Introversion (I)	-.08	.54
Intuition (N)	-.12	.50
Feeling (F)	.21	.15
Perceiving (P)	.01	.94
R= .25, R square = .06, R square change .04, ρ = .56		

Hypothesis two stated that controlling for school size and level, principal personality will predict parent trust of the school. The results show that principal's personality type (I, N, F, P) does not explain a significant amount of the variability in parent trust of the school. The change of the R square from .25 to .34 (R square change = .09, p > .05) when the personality variables were entered into the model was not significant. In addition the total explained variance in parent trust of school was not significant (R = .58), p > .05. The total variance of parent trust of school explained by the predictors was 34%. One personality component, N (intuition) (β = .36, p < .05), did independently explain a significant amount of the variability of parent trust in school (see Table 4). Another significant finding revealed that school level was a predictor of parent trust in the school (β = -.48). School size however was not a predictor.

Table 4

Summary of Hierarchical Regression Analysis for Principal Personality Type Predicting Parent Trust in the School (N = 76)

Variable	β	ρ
Step 1		
School level	-.50	.00**
School size	.03	.76
R = .50, R square = .25, **p < .01		
Step 2	β	ρ
School level	-.48	.00**
School size	.03	.79
Introversion (I)	-.02	.86
Intuition (N)	.36	.01*
Feeling (F)	-.01	.96
Perceiving (P)	-.14	.29
R= .58, R square = .34, R square change .09, ρ = .06.		

Hypothesis three stated that controlling for school size and level, principal personality will predict parent trust in the principal. The results show that principal's personality type (I, N, F, P) does not explain a significant amount of the variability in parent trust of the principal. The change of the R square from .16 to .24 (R square change = .08, $p > .05$) when the personality variables were entered into the model was not significant. In addition the total explained variance in teacher trust of principal was not significant (R = .49), $p > .05$. The total variance of parent trust of principal explained by the predictors was 24% (see Table 5). There was however a significant finding in that school level predicted parent trust of the principal ($\beta = -.34$). School size was not a predictor of parent trust in the principal.

Table 5

Summary of Hierarchical Regression Analysis for Principal Personality Type Predicting Parent Trust in the Principal (N = 76)

Variable	β	ρ
Step 1		
School level	-.35	.00*
School size	-.14	.22
R = .40, R square = .16, *p < .01		
Step 2	β	ρ
School level	-.34	.00*
School size	-.12	.27
Introversion (I)	-.14	.24
Intuition (N)	.21	.15
Feeling (F)	.07	.61
Perceiving (P)	-.16	.27
R= .49, R square = .24, R square change .08, ρ = .14.		

Hypothesis four stated that controlling for school size and level, principal personality will predict student trust in the principal. The results show that principal's personality type (I, N, F, P) does not explain a significant amount of the variability in student trust of the principal. The change of the R square from .39 to .43 (R square change = .04, $p > .05$) when the personality variables were entered into the model was not significant. In addition the total explained variance in student trust of principal was not significant (R = .65), $p > .05$. The total variance of student trust of principal explained by the predictors was 43% (see Table 6). There were however two significant findings in that school level predicted student trust of the principal (β = -.50) and school size predicted student trust of the principal (β = -.29).

Table 6

Summary of Hierarchical Regression Analysis for Principal Personality Type Predicting Student Trust in the Principal (N = 76)

Variable	β	ρ
Step 1		
School level	-.49	.00*
School size	-.31	.00*
R = .63, R square = .39, *p < .01		
Step 2	β	ρ
School level	-.49	.00*
School size	-.29	.00*
Introversion (I)	-.12	.21
Intuition (N)	.14	.28
Feeling (F)	-.04	.74
Perceiving (P)	-.11	.38
R= .65, R square = .43, R square change .04, ρ = .36.		

The findings in this study suggest that principal personality type, as indicated by the MBTI, is not a reliable predictor of the perceived trust that parents, teachers, and students have for the principal, thus not confirming hypotheses 1, 3, and 4. (However, the strength of the principal's N (intuition) personality function was a statistically significant predictor of the parents' trust in the school.) Thus, principal personality type has some predictive value in respect to the trust that parents have in the school, in part supporting hypothesis 2. Yet, personality type as a whole did not account for a significant amount of the variance in parent trust of the school. School level was a reliable predictor of student and parent trust in the principal and the parents' trust in the school. School size was a reliable predictor of student trust in the principal.

After analyzing the results of the study and in light of the preponderance of insignificant findings a *post hoc* analysis was conducted. These *post hoc* analyses were conducted to search for logical, theoretical or measurement factors that might account for

the failure of the hypothesized relationships. Since the initial analysis found that school level was a significant predictor of student and parent trust in the principal and of parent trust in the school a further analysis along this line was conducted. First, two separate one-way Analysis of Variance runs using Tukey HSD for the *post hoc* tests were conducted to determine how trust in the principal and school differed at the three school levels – elementary, middle school, and high school. Three other two-way Analysis of Variance runs were then conducted to determine if an interaction existed between school level and principal N personality type as it affected parent and student trust in the principal and parent trust in the school. For these final three runs the principals' (N) intuition scores were categorized into three levels: high, medium, and low. The intuition personality component was chosen as an independent variable because it was the only aspect of principal personality that yielded any significant findings in the original data analysis. The rationale for all these *post hoc* analyses was that school level might condition the exposure of the principal and subsequently his or her personality type to parents and students.

The results of the first *post hoc* analyses revealed some interesting findings in regard to parent and student trust of the principal and parent trust of the school. First, parent trust in the principal differed significantly between elementary schools and high schools with a mean difference of 14.88 (see table 7). However, the parent trust of the elementary principal did not differ significantly from the trust of the middle school principal nor did the parent trust in middle school principal differ significantly from the trust of the high school principal.

Table 7

Summary of Tukey HSD *Post hoc* Test for Parent Trust of Principal Across School Levels

School level	School level compared	Mean difference	SE
1	2	9.19	4.07
1	3	14.88*	4.16
2	1	-9.19	4.07
2	3	5.70	3.85
3	1	-14.88*	4.16
3	2	-5.70	3.85

Note. School levels are 1 = elementary, 2 = middle school, and 3 = high school.
SE = Standard error. *p < .01

Second, the parent trust in the school differed significantly between both elementary and middle school and between elementary and high school. The parent trust of the elementary schools differed from parent trust of the middle schools at a mean difference of 11.04. The parent trust of the elementary schools differed from parent trust of the high schools at a mean difference of 12.56 (see table 8). The parent trust of the middle schools did not differ significantly from the parent trust of the high schools.

Table 8

Summary of Tukey HSD *Post hoc* Test for Parent Trust of School Across School Levels

School level	School level compared	Mean difference	SE
1	2	11.04*	2.34
1	3	12.56*	2.39
2	1	-11.04*	2.34
2	3	1.52	2.21
3	1	-12.56*	2.39
3	2	-1.52	2.21

Note. School levels are 1 = elementary, 2 = middle school, and 3 = high school.
SE = Standard error, *p < .01

Third, the student trust in the principal differed between the elementary and high school levels and between the middle school and high school levels. The student trust in the principal in elementary schools differed from that at the high schools at a mean difference of 7.38. The student trust in the principal in middle schools differed from that in the high schools at a mean difference of 5.20 (see table 9). The student trust in the principal did not differ significantly between elementary and middle schools.

Table 9

Summary of Tukey HSD *Post hoc* Test for Student Trust of Principal Across School Levels

School level	School level compared	Mean difference	SE
1	2	2.19	1.18
1	3	7.38*	1.21
2	1	-2.19	1.18
2	3	5.2*	1.12
3	1	-7.38*	1.21
3	2	-5.2*	1.12

Note. School levels are 1 = elementary, 2 = middle school, and 3 = high school.
SE = Standard error, *p < .01

The final three *post hoc* analyses involved the principal N (intuition) scores from the MBTI. These two-way Analysis of Variance analyses compared the interaction of school level and principals' intuition scores with parent and student trust of the principal and parent trust of the school. Results from these analyses revealed no statistically significant findings (see Tables 10-12).

Table 10

Interaction of School Level and Principal Intuition on Student Trust of Principal

Source	df	Mean Square	F	Significance
School level	2	185.99	10.15	.01
Intuition	2	.76	.04	.96
School level & Intuition	4	15.10	.82	.52

Table 11

Interaction of School Level and Principal Intuition on Parent Trust of Principal

Source	df	Mean Square	F	Significance
School level	2	429.32	2.05	.14
Intuition	2	684.22	3.27	.04
School level & Intuition	4	198.52	.95	.44

Table 12

Interaction of School Level and Principal Intuition on Parent Trust of School

Source	df	Mean Square	F	Significance
School level	2	446.87	6.65	.00
Intuition	2	300.75	4.48	.02
School level & Intuition	4	38.15	.59	.69

The *post hoc* analyses revealed some interesting trends but also generated some questions. First, the results showed how school level affects parent and student trust of the principal and parent trust of the school. Interestingly, the influence of school level on trust is not consistent. For instance, while parent trust in the principal differed between elementary and high schools it did not differ between elementary and middle schools. However, parent trust of school differed significantly between elementary and middle school and between elementary and high schools. These findings provoke one to ask,

why did parent trust in the principal not differ between elementary and middle school while parent trust in the schools did differ between these two levels? Second, one might reason that given the structure in elementary schools students and parents would have more opportunities to become better acquainted with the principal than in a high school setting. These increased opportunities in elementary schools would allow for parents and students to become more familiar with the personality of the principal. Then, being aware of the principal's personality, the parents could make a judgment as to whether to trust the principal or not. Although this process seems logical, the results of the *post hoc* analyses did not support this premise, but why? Perhaps other intervening factors affect the trust stakeholders place in the principal, or stakeholder trust in the principal may be based more on principal behaviors rather than personality. A discussion of these questions and issues follows.

Chapter Six

Discussion

The results of the study yielded one significant finding. In regard to one aspect of hypotheses 2, the N (intuition) personality component did independently explain a significant amount of the variability of parent trust in school. Interestingly, the same N (intuition) component did not significantly affect the parent trust of principal. Why would the principal's N score explain a significant amount of the variability in the parent trust of the school but not of the principal? A deeper description of the intuitive personality function may help explain this finding. According to Briggs Myers et al. (1998) intuition and sensing are the two ways a person becomes aware of things, events, ideas, and people. An intuitive (N) person will perceive things by way of the unconscious. This person will exercise perception by going beyond what can be gathered through the senses and often times develop a "hunch" (p. 24). An intuitive person may be led to become "imaginative, theoretical, abstract, future oriented, and original or creative." (p. 24) For example, a creative principal may initiate a new imaginative program at a school that in turn yields higher student test scores. A parent's trust in the school is bolstered when he or she is witness to this new program being successful; however, the parent does not equate the program with the principal, just with the school. While the trust the parent has for the school is strengthened the trust in the principal goes unchanged. In summary then, perhaps the manifestations of an "intuitive principal" are evidenced by the parents at the school level and not attributed to the principal. Thus the manifestations affect the trust that parents place in the school but not the trust they place in the principal. An avenue for future study could analyze how parents' perceptions of

the school are related to parents' perceptions of the principal and why these differences in perception occur.

Besides the aforementioned results with Intuition and parent trust in the school, this study yielded no other significant findings. Hypothesis one, controlling for school size and level, conjectured that principal personality would predict teacher trust in the principal. This was not confirmed. Hypothesis two, controlling for school size and level, conjectured that principal personality predicted parent trust in the school. This hypothesis was not confirmed entirely. Hypothesis three, controlling for school size and level, conjectured that principal personality predicted parent trust in the principal. This was not confirmed. Hypothesis four, controlling for school size and level, conjectured that principal personality will predict student trust in the principal. This too was not confirmed. When one can logically relate principal personality type to perceived trustworthiness, and when empirical evidence suggested that personality, particularly that of people in superior positions, would have an effect on the level of trust others have in them (Hall, Dugan, Zheng, and Mishra , 2001) why did the hypotheses fail?

Five possible causes for the hypotheses failure are discussed. First, there was little theoretical basis found relating personality type and perceived trust. Second, there was a lack of empirical evidence supporting the relationship of perceived trust and personality type particularly in the school setting. Third, too grand a leap may have been made in reasoning that a relationship existed between trust evoking behaviors and personality characteristics that foster trust. Fourth, other factors besides principal personality type may determine the amount of trust parents, students, and teachers place in the administrator and the school. Fifth, there may have been a specification error, that

is a failure to specify intervening variables that nullified the effect of the principal personality type and his or her perceived trustworthiness.

The first possible cause for the hypotheses failure is due to tangential theory relating personality type to perceived trust upon which to ground the research. Theories were located regarding the levels of trust and the characteristics therein (Rempel, Ross, & Holmes, 2001) and the characteristics of an effective business that included trust (Ouchi, 1981). Personality theories, Jung's (1971) personality theory and Myers and Briggs personality type theory (Briggs Myers et al., 1998), were also located and utilized in the study. However, a search for theory relating perceived trustworthiness to personality type was not successful. Thus, since the study was not guided by theory regarding personality type and perceived trustworthiness this may have contributed to the unconfirmed hypotheses.

The second probable cause of the hypotheses failure may have been due to empirical evidence. After a review of the literature, apparently no studies in an educational setting relating personality type and perceived trustworthiness have been conducted. Furthermore, no studies were located that utilized the MBTI in connection with the perceived trustworthiness of a school principal. Several studies in both educational and non-educational fields linked behaviors and conditions and trust (Butler, 1991; Frost et al., 1978, Hoy & Tschannen-Moran, 1999; Roberts & Aruguete, 2000; Tarter et al., 1995); however, these studies lack the personality component. Using related research as a reasonable juxtaposition to connect principal personality type and trust ran the risk of not being perfectly applicable.

Third, the hypotheses may have failed as a result of taking too broad a leap in logical reasoning. Since studies supporting a relationship between perceived trust and personality were few in number it was further reasoned that the trust evoking behaviors could be logically related to personality type and thus to perceived trustworthiness. One could logically reason that individuals with certain personality types would display certain trust evoking behaviors. The MBTI manual (Briggs Myers et al., 1998) provided behavioral summaries of the 16 personality types. These personality type summaries were scrutinized for similarities between the trust provoking behaviors and the personality type characteristics. For example, Roberts and Aruguete (2000) found that patients trusted their physician more when he or she acted warmly, smiled, used a friendly voice and appeared concerned. These behaviors are similar to the description of an individual with the ESFJ personality type who is described as being "warmhearted" (Briggs-Myers et al., p. 64). Also, another study in elementary schools found that benevolence evokes trust (Hoy & Tschannen-Moran, 1999). It was reasoned that an SF (sensing-feeling) individual -- characterized as showing friendliness, warmth, and sympathy (Briggs Myers et al, 1998) -- would be considered a benevolent person by others. Although the reasoning in connecting these trust provoking behaviors to personality type seemed logical and clear, the logical assumption that a relationship existed may have been too grand.

The fourth possible reason the hypotheses failed is that apparently other factors, besides the hypothesized principal personality type, cause the perceived trust parents, students, and teachers place in the principal and that parents place in the school. The results of this study show that school size and level have some bearing on trust.

However, while school size and level were related to stakeholder trust in the principal and school the two variables did not affect each group equally.

School size and level had no bearing on the teacher trust of the principal. One might expect that in a smaller school setting, one in which teachers would have more personal contact with the principal, that the trust they place in the principal would be stronger. For example, a study of Tschannen-Moran (2001) found that the more a principal collaborated with faculty and parents the more likely the faculty and parents were to trust the principal. Apparently, the size of the school does not influence the amount of collaboration principals have with teachers. Furthermore, in a small school setting, it seems logical that teachers would better know the personality of a principal and that this knowledge would relate to the trust they place in the principal. However, this study provides evidence that this is not so.

School level was shown to be a contributing factor to parent and student trust. The results revealed a significant inverse relationship between school level and parent trust of principal, parent trust of school, and student trust of principal. In other words, students and parents of students in elementary schools are more trusting of the principal and school than are stakeholders at high schools. These findings support, in part, Adams and Christenson (2000) who found parents' trust in the teachers dropped significantly between elementary and middle school and then dropped slightly more from middle to high school. Parents' trust apparently wanes as their children progress through school. Furthermore, it seems logical that in an elementary school the principal has more contact with the parents because parents of elementary age students are at the school quite often and more directly involved with the school (i.e. Parent Teacher Organization, parent-

teacher conferences, multiple school programs, and classroom parents). This additional contact would in effect bolster trust. This conclusion is supported by Tschannen-Moran's (2001) study that revealed that the more a principal collaborated with faculty and parents the more likely the faculty and parents were to trust the principal. Furthermore, the findings in this study in regard to student trust support Gathman, Many, and Many (1977) who found the students at the elementary level are more trusting of their teachers than are middle school students.

While one might think school size would be related to all three stakeholders' (teachers, parents, and students) trust of the principal, it was only related to student trust of the principal. Regardless of level, perhaps students in a smaller school know the principal better, feel safer, and become more a part of the school family than students in larger schools. An opportunity for further study was suggested by this finding. Why does school size relate to the trust that students place in the principal but does not relate to parent and teacher trust?

Besides school size and level, behaviors also seem to play more of an important role in perceived trust than does personality type. Since a principal's behaviors are outwardly expressed and visible to others, perhaps it is the behaviors of the principal more than his or her personality type that relate to perceived trustworthiness. This reasoning is supported by Tarter et al. (1995) who found that supportive principal behavior i.e., listening to teachers, demonstrating concern, praising frequently, and criticizing sparingly is positively related to teacher trust.

The fifth possible explanation as to why the hypotheses failed is because there was a failure to specify intervening variables that may have nullified the effect of the

principal personality type and his or her perceived trustworthiness. Educational research suggests that such a phenomenon can occur. In a study about intervening variables, researchers questioned if the principal's communication style intervened between the relationship of an administrator's leadership style and his or her effectiveness at school. Results showed that the principal's communication style variable did intervene between the relationship of his or her communication style and effectiveness at school (Forsyth & Boshart, 1985). Also, the researchers suggested that communication style intervenes between leadership style and whatever outcome variable a researcher might choose to investigate. Thus, one could reason that in this trust study, the principal's communication style or some other factor intervened between principal personality type and perceived trustworthiness.

Continuing this reasoning, in a school setting the nature of the principal's job may produce intervening factors that in effect nullify the natural behavioral manifestations of his or her personality type that in turn evoke trust from others. To illustrate this argument, let us first investigate how the MBTI determines one's personality type. The directions of the MBTI instruct the test-taker to answer the questions in response to "how they *usually* feel or act" (Briggs & Myers, 1998). In essence, the instrument determines an individual's personality type when he or she is in a comfortable environment where his or her personality is most clearly evident. An individual may however not be able to consistently display his or her *normal* personality in a stressful job setting that requires actions inconsistent with the personality type. As a personal example, this researcher's personality type is one of being introverted and non-confrontational. However, as a middle school teacher, the job requires me to often behave much more extrovertly and in

more of a controlling manner than I would do so under relaxed conditions. Maintaining classroom discipline is a good example of this phenomenon. As a naturally easy-going, non-intrusive person I would prefer to simply teach a lesson, help students with their assignments, and listen to their questions and comments. However, often times I must assertively confront a student or class in an effort to curtail inappropriate behavior. While this action is not in harmony with my personality type, the nature the job of teaching requires such action. So too the principal may not be able to exhibit his or her natural personality because of intervening factors related to the nature of the job as principal.

Educational research supports the premise that the nature of a principal's job and conditions at the school can nullify or intervene with an administrator's natural personality and behavioral tendencies. First, certain school factors can alter the behaviors and action of principals. Zheng (1996) studied how instructional management behaviors are shaped by a number of contextual variables. Results showed that school size, urbanicity, and percentage of minority students at school were among the contextual factors that influenced principal behavior and the principal's perceived effectiveness in instructional leadership. Second, intervening factors specifically related to the job of being principal can influence behavior. Trider, Leithwood, & Montgomery (1985) found that principals perceive themselves as being strongly influenced by the type and amount of planning, relationships with and help from the central office, relationships with school staff, and the staff's attitude toward policy implementation. It is important to note that some of these factors are relationship oriented and other factors, planning for example, are related to the specific demands of the principal's job. Some principals may be more

influenced by the pressure and influence associated with interpersonal relationships while others may be more influenced by time constraints and the pressure of performance. It is possible that these behavior-influencing factors could lead to a principal behaving in a manner that is inconsistent with his or her personality type. Further research exists to support this argument.

Wiggins (1971) compiled the results of research conducted in the area of the behavioral characteristics of principals. One of the studies cited found that as an elementary school principal progresses through his or her career, the principal's behavior is influenced more by others' expectations than by the principal's personality (Bridges, 1965). As an example, a new principal may be inclined to present himself or herself in a certain way so as to gain the approval and support of the superintendent. In essence, the new principal will behave the way he or she thinks the superintendent would like for the principal to behave. The principal's behavior may or may not be in concert with his or her personality type. Such expectations act as intervening factors that can alter a principal's behavior and thus may skew stakeholders' perceptions of the principal thus nullifying the relationship between personality type and perceived trustworthiness.

Wiggins further expounded, "the school principal is commonly confronted with a hidden script which implicitly prescribes his behavior." (p. 2) If the principal's behavioral script is set, then this leaves little room for the exhibition of observable behaviors that would be in-line with his or her personality type. Perhaps the demands of a principal's job to maintain certain norms and act in a prescribed matter limit the opportunities for a principal to show his or her true personality. To further justify this point Wiggins wrote, "an elementary principal's personality is strongly influenced by the

forces of socialization which tend to mold individuals to fit into roles devised for maintaining stability." (p. 4) These forces of socialization such as superintendent, parent, teacher and community expectations and pressures may be more influential on a school principal than to other professionals. Some areas of possible future study could be investigations of how socialization factors influence principal behavior and how socialization factors influence school principals' behavior differently than professionals in other jobs.

One might suggest that the results of this study are the result of the MBTI having not been used extensively in studies in educational settings or that the instrument is not reliable in educational settings. The opposite appears to be true, however. The MBTI has been used for many years in an array of studies in educational settings. Many of these studies are demographic studies such as describing personality demographics of principals (Cline et al., 1990). Other studies involve relating student learning conceptions and styles with personality type (Haygood & Iran-Nejad, 1994). More specific to this study, the MBTI has been used to relate principal personality type to a number of variables. For example, MBTI studies have been used to relate a principal's personality type to teachers' work satisfaction (Koll, Robertson, Lampe, & Hegedus, 1996) and relating principal's personality type to leadership style (Hardin, 1995). Thus, it is reasonable to assume that the MBTI is a reliable instrument to be used in studies in educational settings.

The *post hoc* analysis detailed how school level affects trust in schools. First, parent trust of the principal decreases as school level increases. Parents of elementary students trust the elementary school's principal significantly more than parents of high

school students trust the high school principal. This finding concurs with Adams and Christenson's (2000) study that found parents of elementary students trust their children's teachers significantly more than parents of high school students trust their children's teachers. The level of parent trust in the principal declined from elementary to middle school but not at a significant amount. Second, as school level increases the decline of trust is even more pronounced when comparing parent trust in the school. Parents of elementary school students trust the school significantly more than both the parents of middle school students and parents of high school students trust their respective schools. Interestingly, while parent trust of the school declined from middle to high school, the amount was not significant. Third, student trust in the principal also declined as school level increased. In this case elementary students trust their principals significantly more than high school students trust their principals. Furthermore, middle school students trust their principals significantly more than high school students trust their principals. Although the level of student trust declined from elementary school to middle school the level was not significant. Fourth, principals scoring high, medium, or low on the N (intuition) scores evoked no significant differences in trust from parents and students regardless of school level.

The first three *post hoc* findings, though not surprising, offer insight into how stakeholder trust varies between school levels, but the findings also bring to light some interesting questions. Why does the parent trust of the school differ significantly between elementary and middle school while the parent trust of the principal does not? Why does the amount of student trust in the principal decrease significantly between elementary and

middle school but only a small amount from middle to high school? The quest for answers to these questions could be an opportunity for future study in this field.

The finding of the final *post hoc* analysis is also a cause for discussion. Results showed principals' N (intuition) scores did not affect parent trust in the school or the principal nor did it affect student trust in the principal regardless of school level. One would reason that in elementary schools, parents and students would have more opportunities for personal contact with the principal than in high schools. These opportunities for more personal contact would give rise to greater parent trust of the principal (as supported by the first *post hoc* analysis that showed parent and student trust of principal differ significantly between elementary and high school). This notion is also supported in part by Tschannen-Moran's (2001) study that revealed the more a principal collaborated with faculty and parents, the more likely the faculty and parents were to trust the principal. Since parents associated with elementary schools apparently have more contact with the principal than parents associated with high schools, why would the principal's personality type not affect the trust placed in him or her? In other words, elementary students' parents apparently have more contact with the principal than do high school students' parents have with their principal. This greater amount of contact in the elementary schools seemingly promotes more trust in the principal; but the principal's personality (as determined by the intuition score) does not affect the level of trust even at the elementary level. Why is this so? Is the principal's personality simply not related to stakeholder trust in him or her? Are principal behaviors more a determinant of perceived trust than personality? Or, are there still other intervening factors that cause trust in the principal? These questions give rise to future study.

Last, the descriptive statistics calculated for this study allowed for a personality comparison of Oklahoma principals with a national sample of administrators. When the 76 Oklahoma principals were compared with a national sample of elementary and secondary school administrators, the former were more introverted (47% to 41%), more intuitive (46% to 40%), slightly more feeling (54% to 50%) and more perceiving (41% to 30%) (Cline et al., 1990). Furthermore, Hetrick's (1993) study of rural and suburban school administrators in Michigan found that 40% of the administrators were ESTJ (extrovert, sensing, thinking, judging) or ESFJ (extrovert, sensing, feeling, judging). The sample of Oklahoma principals in this study revealed only 16% as being ESTJ or ESFJ. The two most prominent principal personality types in this study were ISTJ (introvert, sensing, thinking, judging) 22% and ENFP (extrovert, intuition, feeling, perceiving) 14%.

Benefits of the Study

It was hypothesized that principal personality type would predict stakeholders' trust in the principal and the school. Although the results of this study generally showed otherwise, the initial findings and *post hoc* analysis are still important. First, principals should be cognizant that personality is not the most important factor causing others to trust him or her. More importantly, as evidenced by previous studies (Butler, 1991; Tarter et al., 1995), an individual's behaviors and actions affect perceived trust. Thus, principals should be more aware of how they behave rather than focus on their personality types if they wish to build stakeholder trust. Second, those who prepare principals can incorporate this information into their curriculum. Besides teaching about the benefits of school trust, trainers can emphasize that no matter what the administrator's personality type, the principal can enhance stakeholder trust by exhibiting certain

behaviors such as openness and collaboration. Third, the *post hoc* analysis showed how stakeholder trust in the principal and school waned as school level increased. This information is valuable because it provides additional evidence that high school and middle school principals need to give more attention to trust building. Fourth, the initial results showed that school size is inversely related to student trust in the principal. While this result underscores the benefit of smaller school size, it should also motivate principals of larger schools to try to build the trust of their students.

Future Research

The results of this study suggest opportunities for future research. The findings showed that principal personality type has little consequence for the trust that stakeholders place in him or her. Previous studies have provided results that show certain behaviors evoke trust. For example, Tarter, Bliss, & Hoy (1989) found the more open the climate of a secondary school, the greater the level of faculty trust in colleagues. Hoy and Tschannen-Moran (1999) found that reliability, openness, and benevolence foster trust. Also Tarter et al. (1995) found that supportive principal behavior evokes teacher trust. Future research could attempt to locate other behaviors that evoke trust in schools.

The results of this study also found that the N (intuition) personality component did independently explain a significant amount of the variability of parent trust in school. A future study could look more closely at the behaviors of intuitive principals, their leadership styles, and how these factors affect school trust and climate. Along these lines, this study produced evidence that parent trust of the principal does not translate to parent trust of the school. Why is this? Future research could analyze how the parent relationship with the school is related to the parent relationship with the principal.

The *post hoc* findings of this study showed how school level affects trust. Basically, the level of trust in the principal and school decline as school level increases. A study of why trust wanes as school level increases could give insight to school administrators and teachers as to what they could do to maintain stakeholders' trust in the schools through the upper grades.

Research was presented in the discussion section about intervening variables and how outside factors can influence research in schools and the behavior of the principal. One study found that the intervening variable of communication style intervened between the relationship of an administrator's leadership style and his or her effectiveness at school (Forsyth & Boshart, 1985). Future educational research could attempt to find other school-specific intervening variables that influence the effect of one variable upon another. For example, a study could determine if principal personality type is an intervening variable between principal leadership style and school effectiveness. Similarly, other research gave evidence that a number of factors affect the behavior of the principal (Zheng, 1996; Trider et al., 1985). Future research could attempt to determine how these factors influence principal behavior and if principals of differing leadership styles and personality types are affected differently by these factors.

Conclusions

Trust is vital in relationships and organizations. Parent, teacher, and student trust in school and the principal is also important. Studies have shown how trust improves school climate (Ferris, 1994), increases parent participation in schools (Adams & Christenson, 1998), and fosters a sharing environment for students (Kratzer, 1997). Similarly, principal personality type is an important aspect of schools because it has been

shown to have influence on the principal's success and behaviors. Research has shown that the best performing principals (as determined by supervisor, peer, and teacher evaluations) were the ones with "assertive, imaginative, self-sufficient, and warmhearted" personalities (Lunenburg, 1990, p. 13). Also, principals' problem-solving techniques vary with personality type (Lueder, 1983).

While these studies and other similar studies have broadened the scope of trust and the influence of principal personality type in schools; no apparent studies to date have been conducted relating parent, teacher, or student trust of the principal and parent trust of the school to principal personality. The purpose of this study was to fill a knowledge gap by identifying how the principal's personality type affected the level of trust parents, students, and teachers place in the principal and parents place in the school.

This study found that principal personality type is not significantly related to the trust that parents, teachers, and students place in him or her nor to the trust that parents place in the school. One aspect of the principal's personality type, N (intuition), did explain a significant amount of the variance in parent trust of the school; however, personality type as a whole did not account for a significant amount of the variance.

Results of the first *post hoc* analysis showed how school level affected parent trust in the school, parent trust in the principal, and student trust in the principal. In general, the lower the school level the greater the parent and student trust in the principal and school. However, the levels of stakeholders' trust between elementary, middle school, and high school were not consistent. Parent trust in the principal differed significantly between elementary school and high school. The parent trust in the school differed significantly between both elementary and middle school and between

elementary and high school. The student trust in the principal differed between the elementary and high school and between the middle school and high school.

The final *post hoc* analyses involved the principal N (intuition) scores from the MBTI. These analyses compared the school level and principals' intuition scores with parent and student trust of the principal and parent trust of the school. Results from these analyses revealed no statistically significant findings.

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Appendix A

Definitions Associated with the Myers-Briggs Type Inventory (MBTI)

The following are definitions to terms found in or related to the MBTI.

1. Personality Type – An individual's personality type is the interaction of his or her four basic "dichotomies" (Briggs Meyers, McCaulley, Quenk, and Hammer, 1998, p. 6).

2. Dichotomies – Dichotomies are "opposite domains of mental functioning or attitudes" (Briggs Myers et al., p. 390). The Myers-Briggs Type Indicator is divided into four dichotomies: Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving.

3. Extroversion – Extroversion is one of the attitudes or orientations of energy. This type of person is "directing energy mainly toward the outer world of people and objects" (Briggs Myers et al., p. 6).

4. Introversion – Introversion is one of the attitudes or orientations of energy. This type of person is "directing energy mainly toward the inner world of experiences and ideas" (Briggs Myers et al., p. 6).

5. Sensing – Sensing is one of the functions or processes of perception. This type of person is "focusing mainly on what can be perceived from the five senses" (Briggs Myers et al., p. 6).

6. Intuition – Intuition is one of the functions or processed of perception. This type of person is "focusing mainly on perceiving patterns and interrelationships" (Briggs Myers et al., p. 6).

7. Thinking – Thinking is one of the functions or processes of judging. This type of person is "basing conclusions on logical analysis with a focus on objectivity and detachment" (Briggs Myers et al., p. 6).

8. Feeling – Feeling is one of the functions or processes of judging. This type of person is "basing conclusions on personal or social values with a focus on understanding and harmony" (Briggs Myers et al., p. 6).

9. Judging – Judging is one of the attitudes or orientations toward dealing with the outside world. This type of person is "preferring the decisiveness and closure that result from dealing with the outer world using one of the judging processes of thinking or feeling" (Briggs Myers et al., p. 6).

10. Perceiving – Perceiving is one the attitudes or orientations toward dealing with the outside world. This type of person is "preferring the flexibility and spontaneity that results from dealing with the outer world using one of the perceiving processes of sensing or intuition" (Briggs Myers et al., p. 6).

Appendix B

Student Trust of Principal Instrument

Please indicate how much you agree or disagree with each of the following statements. Place an "X" next to the word that is closest to how you feel or what you think. Please answer all items, even if you are not sure.

1. The principal at my school is nice.
Always, most of the time, sometimes, never

2. The principal at my school likes students.
Always, most of the time, sometimes, never

3. The principal at my school is fair.
Always, most of the time, sometimes, never

4. The principal at my school makes me feel safe at school.
Always, most of the time, sometimes, never

5. The principal at my school is helpful.
Always, most of the time, sometimes, never

6. The principal at my school does what he/she says he/she will do.
Always, most of the time, sometimes, never

7. The principal at my school is there for students when needed.
Always, most of the time, sometimes, never

8. The principal at my school tells the truth to students.
Always, most of the time, sometimes, never

9. The principal at my school makes time to talk with students.
Always, most of the time, sometimes, never

10. The principal at my school is smart.
Always, most of the time, sometimes, never

11. The principal at my school expects me to work hard.
Always, most of the time, sometimes, never

12. The principal at my school believes all students can learn.
Always, most of the time, sometimes, never

13. The principal at my school expects students to behave.
Always, most of the time, sometimes, never

14. The principal at my school knows all students by name.
Always, most of the time, sometimes, never

15. The principal at my school can be trusted.
Always, most of the time, sometimes, never

16. The principal at my school does the right thing.
Always, most of the time, sometimes, never

17. The principal at my school likes to talk to me.
Always, most of the time, sometimes, never

18. The principal at my school does his or her job well.
Always, most of the time, sometimes, never

19. The principal at my school treats all students with respect.
Always, most of the time, sometimes, never

20. The principal at my school can be seen around the halls.
Always, most of the time, sometimes, never

21. The principal at my school is helpful.
Always, most of the time, sometimes, never

Note: response rate 1-4

Appendix C

Teacher Trust in the Principal Instrument

The following are statements about your school. Please indicate the extent to which you agree with each statement along a scale from strongly agree to strongly disagree by circling one number for each question.

	Strongly Disagree					**Strongly Agree**
1. Teachers in this school trust the principal	1	2	3	4	5	6
2. The teacher in this school are suspicious of most of the principal's actions*	1	2	3	4	5	6
3. The teachers in this school have faith in the integrity of the principal	1	2	3	4	5	6
4. The principal in this school typically acts with the best interest s of the teachers in mind	1	2	3	4	5	6
5. The principal of this school does not show concern*	1	2	3	4	5	6
6. The principal in this school is unresponsive to teachers' concerns*	1	2	3	4	5	6
7. Teachers in this school can rely on the principal	1	2	3	4	5	6
8. The principal in this school is competent in doing his or her job	1	2	3	4	5	6
9. The principal in this school keeps his or her word	1	2	3	4	5	6
10. The principal doesn't tell teachers what is really going on*	1	2	3	4	5	6
11. The principal openly shares personal information with teachers	1	2	3	4	5	6

Note: response rate 1-6; * indicates negatively worded item

Appendix D

Parent Trust of Principal Scale

The items below permit a range of response from one extreme on the left (strongly disagree) to the other extreme on the right (strongly agree). By circling one number in each row, please indicate how you feel about your child's principal. Circled numbers close to the "1" or "8" suggest more intense feeling. **Think about your principal and respond to the following items.**

The principal of this school...	**Strongly Disagree**							**Strongly Agree**
1. is good at his/her job	1	2	3	4	5	6	7	8
2. can be counted on to do his/her job	1	2	3	4	5	6	7	8
3. is well intentioned	1	2	3	4	5	6	7	8
4. is always honest	1	2	3	4	5	6	7	8
5. invites both criticism and praise from parents	1	2	3	4	5	6	7	8
6. is very reliable	1	2	3	4	5	6	7	8
7. has high standards for all kids	1	2	3	4	5	6	7	8
8. is always ready to help	1	2	3	4	5	6	7	8
9. treats everyone with respect	1	2	3	4	5	6	7	8
10. keeps an open door	1	2	3	4	5	6	7	8
11. owns up to his/her mistakes	1	2	3	4	5	6	7	8
12. knows how to make learning happen	1	2	3	4	5	6	7	8
13. is always there when you need him/her	1	2	3	4	5	6	7	8
14. is trustworthy	1	2	3	4	5	6	7	8
15. likes to talk to parents	1	2	3	4	5	6	7	8

Note: response rate 1-8

Appendix E

Parent Trust of School Scale

The items below permit a range of response from one extreme on the left (strongly disagree) to the other extreme on the right (strongly agree). By circling one number in each row, please indicate how you feel about your child's principal. Circled numbers close to the "1" or "8" suggest more intense feeling. **Think about your child's school and respond to the following items.**

	Strongly Disagree							**Strongly Agree**
1. This school always does what it is supposed to	1	2	3	4	5	6	7	8
2. This school keeps me well informed	1	2	3	4	5	6	7	8
3. I really trust this school	1	2	3	4	5	6	7	8
4. Kids at this school are well cared for	1	2	3	4	5	6	7	8
5. This school is always honest with me	1	2	3	4	5	6	7	8
6. This school does a terrific job	1	2	3	4	5	6	7	8
7. This school has high standards for all kids	1	2	3	4	5	6	7	8
8. This school is always ready to help	1	2	3	4	5	6	7	8
9. I never worry about my child when he/she is there	1	2	3	4	5	6	7	8
10. At this school, I know I'll be listened to	1	2	3	4	5	6	7	8

Note: response rate 1-8

VITA

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