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Jeaneen Kaye Talbott

University of Nebraska at Omaha

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THE RELATIONSHIP BETWEEN OBSERVABLE TEACHING EFFECTIVENESS BEHAVIORS AND PERSONALITY TYPES IN A SAMPLE OF URBAN MIDDLE SCHOOL TEACHERS

By

Jeaneen Kaye Talbott

A DISSERTATION

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DISSERTATION TITLE

The Relationship Between Observable Teaching Effectiveness Behaviors And Personality Types In A Sample Of Urban Middle School Teachers

BY

Jeaneen Kaye Talbott

SUPERVISORY COMMITTEE:

APPROVED

Laura Schulte

Signature

Dr. Laura Schulte

Typed Name

Signature

Dr. Martha Bruckner

Typed Name

Signature

Tommie Radd

Typed Name

Signature

Dr. Tommie Radd

Typed Name

Signature

Larry Dlugosh

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Dr. Larry Dlugosh

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ABSTRACT

THE RELATIONSHIP BETWEEN OBSERVABLE TEACHING EFFECTIVENESS BEHAVIORS AND PERSONALITY TYPES IN A SAMPLE OF URBAN MIDDLE SCHOOL TEACHERS

Jeaneen Kaye Talbott

University of Nebraska, 2005

Advisor: Dr. Laura Schulte

Fifty-one middle school teacher volunteers in an urban, Midwestern school district were surveyed to determine their personality and temperament type using the 93 forced choice question Myers-Briggs Type Indicator (MBTI) Self-Scorable Form M. Each question contained two options and each question was weighted “1”. Two administrators rated those same teachers’ teaching effectiveness using the 34 question Teacher Effectiveness Survey (TES). There were three subscales on the TES; instructional performance, professional development, and leadership skills. The Overall score included all three subscales’ mean scores. A 5-point Likert scale with 1 as “Poor” and 5 as “Excellent” was used on the TES. Percentages and modes were determined for personality types and means and standard deviations were calculated to determine teaching effectiveness. Chi-Square Tests of Independence were calculated to determine if there was a statistically significant relationship between teacher personality temperament types and years of experience and Core vs. Non-Core teaching. Multiple t-tests were calculated to determine if there was a statistically significant relationship between teachers’ effectiveness scores and Core vs. Non-Core teaching. The one-way
analysis of variance (ANOVA) was used to determine if there was a statistically
significant relationship between teachers' effectiveness scores and years of teaching
experience (current and overall) as well as the relationship between teaching
effectiveness and teachers' personality temperament types. There was a statistically
significant relationship in the Leadership Skills category of teaching effectiveness and
current years of teaching experience. Teachers with 11-15 years of current teaching
experience (M = 3.72, SD = 0.28) were rated significantly higher than teachers with 1-5
years of current teaching experience (M = 2.30, SD = 0.88). Although no other
statistically significant relationships were found, the data provided information
regarding the need for staff development to improve teacher effectiveness. In addition,
the data provided information that would encourage further investigation into the
relationship between teacher personality and teacher effectiveness.
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Chapter 1

Introduction

The future of society lies in the classrooms of every school. The preparation and retention of quality, middle level teachers continue to be major concerns in the United States. Sikora (1999) and Riley (2002) reported that the most important component of education is the teacher. Middle level teachers, grades 5-8, need to be knowledgeable about middle level practices, experts in subject content, and responsive to the needs of young adolescents (Anfara, Rosenblum, & Mahar, 2002; Cooney, 2000; Martin, 1988; Morocco, Clark-Chiarelli, Aguilar, & Brigham, 2002; National Center for Education Statistics, 2000; National Middle School Association, 1995; Wells, 1989). "The importance of achieving developmentally responsive middle level schools cannot be overemphasized. The nature of the educational programs young adolescents experience during this formative period of life will, in large measure, determine the future for all of us" (NMSA, 1995, p. 37).

Behaviors that lead to student success can either be diminished or enhanced by the teacher's ability to instruct in an organized and effective way (Fairhurst & Fairhurst, 1995; Mamchur, 1996; Ryan, 1999). Students' perceptions of the learning environment and their motivation to succeed can be greatly influenced by one teaching episode or some unique interaction between the teacher and student or the student and other peers. Positive student-teacher relationships are cited as an important component of successful middle schools (Lounsbury, 1996; Morocco et al., 2002; NMSA, 1995; Wells, 1989). Middle schools, especially with underachieving students, must address both issues of
positive student-teacher relationships and high achievement (Wells, 1989). In a study of successful urban middle schools, survey results showed that teachers and staff cared about the students, students felt like they belonged, and respondents felt they were safe at school (Morocco et al., 2002).

"Young people undergo more rapid and profound personal changes during the years between 10 and 15 than at any other period in their lives" (NMSA, 1995, pp. 10-11). Student lack of motivation, alienation, and underachievement often begin in the middle school (NCES, 2000). Adolescents tend to pull away from adults but also have a strong need to bond with them. Research points to negative teacher-student interactions as a strong part of why students dropout. A "good teacher" is often cited as one of the most positive elements for why students stay in school (Wells, 1989). A student's decision to dropout before the ninth grade is often an end result of a long experience of poor student-teacher interactions, academic failure, grade retention, or frequent suspensions. Dropout prevention strategies should be targeted at middle school grades (Massachusetts Advocacy Center, as cited in Wells, 1989). By understanding the relationship between teacher effectiveness and personality type theory, student dropout rates could be positively affected.

Mamchur (1996) reported a vast difference between the personality traits of the general population and personality traits of teachers using the Myers-Briggs Type Indicator. One example of the difference is that only 4% of the teaching population is SP (Sensing-Perceiving); these teachers have the shortest stay in the teaching profession. Thirty-eight percent of the general population is SP. Francis (2000) also
reported that although SP personality types make up 38% of the population, 85% of students who dropout of school are SP personality types. With an extremely small percentage of SP teachers teaching SP students, that dropout statistic may never improve unless a conscious effort is made to understand personality types and teaching effectiveness. Because the differences between the general population and the teaching profession are known, this should encourage the teaching profession to find strategies to understand teaching effectiveness research and personality theory so the needs of all personality types can be met.

Personality theory suggests that individuals have preferences. Carl Jung was a contemporary psychologist of Sigmund Freud and a leading exponent of Gestalt personality theory. "Jung’s theory of psychological type is one of the most comprehensive theories developed to explain human personality" (Lawrence, 1982 as cited in Wicklein & Rojewski, 1995, p. 2). Fairhurst and Fairhurst (1995) stated that psychological type theory has helped determine which tools and techniques work best with which students. By understanding the theory, teachers are able to understand core student needs and select teaching strategies that effectively reach all students. According to the theory, "people learn and teach differently because they are different" (Fairhurst & Fairhurst, 1995, p. 3). Several researchers have found that specific personality types learn best in specific and different ways. Personality has a great impact on how teachers teach and how students learn. Teachers must learn about their own personality and teaching styles in order to reach every personality and learning style in their classroom (Fairhurst & Fairhurst, 1995; Mamchur, 1996; Myers & Myers,
Myers and Myers (1980) made the following statement in reference to type and learning styles:

Type makes a natural and predictable difference in learning styles and in student response to teaching methods. An understanding of type can help to explain why some students catch on to a way of teaching and like it, whereas others do not catch on and do not like it. Two distinct problems are involved here. Catching on is a matter of communication. Liking it is a matter of interest.

(Myers & Myers, 1980, p. 147)

Dorow (1989) concluded that significant change will only occur when teachers clearly understand their own personality types as well as their students. Self-perception is the key to an awareness and sensitivity to effective teaching strategies appropriate to the types represented by the students within the school. The perceptual psychology theory of Snygg and Combs supports personality theories that purport the need for understanding an individual's own view of him or herself (Boeree, 1998; Guild, 2001). Teacher effectiveness will be positively affected when the teacher adapts his or her dominant personality type and teaching style with the student's personality type and learning style. By understanding personality type theory and teacher effectiveness research, teachers can start to increase student results and improve teaching strategies by building relationships with each student. "Teachers must get to know their students, because the motivation to learn is 'inside' them, in their phenomenal fields and phenomenal selves" (Boeree, 1998, p. 3). Several researchers have found a significant relationship between certain teaching behaviors and personality types of teachers.
Effective teachers are known to have certain personality characteristics and an understanding of different learning and teaching styles. Therefore, an examination of the relationship between teacher effectiveness behaviors and personality types may help improve the critical middle school student-teacher relationship. An understanding of personality types in the teaching profession may also help to reduce the number of individuals going into the educational profession that will more than likely quit within a short amount of time (Ryan, 1999).

**Purpose of the Study**

The purpose of this study was to examine the relationship between personality type, as measured by the Myers-Briggs Type Indicator (MBTI) (Consulting Psychologist Press, 2002) and teaching effectiveness, as measured by the Teacher Effectiveness Survey (TES) (Andrews, 2000) in a sample of urban middle school teachers. The MBTI is a personality assessment that has been widely used. The TES was designed to assess and rate teachers on three characteristics of effective teaching: instructional performance, professional development, and leadership skills.

**Theoretical Framework**

Personality type or psychological type are terms most commonly associated with the model of personality development created by Isabel Briggs Myers. In her studies of people and extensive reading of Jung's theories of personality, she concluded that there were four primary ways people differed from one another.
The Myers-Briggs Type Indicator (MBTI) is an instrument developed through clinical experience supported by research. C. G. Jung created and tested the model in his clinical practice; Isabel Myers developed the Indicator to make it possible to test and use Jung's theory with non-clinical populations. (McCaulley, 1990, p. 181)

Carl Jung's personality theory of eight personality types and Isabel Myers' modification of that theory of 16 Myers-Briggs personality types and the Judging - Perceiving variable, make up the MBTI. Jung's theory divided all human behavior into two basic categories, perception and judgment. Perception is an open act of discovering, and judgment is a closed act of deciding. Donald Snygg's and Arthur Combs' educational theory of the phenomenal field states that the phenomenal view is developed over a lifetime and based on physical characteristics, cultural upbringing, and other, more personal experiences (Boeree, 1998). In order to understand and predict behavior, a variety of observations must be used in order for a person to understand his or her phenomenal field. Their theory supports Jung's theory in reference to perception (Boeree, 1998). Jung reported that individuals perceive through Sensing (S) or Intuition (N) while individuals make judgments through Thinking (T) or Feeling (F) processes (Mamchur, 1996). In Keirsey and Bates (1984) Please Understand Me, the authors discussed Jung's "invention" of psychological types and Isabel Myers' modification that pioneered a method of measuring type which is "personally significant" to any individual. The 16 MBTI types were consistent with four historical temperament type
categories developed by Hippocrates, Adickes, Kretschmer, Spranger, and Adler (Keirsey, 1998; Keirsey & Bates, 1984).

Brownsword (1987) introduced readers to both Jung's theories of psychological type as interpreted by Myers-Briggs and to Keirsey's idea about temperament. Their relationship provided different and useful insight into human personality as a continual relationship between type and temperament (Keirsey, 1998; Keirsey & Bates, 1984). After outlining the preferences (attitudes of extraversion and introversion and the four functions of perceiving and judging), he provided detailed descriptions of the 16 MBTI types that are grouped in Keirsey's four temperament types. The combinations were then related to each other and to the world of work as well as to the process of human development (Brownsword, 1987).

In Keirsey's 1998 book, Please Understand Me II, he described personality type theory as having two sides, temperament and character. Temperament is predisposition and character is disposition. "Temperament is the inborn form of human nature and character is the emergent form, which develops through the interaction of temperament and the environment" (p. 20). Keirsey also described temperament, character, and personality as unified actions and attitudes.

Hundreds of studies use some form of the MBTI, and several other personality tests base their tests on Carl Jung's personality theory and Myers-Briggs adaptation of his theory. Currently, the MBTI has the best reliability and validity of all personality tests. Jung's theory and Isabel Myers development of the MBTI is accepted in several occupations, including education (Brownfield, 1993; Brownsword, 1987; Fairhurst &
Fairhurst, 1995; Lawrence, 1993; Mamchur, 1996; McCaulley, 1990; Myers & McCaulley, 1985; Myers & Myers, 1980). Several studies have focused on teacher personality in the educational setting, however, none has focused solely on middle school teachers (Barrett, 1991; Gordon & Yocke, 1999; Lorentz & Coker, 1977; McCutcheon et al., 1991; Sikora, 1999).

**Research Questions**

1. What are the personality types of middle school teachers?
2. What is the teaching effectiveness of middle school teachers?
3. Is there a relationship between teachers' personality temperament types and their years of teaching experience (current school and overall)?
4. Is there a relationship between teaching effectiveness and years of teaching experience (current school and overall)?
5. Is there a relationship between teachers' personality temperament types and content area (Core vs. Non-Core)?
6. Is there a relationship between teaching effectiveness and content area (Core vs. Non-Core)?
7. Is there a relationship between teaching effectiveness and teachers' personality temperament types?

**Definition of Terms**

**Character** “Character is a configuration of habits. Character is disposition. Character is the emergent form of human nature, which develops through the interaction of temperament and environment” (Keirsey, 1998, p. 20).
Core teachers  Core teachers include those who teach math, science, social studies, literature, and language arts classes in middle schools.

Keirsey Temperament Sorter II  The Keirsey Temperament Sorter II is a questionnaire comprised of 70 questions that can help an individual become aware of preferred attitudes and actions. The questionnaire can help identify an individual’s basic temperament; NF, NT, SP, or SJ. The questionnaire can also provide more specific information to the four variants of each temperament (Keirsey, 1998).

Learning Styles  “Learning styles is the composite characteristic of cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment” (Keefe, 1979, as cited in Griggs, 1991).

Middle level  The middle level for this study will be defined as seventh and eighth grade students and teachers. Middle level research cites middle schools with combinations of fifth – eighth grades (Lounsbury, 1996).

Myers-Briggs Type Indicator  The MBTI is comprised of 16 type variables, each possessing its own unique qualities of personality. An individual’s basic preferences can be identified by taking the MBTI. Once established, interpretive data could help promote a more constructive use of the differences among individuals. Each of the 16 types was written by combining the letters that identified the basic preference from each of the four indices (e.g., ESFJ, INTP). The MBTI is used to understand the differences within type or the meaning of close scores. It describes subtle individual differences within a type and allows exploration of how one client compares to others of his or her
type, age, and gender. It can be used to find someone’s ideal work situation and to tailor individual results to career development or personal development (Myers & McCaulley, 1985).

Sears and Kennedy (1997) provide descriptions of each variable:

**Extraversion** The letter E is on the first indice of the MBTI. Attention flows out from the subject to objects and people of the environment.

**Introversion** The letter I is on the first indice of the MBTI. Attention flows from the object back to the subject and energy is abstracted from the environment and conserved by consolidating it within one’s own position.

**Sensing** The letter S is on the second indice of the MBTI. Sensing is perception of the observable by way of the senses.

**Intuition** The letter N is on the second indice of the MBTI. Intuition is perception of meanings, relationships, and possibilities by way of insight.

**Thinking** The letter T is on the third indice of the MBTI. Thinking is a logical decision-making process aimed at impersonal findings.

**Feeling** The letter F is on the third indice of the MBTI. Feeling is the process of appreciation, making judgments in terms of a system of subjective personal values.

**Judgment** The letter J is on the fourth indice of the MBTI. Judgment is the preference to organize and plan life, using one’s energies to control events rather than to experience and understand them.

**Perception** The letter P is on the fourth indice of the MBTI. Perception
entails an open, curious desire for understanding events with relatively little pressure to control them.

**Non-Core teachers** Non-Core teachers are those who teach special education and any other classes not listed in the “Core” category.

**Personality** Temperament and character make up personality. Temperament is a set of inclinations a person is born with and character is a set of traits a person develops over a lifetime of experiences. A person’s unique personal style is a combination of the two (Keirsey, 1998).

**Personality Type Theory** Personality type theory is a complex network of interacting systems that strive toward eventual harmony with oneself and one's environment. Human behaviors are consistent and orderly and are a function of different ways in which people prefer to use their perception and judgment (Myers & McCaulley, 1985; Myers & Myers, 1980).

**Teacher Effectiveness** Teacher effectiveness is defined as the ratings given to each teacher in reference to instructional performance, professional development, and leadership skills and an overall assessment from the 34 Likert-type questions on the Teacher Effectiveness Survey (TES) (Andrews, 2000; Barton & Andrews, 1994).

**Teacher Effectiveness Survey** The Teacher Effectiveness Survey (TES) is a 34-item instrument designed to assess the teaching effectiveness of graduates of teacher education programs but may also be used as a basis for further exploration of teacher effectiveness. Principals who work in the same building as the teachers rate the teachers on three characteristics that have been identified as characteristics of effective
teaching: instructional performance, professional development, and leadership skills. Ratings are made on a 5-point Likert-type scale (Andrews, 2000).

**Teacher Temperament Types**

*SJ (Sensation-Judging)* – Fifty eight percent of teachers are SJ types. The SJ teacher seeks to maintain the institution as it is. Dedicated to the work ethic, this type accepts the educational hierarchy and expects students to comply with the rules. Preservation of the cultural heritage, a very important value, is reinforced by a product orientation which emphasizes tests, quizzes, and demonstrations as means of evaluation. (Dorow, 1989, pp. 1-2)

*SP (Sensation-Perceiving)* – Four percent of teachers are SP types. Freedom and spontaneity are the hallmarks of the SP teacher. Process oriented, student-teacher interaction is encouraged in the classroom. Thriving on performance, this type of teacher is not goal oriented but basically impulsive. Naturally, valuing 'freedom', this instructor reacts negatively to accountability when imposed by authorities. (Dorow, 1989, p. 2)

*NT (Intuition-Thinking)* – Eight percent of teachers are NT types. The NT teacher is one who values intellectual growth, views mental development as a life-long challenge and takes every opportunity to interact with new ideas. Problem solving, which leads to the construction of mental models, is a major focus in classroom instruction. Placing a heavy emphasis upon subject matter acquisition, the NT teacher tends to be impersonal in relationships with students. (Dorow, 1989, p. 2)
**NF (Intuition-Feeling)** – Thirty-two percent of teachers are NF types.

The NF teacher is a people oriented instructor who encourages student-student interaction which will result in self-actualization. Anticipating personal growth as a natural outcome of education, this type individualizes instruction as often as possible while avoiding lectures, which are perceived as encouraging emotional isolation. (Dorow, 1989, p. 2)

**Temperament Style**  Temperament style is a set of inclinations individuals are born with. It is the inborn form of human nature (Keirsey, 1998; Keirsey & Bates, 1984).

**Temperament Theory**  Temperament theory provides a language for talking about people’s differences, helps people get started on the difficult task of self-examination, and makes a plea for tolerating, even embracing, differences. It is a way to systematize the study of character and core values. Temperament theory has historically divided temperament into four main categories. Keirsey identifies them as Artisan, Guardian, Idealist, and Rational, and each has a core value attached to it. Core values are those that are sacrificed with the most reluctance within an individual (Chess, 1997; Keirsey, 1998).

**Assumptions**

It was assumed that respondents would be honest when taking the MBTI. It was also assumed that the Teacher Effectiveness Survey would be accurately filled out by competent administrators who remained unbiased.
Delimitations

The study was delimited to middle school teachers in one urban, Midwestern middle school.

Limitations

The limitations of the study included non-probability sampling, the personality and effectiveness measurement tools, generalization of findings, and researcher bias.

Because of population availability and researcher access support, teachers selected to participate in the study were volunteers from one middle school. The sample (n = 51) studied was as large as could be justified due to budgetary, geographic, and time constraints. Assessment of personality was limited to the MBTI and the measurement of teaching effectiveness was limited to the 34 questions on the Teacher Effectiveness Survey and then compared to current research.

The findings of the study may not be representative of all urban middle school teachers. Readers should use caution when generalizing the findings. Although the reliability and validity of the MBTI are acceptable, the questionnaires gave rough indicators of personality and are a start, not an end, to understanding personality and temperament.

A final limitation to the study may be building administrators' bias as raters of teacher effectiveness. Administrators evaluated teachers regularly to ensure accurate measurements on the TES during the fourth quarter of the 2003 school year.
Significance of the Study

The dissertation study was designed to provide educators information about the relationship between teaching effectiveness and personality type. The results may help middle level educators provide better instruction to all students with the objective of reaching all differing personality types and learning styles. An increase in positive student-teacher relationships may help increase middle school teacher retention, increase student motivation to learn, and decrease future student dropouts.

To date, there have been no other studies focusing specifically on the personality and observable teaching effectiveness of all content area teachers in an urban middle school. As society changes and middle school effectiveness research continues to evolve, teachers must be effective in preparing middle school students for future successful roles.
Chapter 2

Review of Relevant Literature

Four bodies of literature provide a foundation for studying personality types and teacher effectiveness at the middle school level. First, the nature of middle schools will be defined and examined. Second, the literature pertaining to personality theory will be reviewed. Third, the literature pertaining to teacher effectiveness will be presented. Fourth, a brief overview of the relationship of personality types and teacher effectiveness will be reviewed.

Nature of Middle Schools

Middle level education is a concept more than it is a place. It is a program designed for the 10 to 15 year-old student that reflects the uniqueness of its clientele. Programs for this age group stress:

1. academic achievement,
2. responsibility,
3. reliability,
4. cooperation through teamwork,
5. differences among student population, and
6. exploration of subject areas in the safety of a supportive instructional team environment.

Middle level teaching is very challenging and not for everyone. If teachers like to work with young adolescents, enjoy being active members of a team, want to nurture students who are not sure they want to be nurtured, and have a lot of physical and emotional...
energy, then the middle level would be a complement to their personality (Nebraska Department of Education, 1997). Currently, great attention is being placed on the middle school's ability to be academically rigorous while providing a nurturing environment for adolescents (Council on Adolescent Development, 1989; Lounsbury, 1996; NMSA, 1995).

**History.** Middle grades reform research provides a broad set of dimensions to organize and understand middle schools (Morocco et al., 2002). The history of middle schools dates back to the 1920s and has gone through numerous changes, including the current configuration of middle schools (Lounsbury, 1996).

In the 1920s, junior high was gaining acceptance, and major statements identifying important characteristics were put forth. In the 1940s and 50s, major efforts were made to bring about the renaissance of the junior high school. Six major functions were proposed and described: integration, exploration, guidance, differentiation, socialization, and articulation. In the 1960s, middle schools' configurations of fifth-eighth grades or sixth-eighth grades were used as an alternative to seventh-ninth grade junior high schools. In 1982, key characteristics emerged from This We Believe (1982). In 1989, Turning Points: Preparing American Youth for the 21st Century, was released by the Council on Adolescent Development of the Carnegie Corporation of New York. This report placed middle schools on the public's agenda, not just the profession's agenda. In 1995, a new position paper was called for by the Carnegie Corporation in reference to changes in conditions and lessons learned since the 1982 paper.
Effectiveness characteristics. Research on middle school effectiveness characteristics is becoming more prevalent since the National Middle School Associations’ report (NMSA, 1995). The report provided six general characteristics of developmentally appropriate middle schools: (a) educators committed to young adolescents, (b) shared vision of middle level education, (c) high expectations for all students, (d) adult advocate for every student’s academic and personal development, (e) family and community partnerships, and (f) positive school climate. The report also provided six major middle level components: (a) curriculum that is challenging, integrative, and exploratory; (b) varied teaching and learning approaches; (c) assessment and evaluation that promote learning; (d) flexible organizational structures; (e) programs and policies that foster health, wellness, and safety; and (f) comprehensive guidance and support services.

The Council on Adolescent Development (1989) provided eight major recommendations through their research prior to the NMSA (1995) report. The eight were: (a) create small communities for learning, (b) teach a Core academic program, (c) ensure success for all students, (d) empower teachers and administrators to make decisions about the experiences of middle grade students, (e) staff middle grade schools with teachers who are experts at teaching young adolescents, (f) improve academic performance through fostering the health and fitness of young adolescents, (g) reengage families in the education of young adolescents, and (h) connect schools with communities.
Morocco et al. (2002) reported that academic excellence in the middle school involves all dimensions of the school including the structures through which people work together, approaches to curriculum and teaching; depth of content knowledge; relationships between teachers, students, parents, and the community; and school leadership. Anfara, et al. (2002) reported that effective middle schools have advisory programs, interdisciplinary teaching, integrative curriculum, exploratory and transition programs, and other programs to meet the needs of the young adolescent. In addition, teachers should provide developmentally appropriate teaching strategies and developmentally effective lesson plans. Lounsbury (1996) reported that a school foundation had the components of integration, exploration, guidance, differentiation, socialization, and articulation.

**Conclusion.** The middle school has a history of reform efforts in order to create an environment for the adolescent age group that is not only academically challenging, but also developmentally appropriate. By understanding the needs of the adolescent, adults working with students between the ages of 10-15 will have a more positive impact.

It is important to understand that middle school students are at a critical age in their lives. Efforts by teachers that can support positive outcomes with middle school students are not only good practice, but necessary activities.

**Teacher Effectiveness**

Professional knowledge of content is essential for teachers, but how that knowledge and the transmission of that knowledge are assessed is the bigger question.
Harris (1998) and Cruickshank (1990) reviewed the literature in reference to effective teaching. Cruickshank (as cited in Gordon & Yocke, 1999) organized the effective teaching behaviors from 10 studies and categorized the results into seven main clusters: (a) teacher character traits, (b) what the teacher knows, (c) what the teacher teaches, (d) what the teacher expects, (e) how the teacher teaches, (f) how the teacher reacts to pupils, and (g) how the teacher manages the classroom. Harris organized the research on effective teaching behaviors from several studies and categorized the literature by the following: (a) teaching behaviors, (b) teaching skills, (c) teaching styles, (d) teaching models, and (e) teaching artistry.

Marzano, Gaddy, and Dean (2000) provided a more detailed example of effectiveness when they used a research technique referred to as meta-analysis to identify instructional strategies that have the highest probability of enhancing student achievement for all students, in all content areas, and in all grades. They provided educators with the following effective instructional strategy categories and average effect sizes, with 1.0 being one year’s achievement growth: (a) identifying similarities and differences, 1.61; (b) summarizing and note taking, 1.00; (c) reinforcing effort and providing recognition, .80; (d) homework and practice, .77; (e) nonlinguistic representations, .75; (f) cooperative learning, .73; (g) setting goals and providing feedback, .61; (h) generating tests and hypotheses, .61; and (i) activating prior knowledge, .59. The authors warn that no instructional strategy works equally well in every situation, but each is dependent, in part, on several other factors.

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Observational tools used to measure teacher effectiveness are rare and difficult to locate. Currently, the Classroom Observations Keyed for Effectiveness Research (COKER) is no longer in print. Most standardized tools used to measure effectiveness do so in a subjective manner. However, tools are available to look at teacher classroom behaviors, which can be compared to teacher effectiveness research.

**Middle school teacher effectiveness.** Riley (2002) states that teachers need to find a balance between adolescent developmental needs and expectations for academic achievement. Far too often, teachers focus on one or the other. The teacher who spends too much time with the developmental needs of the adolescent may not prepare them for high school and beyond. The student may not be engaged in academics and fail to commit to education in the future. The teacher who focuses only on academics may lose the relationship with the student that encourages students to have fun while learning and continue to have fun throughout their educational career.

Jackson and Davis (2000) and the NMSA (1995) (as cited in Vars, 2001) support curriculum integration. The concept provides learning experiences organized around real life issues and problems. Curriculum integration not only helps young adolescents, but adults as well. The emphasis is on higher order thinking, cooperative learning, and consideration of human values. This allows students to understand their learning experience and relate it to the real world. The NMSA (1995) takes the stance that teachers using this concept will allow students to “make sense” of what they are learning (as cited in Vars, 2001).
Teachers should not become specialists in subject-matter only (Vars, 2001). Fitzpatrick (1997) and the Alliance for Curriculum Reform and National Study of School Evaluation (as cited in Vars, 2001) share categories of common learning that teachers should focus on: Learning-to-Learn Skills, Expanding and Integrating Knowledge, Communication Skills, Thinking and Reasoning Skills, Interpersonal Skills, and Personal and Social Responsibility. The NMSA (1995) provides other components that help make exemplary middle schools and teachers: (a) interdisciplinary teaming, (b) advisory programs, (c) varied instruction, (d) exploratory programs, and (e) transition programs. In addition, educators must be committed to young adolescents.

**Learning styles of middle school students.** Middle school students, make rapid physical growth changes, change in their ability to reason morally, start thinking in the abstract, and are introduced to a range of social pressures, including sex, drugs, and violence (NMSA, 2001). Middle school students are curious, energized and opinionated. They are active, engaged, and open to discovery. Students want hands-on experiences that challenge them while they enjoy the experience of learning. Students are looking to define themselves as individuals and at the same time want to belong to a group that defines popularity (Riley, 2002).

Engaging students in learning depends on the learning environment, and their experiences, motivation, and ability to make sense out of what is being taught. Students should be directly involved in planning, conducting, and evaluating their own learning so they can demonstrate a "developmentally-responsive" character (Vars, 2001). All
students cannot be expected to reach the same adult-determined level of performance on a standardized test. The standards themselves are not the problem; attaching them to a high-stakes test is the problem (Vars, 2001).

Learning styles and teacher effectiveness. Teacher effectiveness has been related to research about learning styles (Lounsbury, 1996; Morocco et al., 2002; NMSA, 1995; Wells, 1989) and both have been related to research about personality types (Fairhurst & Fairhurst, 1995; Keirsey, 1998; Lawrence, 1993; Mamchur, 1996; Myers & McCaulley, 1985; Myers & Myers, 1980). Teaching and learning are increased through a number of strategies. Wells (1989) suggests that teachers can help develop student social interactions by increasing opportunities for cooperative learning, forcing interpersonal communication skills. In addition, when teachers vary teaching and learning approaches that are directed to the diverse learning styles and mental maturation of the student, teaching and learning are improved (Lounsbury, 1996; NMSA, 1995). Research in several fields of cognition and learning, content learning and instruction, and teaching for understanding have guided the following principles: (a) authentic tasks engage students in constructing knowledge around important concepts; (b) cognitive strategies provide tools for engaging in domain-specific thinking and learning; (c) socially mediated learning engages students in intellectual partnerships with one another and with adults; and (d) constructive conversations facilitate building ideas (Morocco et al., 2002).

AdvisorTeam (2002) is a group dedicated to identifying individual styles and preferences in corporations, careers, relationships, and education. Specifically in
education, AdvisorTeam has provided information relating to effective teaching and learning in reference to the four temperaments: SP, SJ, NT, and NF. The Sensing-Perceiving (SP) learning style is typically in conflict with most teachers. Teachers wanting to reach the SP learner need to instruct with the use of games and competitions. Anything that involves doing rather than sitting, reading, and listening will benefit the teacher’s effectiveness and the student’s ability to learn.

The Sensing-Judging (SJ) learning style is in contrast to the SP learning style. The SJ learner is responsible, has good study habits, and completes well-structured tasks effectively. The SJ learner does well in classrooms where the teacher provides an orderly, quiet environment with lectures, and detailed homework assignments dominate instruction. An effective teacher for this learner type would include the use of workbooks, drills, and step-by-step presentations.

The Intuitive-Thinking (NT) learning style is dominated by a feeling of competence. This type of learner feels the need to know everything about everything. Laws, rules, and principles give NT learners an understanding of the world. The NT learner is often an independent learner who may be distracted from completing given assignments because of the pursuit of knowledge. A teacher who is effective with an NT learner may use strategies that create opportunities for sharing ideas with peers. The teacher should make it a point to work with NTs social skills as well as providing opportunities for recreational activities, otherwise the NTs may become isolated within the classroom.
The Intuitive-Feeling (NF) learning style is in contrast to all other styles in that this individual is looking for the personal connection with others. The NF individual looks for ways to open communication with others. The NF learner thrives on personal attention and recognition, especially by the teacher who needs to know the NF by name. The teacher who is effective with the NF learner should provide opportunities for discussion, use of imagination, and role play. The teacher should run a democratic classroom with plenty of group participation and interaction.

**Conclusion.** Mamchur (1996), Fairhurst and Fairhurst (1995), and Dorrow (1989) draw the conclusion that teachers are effective when they first understand their own learning style, teaching style, and personality type. After understanding themselves, then they need to understand the learning style and personality type of their students. White's and Burke's (1994) data, as cited in Mamchur (1996), support Mamchur's research indicating personal factors as the most indicative of teacher performance and success. Further noted was that personality has been shown to be the difference between strength and weakness in teaching. AdvisorTeam (2002) also provided information that can help teachers provide effective environments for each learning style. These findings would suggest that personnel departments may be wise to review teachers' personality types and knowledge of personality types when placing them in a particular school or particular assignment to avoid teacher ineffectiveness. This is not to suggest that personality type would be the prime indicator of teacher placement, but it could certainly be used as a tool to help improve teacher effectiveness.
Personality Theory

The idea of classifying humanity into personality types has been around for centuries. Almost 2,500 years ago, Hippocrates started the idea that there are only four basic types of people and chose to name them after body fluids. In the early 1900s, scientists such as Jung, Kretschmer, Fromm, Adickes, and Spranger began to examine human behavior in a more scientific manner and developed systems of classification. In the 1940s, Isabel Briggs Myers and her mother, Katharine Cook Briggs classified people based on their living style choices. Today, several personality questionnaires have been created that relate to Jung's and Myers-Briggs' theories of type.

Personality type theory of Carl Jung. “Jung’s theory of psychological type is one of the most comprehensive theories developed to explain human personality” (Plessman, 1985, as cited by Wicklein & Rojewski, 1995, p. 1). It has stood the test of time and a multitude of users. Jung's theories of the human psyche were complex and his style of writing was sometimes difficult to understand. "The essence of the theory is that much seemingly random variation in behavior is actually quite orderly and consistent, being due to basic differences in the way individuals prefer to use their perception and judgment" (Myers & McCaulley, 1985, p. 1). Under Jung's theory, each index reflects one of four basic preferences which directs the use of perception and judgment. "The preferences affect not only what people attend to in any given situation, but also how they draw conclusions about what they perceive" (Myers & McCaulley, 1985, p. 2). One of the major tenets of Jung's theory is that the type pattern is innate and the tendencies are there from birth. Jung developed a personality typology that has
become so popular that some people think that is all he did. The typology begins with the distinction between introversion and extraversion. Introverts are people who prefer their internal world of thoughts, feelings, fantasies, dreams, and so on, while extraverts prefer the external world of things and people and activities. The words have become confused with ideas like shyness and sociability, partially because introverts tend to be shy and extraverts tend to be sociable. In Jung's context, the introvert is somewhat more mature than the extravert. The extravert is valued more in the current culture. The introvert-extravert dimension is found in several theories, notably Hans Eysenck's, although often hidden under alternative names such as "sociability" and "surgency" (McCaulley, 1990; Myers & Myers, 1980).

Whether people are introverts or extraverts, they need to deal with the world, inner and outer. Each individual has his or her own preferred ways of dealing with the world. Jung suggests there are four basic ways, or functions: The first is sensing. Sensing means what it says: getting information by means of the senses. A sensing person is good at looking and listening and generally getting to know the world. Jung called this one of the irrational functions, meaning that it involved perception rather than judging of information.

The second is thinking. Thinking means evaluating information or ideas rationally, logically. Jung called this a rational function, meaning that it involves decision making or judging, rather than simple intake of information.

The third is intuition. Intuition is a kind of perception that works outside of the usual conscious processes. It is irrational or perceptual, like sensing, but comes from
the complex integration of large amounts of information, rather than simple seeing or hearing. Jung said it was like seeing around corners.

The fourth is feeling. Feeling, like thinking, is a matter of evaluating information, this time by weighing one's overall, emotional response. Jung calls it rational, obviously not in the usual sense of the word.

Individuals have all of these functions. They just have them in different proportions. Each individual has a superior function, which he or she prefers and is best developed in him or her; a secondary function, which he or she is aware of and uses in support of his or her superior function; a tertiary function, which is only slightly less developed but not terribly conscious, and an inferior function, which is poorly developed and so unconscious that he or she might deny its existence. Most individuals develop only one or two of the functions, but the goal should be to develop all four.

Myers-Briggs personality theory. Katherine Cook Briggs became very interested in the study of individual differences by noticing those of her family. Upon finding the work of Carl Jung, she devoted her research to understanding Jung’s typology theory. Cook Briggs and her daughter Isabel began research in classifying individuals by Jung’s theory. They were drawn to Jung’s work, which sparked their interest into a passion to put Jung’s theory of psychological type into practical use. World War II made both realize that a psychological instrument based on the understanding and appreciation of human differences would be a valuable tool. Briggs-Myers expanded on the work and developed teaching materials based on type (Myers & McCaulley, 1985; Myers & Myers, 1980). In Myers and Myers (1980), the authors are
careful to clarify three major differences between their work and Jung’s original theory: (a) everyday types vs. pure types, (b) an auxiliary balancing preference in addition to the dominant process, and (c) a different interpretation of Jung’s rational/irrational vs. Cook Briggs’ judging/perception types. Katherine Cook Briggs and Isabel Briggs-Myers developed an accounting questionnaire of psychological type through the research of Jung’s theories and published it in 1962 and later, with a different publisher reaching a wider audience in 1975. "The purpose of the Myers-Briggs Type Indicator is to make the theory of psychological types described by C. G. Jung (1921/1971) understandable and useful in people's lives" (Myers & McCaulley, 1985, p. 1).

Jung’s work had mostly been forgotten until the development of the Myers-Briggs Type Indicator (MBTI). The MBTI was designed to indicate an individual's type pattern, based on Jung's typology. Isabel Myers worked diligently to create items that people of each type would consistently select. Her whole item development and scoring process was based on that assumption. Yet many people use the MBTI to indicate where people are at a certain point in time. People accept the instrument results as the "truth" but are cautioned that the results of the instrument are neither "right" nor "wrong" and may change slightly over time. Type is a lifelong developmental process and many factors can affect the direction of type development.

Over time the MBTI came to be known as the most reliable psychological type inventory to validate Jung’s theories. The MBTI was designed to identify 16 patterns of action and attitude and make the information available to both the scientist and the layman. The MBTI measures preferences for one or the other pole on each of four

Conclusion. Without the persistence of Katherine Cook Briggs and Isabel Briggs Myers, Carl C. Jung may never have been noticed for his work on psychological types. However, without Carl G. Jung's theory, Katherine Cook Briggs and Isabel Briggs Myers may never have had their interests sparked enough to develop the most used personality measure known to society. In a combined effort, the development of the MBTI instrument now allows individuals to understand more about themselves for the betterment of themselves and others.

Teacher Effectiveness and Teacher Personality Types

Several researchers state that students tend to learn best and teachers are the most effective with those who are the same type as themselves (Fairhurst & Fairhurst, 1995; Mamchur, 1996; Myers & McCaulley, 1985). However, that does not mean students should be grouped in classes that match their type to the teachers' type. What should be done is use proven effective ways to reach all personality types, which in turn will reach all learning types.

The letters within the MBTI and the Keirsey Temperament Sorter have remained consistent. They can be compared in many ways. One letter may be used to compare information; two can; three or four can as well. Personality profiles of teachers have

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been done for years, and there are hundreds of studies that provide personality type information of teachers. In addition, personality studies specifically related to teaching effectiveness provide valuable information to support the importance of understanding the relationship.

**Personality profiles of teachers.** McCutcheon et al. (1991) reported that the largest subgroup of student teachers’ personality types in the elementary level was ESFJ, but there was no typical profile in the secondary level. Sears and Kennedy (1997) supported McCutcheon et al. (1991) when they found the SFJ profile to be attracted to elementary teaching. Hinton and Stockburger (1991), Marso and Pigge (1990), and Lawrence (1979) (as cited in Sears & Kennedy, 1997) found prospective teachers to have ESFJ as their primary typology with no distinction between elementary or secondary level. Gordon and Yocke (1999) found ESTJ to be the primary typology of beginning industrial and health occupations teachers. Barrett (1991) reported the highest distribution of secondary teachers to have primary traits of ESTJ. Keirsey and Bates (1984), Mamchur (1996), and Francis (2000) all reported a dominant 56% of school personnel to be SJ temperament types, and SP types, 2-4%, to be vastly underrepresented. Dorow (1989) also found the SJ personality to have the highest secondary level representation during his study of undergraduate and graduate social studies teachers. The studies dealing with the secondary level may be including grades 7-12, but most studies represent grades 9-12. There are no studies specifically focusing on personality traits of middle level teachers, grades 7-8. In a summary of middle school teacher personality types' data taken from banks of cases between March 1978
and December 1982, the percentage of teachers in the most frequent categories included: ISFJ (12.23%), ISTJ (11.70%), ESFJ (11.52%), ENFP (10.99%), and ESTJ (9.13%). The traits of INTP (2.39%), ISTP (2.30%), and ESTP (1.77%) were the least frequent (Lawrence, 1993; Myers & McCaulley, 1985).

Fairhurst and Fairhurst (1995) adapted information from Myers and Myers (1980) and Keirsey and Bates (1984) regarding middle and junior high school teachers' temperaments while Mamchur (1996) and Keirsey and Bates (1984) reported temperament types of all teachers. Middle school SPs represented 11% while all teachers represent 4%. Middle school NTs represent 15% while all teachers represent 8%. Middle school NFs represent 30% while all teachers represent 32%. Middle school SJs represent 45% while all teachers represent 56%.

Myers and Myers (1980) reported findings from 1949 and 1962 regarding college students in the general education field differing from those who were in the specific educational areas of health and physical education. The NT type was 6% for general education and 10% for health and physical education. The ST type was 13% for general education and 32% for health and physical education. The NF type was 39% for general education and 24% for health and physical education. The SF type was 42% for general education and 34% for health and physical education.

Research studies. Sears and Kennedy (1997), Barr (1948) and Feldman (1986) (as cited by Kent et al., 1995), and Barry and Ginsberg (1990) (as cited in Gordon & Yocke 1999), reported that several of the earliest research studies showed an intense interest in teacher effectiveness and teacher personality. Early research was criticized as

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a poor predictor of effective classroom behavior due to several different factors including ineffective observational tools. Soon research focused on "process-product", which investigated specific teaching behaviors and student achievement.

Several studies have attempted to identify the differences between teacher behaviors and personality type and found a positive relationship between observed teacher behavior and predictable behavior explained by personality type theory (Barrett, 1991; Gordon & Yocke, 1999; Lorentz & Coker, 1977; McCutcheon et al., 1991; Sikora, 1999).

Several researchers contribute to the information about personality types and teaching effectiveness. Carlyn (1976) (as cited in Myers & McCaulley, 1985), reported on 200 prospective teachers using a Teacher Personality Questionnaire. DeNovellis and Lawrence (1983) provided information in reference to 76 volunteer elementary and middle school classroom teachers using the MBTI as a personality measure and two other measures of classroom climate and management. Pfeifer (1982) used the MBTI and the Evaluation and Profile to research 69 student teachers. Lorentz and Coker (1977) used the MBTI and five other instruments to determine their results. McCutcheon et al. (1991) used the MBTI and the Classroom Procedures Evaluation Form to discuss 79 elementary and secondary student teachers. Gordon and Yocke (1999) and Barrett (1991) used the COKER (Classroom Observations Keyed for Effectiveness Research) with 22 and 49 vocational teachers, respectively, to provide research data. All found significant relationships, in one way or another, with certain
types and teaching effectiveness traits. All studies were performed with teachers in an educational setting.

The Extravert (E) type was associated with interest in planning school projects and expression of high commitment to classroom teaching (Carlyn, 1976, as cited in Myers & McCaulley, 1985). In addition, McCutcheon et al. (1991) found the E type teacher to relate to student inquiry for information or clarification and was perceived by supervisors to exhibit instruction that accommodated students of different skill levels. Also, Es were seen as demonstrating instruction that accommodated students with varying interests. The Extrovert, Sensing (ES) type scored higher than Extrovert, Intuitive (EN) on providing positive feedback on performance, implementing effective classroom management, and monitoring learner understanding and reteaching. The ES type also scored higher than Introvert, Intuitive (IN) on helping students recognize progress and achievement (Barrett, 1991). In addition, the Extravert, Judging (EJ) type showed a more positive student-teacher relationship than the Introvert, Perception (IP) type (Pfeifer, 1982).

Pfeifer (1982) found the Introvert (I) type to have a negative correlation with teacher performance. The Introvert, Sensing (IS) type was more likely to be rated as controlling the choice of activities (DeNovellis & Lawrence, 1983) and was the best type for predicting teacher effectiveness in the Gordon and Yocke (1999) study. The IS type and the Introvert, Intuition (IN) type both scored higher than the Extravert, Intuitive (EN) type in implementing effective classroom management and monitoring learner understanding and reteaching (Barrett, 1991).
The Feeling (F) type was associated with interest in teaching lower grades and expression of high commitment to classroom teaching (Carlyn, 1976, as cited in Myers & McCaulley, 1985). Other researchers found the Feeling (F) type to attend to pupils closely, to attend to several pupils at the same time, to have pupils central in the activities, and to give more positive verbal and nonverbal feedback to students (DeNovellis & Lawrence, 1983). It was also reported that these teachers related to students in an overly familiar manner (McCutcheon et al., 1991).

The Thinking (T) type was highly correlated with beginning instruction promptly, and using a constant flow of words without repetition (McCutcheon, et al., 1991).

The Intuitive (N) type was associated with enjoying working with students in small groups, using independent and creativity in teaching, and planning school projects (Carlyn, 1976, as cited in Myers & McCaulley, 1985). In addition, Ns allowed more individual activities in class, used more non-verbal negative behavior and were rated as moving more freely about the classroom. When nonproductive behavior occurred, the N teacher was likely to respond with hostile or aggressive acts (DeNovellis & Lawrence, 1983). The Sensing (S) types recognized when students were not comprehending a concept and more likely to repeat themselves than Ns in Barrett's (1991) study. The Intuitive, Feeling (NF) type showed consistently low scores in all areas of teacher effectiveness.

The Perceiving (P) type had a negative correlation with student teaching success at the secondary level in the Pfeifer's (1983) study. Also, Ps were seen providing
additional sources of information for learner inquiry and demonstrating instruction that accommodated students with varying interests in the McCutcheon et al. (1991) study.

The SP type scored the highest in the Barrett (1991) study in demonstrating enthusiasm; demonstrating proper listening skills; maintaining an active learning environment; providing positive feedback; demonstrating patience, empathy, and understanding; helping students recognize process and achievement; and providing examples of how a task should be completed. The SFP type scored highest in all competencies that were different between temperaments as well. The NFP type showed more nonverbal disapproval (DeNovellis & Lawrence, 1983).

The SN type showed positive relationships with using a variety of instructional strategies, creating positive classroom environments, assisting students in discovering and correcting errors, stimulating student interest, using a variety of sensory materials, providing opportunities for successful experiences by students, maintaining environments in which students are actively involved, and developing and demonstrating problem-solving skills (Gordon & Yocke, 1999).

The ENTP and the ESTJ types scored highest on the COKER in the Gordon and Yocke (1999) study. The ESFP type was shown to be strong and enthusiastic in the Barrett (1991) study.

In the Lorentz and Coker (1977) study, teachers classified by predominant MBTI personality types did not differ significantly on the measures of teacher competency; however, they did differ significantly on the measures of competency as
reflected by the students. The teachers may teach the same way, but it was clear that the students responded quite differently to teacher personalities.

**Conclusion.** Although several of the studies do not pertain specifically to middle schools and all teaching areas, the research provides a base in which comparisons can be made and more information can be provided when studying personality types and teaching effectiveness. Several different teacher effectiveness measures were used, but the concept of teacher effectiveness strategies and traits remained the same. With the results of other researchers' studies, comparisons can be made with the current study.
Chapter 3
Methodology

The purpose of this study was to examine the relationship between personality type, as measured by the Myers-Briggs Type Indicator (MBTI) (Myers & McCaulley, 1985), and teaching effectiveness, as measured by the Teacher Effectiveness Survey (TES) (Andrews, 2000) in a sample of urban middle school teachers. The MBTI, based on Carl Jung's theory of personality, was used to make the theory of psychological types understandable and useful to all people. "The essence of the theory is that much seemingly random variation in behavior is actually quite orderly and consistent, being due to basic differences in the way individuals prefer to use their perception and judgment" (Myers & Myers, 1980, p. 1). The TES was designed to assess and rate teachers on three characteristics of effective teaching: instructional performance, professional development, and leadership skills. Methods and procedures that were used in this study are presented in this chapter.

Research Design

The design of the study was a cross-sectional survey, gathering quantitative data that were analyzed to determine the relationship between personality type and teacher effectiveness. The Institutional Review Board number assigned to the researcher study on March 28, 2003, by the University of Nebraska Medical Center was 114-03-EX.

Sample

A non-probability sample (n = 51) for the study consisted of teacher volunteers at one urban middle school, grades 7-8, in a Midwestern school district. Only 3 teachers
chose not to participate in the study. The primary decision to select subjects at the specific middle school was based on their appropriateness for the study, accessibility, and budgetary constraints. Demographic information consisted of gender, age, years of teaching experience, and subject area.

There were 51 out of 54 possible participants in the study, 14 male (27.5%) and 37 female (72.5%) participants. Four (7.8%) teachers were between the ages of 22 to 25, 8 (15.7%) between 26 to 30 years of age, 5 (9.8%) between 31 to 35 years of age, 3 (5.9%) between 36 to 40 years of age, and 31 (60.8%) were 40 or older.

There were 14 (27.5%) teachers with 1 to 5 years of teaching experience, 8 (15.7%) teachers with 6 to 10 years of teaching experience, 6 (11.8%) teachers with 11 to 15 years of teaching experience, and 23 (45.1%) teachers with 16 or more years of teaching experience. The content areas of the teachers included: Cooperative arts (25.5%), special education (15.7%), language arts (13.7%), literature, including the librarian, (11.8%), math (9.8%), science (9.8%), social studies (9.8%), and English as a Secondary Language (3.9%).

Data Collection

An informational handout about the study, including the "Consent to Participate", was given to teachers in November, 2002 (see Appendix A). Teachers reported their interest to the researcher and an estimate of subjects was determined. The subjects were solicited again during a March, 2003, faculty meeting; information was disseminated verbally, and a "Participant Information" sheet was provided (see Appendix B). Those not in attendance were given the opportunity to meet individually.
with the researcher. The researcher followed-up individually after 1 week with teachers who had not completed the "Participant Information" sheet.

After the researcher determined who all the participants were, a meeting was held to discuss the procedures for completing the MBTI (see Appendix C). The meeting took place during the month of April, 2003. All participants completed the MBTI by the end of May, 2003. The researcher made sure that there was no "threat" to the teachers in regards to the questionnaire. The teachers answered each question after reviewing their actions both at work and away from work to ensure reliable results. The researcher will provide an informational meeting regarding personality types after the entire study has been completed, so participants have a basic understanding of personality type and the theory behind personality type. If results would have been given prior to all participants completing the MBTI, their responses could have been affected.

During late April and early May, 2003, the principal of the building and another building administrator other than the researcher completed a TES in reference to each participant (see Appendix D). The raters' scores were averaged to compute a TES score for each participant because the raters' scores did not deviate by more than 3 score points. Because the TES was filled out late in the school year, it gave the raters a better opportunity to make accurate judgments in reference to the three subscales. The raters had several opportunities to observe teachers in many settings throughout the year.
Instrumentation

**Myers-Briggs Type Indicator (MBTI).** The Myers-Briggs Type Indicator is the most popular instrument used to measure an individual’s personality type because of its strong psychometric characteristics. The MBTI reflects a trustworthy theory. There are 93 questions on the MBTI Form M (1998), the standard form, where an individual responds to a forced choice question with only two responses. Teachers were asked to respond to questions about their preferences in various situations and the result was an indicated “type” of personality. The MBTI is a paper-pencil test in which all items are scored with a template and weighted "1". The MBTI is comprised of 16 type variables, each possessing its own unique qualities of personality. An individual's basic preferences were identified after taking the MBTI. The results on an individual's MBTI gave four mental processes that showed an individual which of the four was the favorite or first in importance, the second favorite, the third, and the least favorite. Each of the 16 types was written by combining the letters that identified the basic preference from each of the four dichotomies (e.g., ESFJ, INTP) (Sears & Kennedy, 1997). The highest score in each of the four dichotomies made up the personality type. An additional breakdown was used to determine an individual’s temperament type, based on personality type, that was one of four categories: SJ (Sensing-Judging), SP (Sensing-Perceiving), NF (Intuitive-Feeling), and NT (Intuitive-Thinking).

The instrument itself addressed an individual’s preference for four personality traits. The Association of Psychological Type (2002), Center for Applications of Psychological Type (2002), and Myers and McCaulley (1985) provide descriptions of
the MBTI dichotomies. The first dichotomy acknowledges the individual's preference for extraversion (E) or introversion (I). This indicates how individuals view the world around them and whether they are energized by others and their surroundings or prefer to address the inner world of ideas and concepts.

The second dichotomy considers how individuals take in data or information. This can be either through the concrete method of sensing (S) or the more abstract method of intuition (N). Differences between individuals in this area can create significant problems regarding how reality is viewed and consequently how individuals view each other.

The third dichotomy is the only one that is affected by an individual's gender. It indicates how information is used by the individual in making decisions. The more logical and objective method is referred to as the thinking (T) function and is preferred by 60% of males. The more value related and subjective method is referred to as feeling (F) and is preferred by 60% of women. These differences can create significant communication difficulties at home and at work, and understanding this function can greatly enhance the functioning of an organization or family unit.

Finally, the judging (J) and perceiving (P) attitudes indicate how an individual organizes and operates in the outside world. This dichotomy is usually the easiest one to spot. The judging type individual will be systematic and decisive, while the perceiving type individual will be random and open-ended. Differences in the way people conduct their outer lives can be quite annoying to those of the opposite attitude and need to be understood.
The test-retest reliability estimate for the MBTI is .75 (Association of Psychological Type, 2002; Berens, 1996; Center for Applications of Psychological Type, 2002; Keirsey, 2000; Myers & McCaulley, 1985). A study by Kelly and Jugovic (2001) found moderate to strong positive correlations between the MBTI and Keirsey’s measures of psychological type while Quinn's, Lewis', and Fischer's (1992) results also supported the use of either instrument to determine an individual’s personality type. In addition, Tucker and Gillespie (1993) found correlational comparisons between the MBTI, the Keirsey Temperament Sorter, and the Keirsey Temperament Sorter-II at .68 to .86, suggesting that the three instruments are measuring similar constructs.

Teacher Effectiveness Survey (TES). The TES was completed by two building administrators to provide a measure of teacher effectiveness. The survey consists of 34-items. All of the items are on a 5-point Likert scale. Likert items range from "Poor" to "Excellent". The questions on the survey were broken into three subscales that can be used as a basis for further exploration of teacher effectiveness. The subscales are (a) instructional performance, (b) professional development, and (c) leadership skills.

The instruction subscale consists of items related to the teacher’s performance in the classroom. The professional development subscale is made up of items that measure a teacher’s ability to get along with others. The leadership subscale is comprised of items related to the teacher’s ability to take charge among peers and to take advantage of opportunities to grow and change. (Barton, Andrews, & Schwab, 1994, p. 220)
A fourth subscale, teaching style, was recently added by Andrews (2000), was not used in this study. Current subscales from the 2000 survey are as follows:

a) instructional performance – 20 items; b) professional development – 9 items; and c) leadership skills – 4 items.

The TES has strong psychometric characteristics. Although the TES is subjective in nature, it has been created with research-based criteria to measure teacher effectiveness in several different areas. The TES was developed by a team of five faculty members and one graduate assistant at the University of New Hampshire during the 1989-1990 academic year. The members' areas of expertise included curriculum development, elementary and secondary education, educational administration, and developmental psychology. In addition, the TES does not require extensive and expensive training for the rater (Barton et al., 1994).

Content validity. The TES has been used primarily to measure the teaching effectiveness of graduates of teacher education programs. For this study, a specific group of middle school teachers was studied. To ensure that the items on the TES were appropriate for measuring the teaching effectiveness of middle school teachers, 10 teachers were selected to validate the content of the TES prior to the study. The teachers determined that the items measured teacher effectiveness at the middle school level. Teachers reviewed the survey items on the TES and rated them on a scale between 1 and 3, "1" meaning "Not appropriate", "2" meaning "Marginally appropriate," and "3" meaning "Very appropriate" (see Appendix E). The
appropriateness of the TES was determined and the process to validate the instrument continued.

Reliability. Barton et al. (1994) found internal consistency reliability estimates of .96 (instructional performance), .92 (professional development), and .92 (leadership skills) for the three subscales. High reliability estimates may indicate that each subscale is composed of highly interrelated items or that teachers who excel in one subscale tend to excel in all subscales. Intercorrelations among the three subscales ranged from .80 to .87, suggesting the possibility of a global measure of effectiveness rather than three separate constructs. Prior to the study, two administrators from a separate middle school building other than the one involved in the research study completed the TES in reference to 20 of their teachers in order to provide an estimate of reliability. For the pilot study, Pearson correlations between the two administrators' ratings were significant at the .01 level for the TES as a whole, \( r = .827 \). The Pearson correlations for the subscales were as follows: instructional performance, \( r = .870 \), professional development, \( r = .764 \), and leadership skills, \( r = .482 \). Reliability analysis was done for each rater using Cronbach’s alpha. Cronbach’s alpha is a conservative estimate of a scorer’s reliability. The Cronbach’s alpha reliability estimates of Rater1 were as follows: instructional performance (.99), professional development (.98), and leadership skills (.98). The reliability estimates for Rater2 were as follows: instructional performance (.98), professional development (.97), and leadership skills (.98).

Reliability for the TES was determined for this study as well. Pearson correlations for the two building administrators’ ratings were significant at the .01 level.
for the TES as a whole, \( r = .874 \) and the subscales of instructional performance, \( r = .864 \), professional development, \( r = .743 \), and leadership skills, \( r = .742 \). The Cronbach’s alpha reliability estimates of Rater 1 were as follows: instructional performance (.97), professional development (.92), and leadership skills (.93). The Cronbach’s alpha reliability estimates for Rater 2 were as follows: instructional performance (.97), professional development (.92), and leadership skills (.83).

**Variables**

The variables in this study included three independent and five dependent variables. Descriptions of each follow.

**Independent variables.** The independent variables for this study are defined as:

1. content area (Core vs. Non-Core)
2. years taught (1-5, 6-10, 11-15, 16+)
3. years taught at current school (1-5, 6-10, 11-15, 16+)

**Dependent variables.** The dependent variables were personality type from the MBTI results and the mean scores on the three subscales of the TES and the mean score of all subscales combined.

**Research Questions and Data Analysis**

1. What are the personality types of middle school teachers?

   Descriptive statistics were computed including the mode and percentage of each personality type (16 categories) and temperament type (4 categories).

2. What is the teaching effectiveness of middle school teachers?
Descriptive statistics were computed including means and standard deviations for each of the TES subscales and TES total score.

3. Is there a relationship between teachers' personality temperament types and their years of teaching experience (current school and overall)?

Chi-Square Tests of Independence were computed using a .01 significance level.

4. Is there a relationship between teaching effectiveness and years of teaching experience (current school and overall)?

One-way Analyses of Variance (ANOVA) were computed using a .01 significance level.

5. Is there a relationship between teachers' personality temperament types and content area (Core vs. Non-Core)?

A Chi-Square Test of Independence was computed using a .01 significance level.

6. Is there a relationship between teaching effectiveness and content area (Core vs. Non-Core)?

Independent t-tests were computed, using a .01 significance level.

7. Is there a relationship between teaching effectiveness and teachers' personality temperament types?

One-way Analyses of Variance (ANOVA) were computed, using a .01 significance level (4 categories of personality types).

Sufficient data did not exist to allow two-way Analyses of Variance (ANOVA) to be computed using MBTI personality temperament type and each of the demographic variables as independent variables and TES scores as the dependent variables.
Chapter 4

Results

The purpose of this study was to examine the relationship between personality type and teaching effectiveness. Fifty-one teachers completed the Myers-Briggs Type Indicator (MBTI) Form M. Personality type was measured from each of the four dichotomies: Extroversion-Introversion (EI), Sensing-Intuition (SN), Feeling-Thinking (FT), and Judging-Perceiving (JP). An additional breakdown was used to determine an individual’s temperament type: Sensing-Judging (SJ), Sensing-Perceiving (SP), Intuition-Feeling (NF), and Intuition-Thinking (NT). Using the Teacher Effectiveness Survey (TES), two building administrators rated the 51 teachers on a 5-point Likert-type scale where a score of 1 was “Poor” and a score of 5 was “Excellent”. There are three subscales in the TES including 20 items in the category of instructional performance, 9 items in the category of professional development, and 4 items in the category of leadership skills. Analysis of similar studies reported relationships between personality type and teacher effectiveness (Barrett, 1991; Gordon & Yocke, 1999; Lorentz & Coker, 1977; McCutcheon et al., 1991; Sikora, 1999).

Research Questions

Seven research questions were addressed in the study. The results of the statistical analyses follow.

Research Question #1

What are the personality types of middle school teachers?
**Personality types of teachers.** For the 51 teachers in the study, the three most frequent personality types were Introversion-Sensing-Thinking-Judging (ISTJ), Extraversion-Sensing-Feeling-Judging (ESFJ), and Extraversion-Intuition-Feeling-Judging (ENFJ) with six teachers (11.8%) each. The personality type of Introversion-Sensing-Feeling-Perception (ISFP) was the only type not represented in the study. Table 1 presents the frequency and percentage of each personality type found in the sample of 51 teachers.

**Temperament types of teachers.** Temperament type was determined by taking the personality type and breaking it down into one of the four categories: Sensing-Judging (SJ), Sensing-Perceiving (SP), Intuition-Feeling (NF), or Intuition-Thinking (NT). Of the 51 teachers, 21 (41.2%) were of the SJ temperament type. Fifteen (29.4%) of the teachers were of the NF type, and 10 (19.6%) were of the NT type. Only 5 (9.8%) were of the SP type.

**Research Question #2**

What is the teaching effectiveness of middle school teachers?

**Teaching effectiveness of teachers.** The mean scores of both raters on the TES subscales were as follows: overall ($M = 3.37$, $SD = 0.78$), instructional performance ($M = 3.50$, $SD = 0.82$), professional development ($M = 3.41$, $SD = 0.74$), and leadership skills ($M = 2.63$, $SD = 0.91$). Table 2 presents the means and standard deviations of each sub-category from Rater 1 and Rater 2.
Table 1

Personality Types of Teachers

<table>
<thead>
<tr>
<th>Type</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTJ</td>
<td>4</td>
<td>7.8</td>
</tr>
<tr>
<td>ISFJ</td>
<td>6</td>
<td>11.8</td>
</tr>
<tr>
<td>ISTP</td>
<td>2</td>
<td>3.9</td>
</tr>
<tr>
<td>ESTP</td>
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<td>2.0</td>
</tr>
<tr>
<td>ESFP</td>
<td>2</td>
<td>3.9</td>
</tr>
<tr>
<td>ESTJ</td>
<td>5</td>
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<tr>
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</tr>
<tr>
<td>INFJ</td>
<td>3</td>
<td>5.9</td>
</tr>
<tr>
<td>INTJ</td>
<td>4</td>
<td>7.8</td>
</tr>
<tr>
<td>INFP</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>INTP</td>
<td>2</td>
<td>3.9</td>
</tr>
<tr>
<td>ENFP</td>
<td>5</td>
<td>9.8</td>
</tr>
<tr>
<td>ENTP</td>
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<td>3.9</td>
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<tr>
<td>ENFJ</td>
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<tr>
<td>ENTJ</td>
<td>2</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>100.0</td>
</tr>
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</table>
Table 2

Raters' Scores of Teacher Effectiveness

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<tr>
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<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Scales1</td>
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<td>0.79</td>
</tr>
<tr>
<td>All Scales2</td>
<td>3.16</td>
<td>0.83</td>
</tr>
<tr>
<td>Instructional Performance1</td>
<td>3.67</td>
<td>0.80</td>
</tr>
<tr>
<td>Instructional Performance2</td>
<td>3.32</td>
<td>0.90</td>
</tr>
<tr>
<td>Professional Development1</td>
<td>3.70</td>
<td>0.77</td>
</tr>
<tr>
<td>Professional Development2</td>
<td>3.12</td>
<td>0.82</td>
</tr>
<tr>
<td>Leadership Skills1</td>
<td>2.88</td>
<td>1.09</td>
</tr>
<tr>
<td>Leadership Skills2</td>
<td>2.37</td>
<td>0.86</td>
</tr>
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</table>
Research Question #3

Is there a relationship between teachers' personality temperament types and their years of teaching experience (current school and overall)?

Temperament type and current school teaching experience. Results of the Chi-Square Test of Independence indicated that there was no statistically significant relationship between personality temperament types and current years of teaching experience, $X^2(9) = 12.708$, $p = .176$. Table 3 presents the frequencies and percentages of the four categories of temperament types broken down by the current school teaching experience.

Temperament type and overall school teaching experience. Results of the Chi-Square Test of Independence indicated that there was no statistically significant relationship between personality temperament types and overall years of teaching experience, $X^2(9) = 10.263$, $p = .330$. Table 4 presents the frequencies and percentages of the four categories of temperament types broken down by the overall years of teaching experience.

Research Question #4

Is there a relationship between teaching effectiveness and years of teaching experience (current school and overall)?

Teaching effectiveness and current teaching experience. Results of the one-way ANOVAs indicated that there was a statistically significant relationship between teaching effectiveness and current years of teaching experience in the area of leadership.
Table 3

Breakdown of Personality Temperament Types by Current Teaching Experience

<table>
<thead>
<tr>
<th>Current Years of Teaching</th>
<th>SJ</th>
<th>SP</th>
<th>NF</th>
<th>NT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>(36.7%)</td>
<td>(13.3%)</td>
<td>(23.3%)</td>
<td>(26.7%)</td>
<td>(58.8%)</td>
</tr>
<tr>
<td>Years 1-5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(14.3%)</td>
<td>(14.3%)</td>
<td>(57.1%)</td>
<td>(14.3%)</td>
<td>(13.7%)</td>
</tr>
<tr>
<td>Years 11-15</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(100.0%)</td>
<td>(0.0%)</td>
<td>(0.0%)</td>
<td>(0.0%)</td>
<td>(7.8%)</td>
</tr>
<tr>
<td>Years 16+</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(50.0%)</td>
<td>(0.0%)</td>
<td>(40.0%)</td>
<td>(10.0%)</td>
<td>(19.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>(41.2%)</td>
<td>(9.8%)</td>
<td>(29.4%)</td>
<td>(19.6%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>
Table 4

**Breakdown of Personality Temperament Types by Overall Teaching Experience**

<table>
<thead>
<tr>
<th>Overall Years of Teaching</th>
<th>SJ</th>
<th>SP</th>
<th>NF</th>
<th>NT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years 1-5</strong></td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(28.6%)</td>
<td>(7.1%)</td>
<td>(21.3%)</td>
<td>(42.9%)</td>
<td>(27.5%)</td>
</tr>
<tr>
<td><strong>Years 6-10</strong></td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(25.0%)</td>
<td>(12.5%)</td>
<td>(50.0%)</td>
<td>(12.5%)</td>
<td>(15.7%)</td>
</tr>
<tr>
<td><strong>Years 11-15</strong></td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(66.7%)</td>
<td>(16.7%)</td>
<td>(16.7%)</td>
<td>(0.0%)</td>
<td>(11.8%)</td>
</tr>
<tr>
<td><strong>Years 16+</strong></td>
<td>11</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(47.8%)</td>
<td>(8.7%)</td>
<td>(30.4%)</td>
<td>(13.0%)</td>
<td>(45.0%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>21</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>(41.2%)</td>
<td>(9.8%)</td>
<td>(29.4%)</td>
<td>(19.6%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>
skills, $F(3, 47) = 5.111, p = .004$. Follow-up Tukey pairwise comparison tests indicated that teachers with 1-5 current years of teaching experience ($M = 2.30, SD = 0.88$) were rated lower in the area of leadership skills than teachers with 11-15 current years of teaching experience ($M = 3.72, SD = 0.28$). Results of the one-way ANOVAs also indicated that there was no statistically significant relationship between teaching effectiveness and current years of teaching experience; overall, $F(3, 47) = 2.499$, $p = .071$; instructional performance, $F(3, 47) = 2.035, p = .122$; and professional development, $F(3, 47) = 2.137, p = .108$. Table 5 presents the means and standard deviations of each of the TES subscales as well as the overall TES score in relationship to the four categories of current years of teaching experience.

**Teaching effectiveness and overall teaching experience.** Results of the one-way ANOVAs indicated that there was no statistically significant relationship between teaching effectiveness and overall years of teaching experience; overall, $F(3, 47) = 1.948, p = .135$; instructional performance, $F(3, 47) = 1.473, p = .234$; professional development, $F(3, 47) = 1.934, p = .137$; and leadership skills, $F(3, 47) = 4.082, p = .012$. Table 6 presents the means and standard deviations of each of the TES subscales as well as the overall TES score in relationship to the four categories of overall years of teaching experience.

**Research Question #5**

Is there a relationship between teachers' personality temperament types and content area (Core vs. Non-Core)?
Table 5

Teaching Effectiveness and Current Teaching Experience

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Years of Experience</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Performance</td>
<td>1-5</td>
<td>30</td>
<td>3.27</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>7</td>
<td>3.77</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>4</td>
<td>3.96</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>16+</td>
<td>10</td>
<td>3.80</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>3.50</td>
<td>0.82</td>
</tr>
<tr>
<td>Professional Development</td>
<td>1-5</td>
<td>30</td>
<td>3.21</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>7</td>
<td>3.61</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>4</td>
<td>3.97</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>16+</td>
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<td>3.65</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>3.41</td>
<td>0.74</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>1-5</td>
<td>30</td>
<td>2.30</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>7</td>
<td>2.68</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>4</td>
<td>3.72</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>16+</td>
<td>10</td>
<td>3.11</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>2.63</td>
<td>0.91</td>
</tr>
<tr>
<td>Overall</td>
<td>1-5</td>
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<td>3.14</td>
<td>0.91</td>
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<td>3.60</td>
<td>0.44</td>
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<td></td>
<td>16+</td>
<td>10</td>
<td>3.68</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>3.37</td>
<td>0.78</td>
</tr>
</tbody>
</table>
Table 6

**Teaching Effectiveness and Overall Teaching Experience**

<table>
<thead>
<tr>
<th>Category</th>
<th>Overall Years of Experience</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Performance</td>
<td>1-5</td>
<td>14</td>
<td>3.37</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>8</td>
<td>3.33</td>
<td>0.58</td>
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<tr>
<td></td>
<td>11-15</td>
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<td>16+</td>
<td>23</td>
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<td>6-10</td>
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<td>2.19</td>
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<td>11-15</td>
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<td>3.54</td>
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</tr>
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<td>16+</td>
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<td>2.75</td>
<td>0.93</td>
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<td>0.91</td>
</tr>
<tr>
<td>Overall</td>
<td>1-5</td>
<td>14</td>
<td>3.22</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>8</td>
<td>3.15</td>
<td>0.56</td>
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<tr>
<td></td>
<td>11-15</td>
<td>6</td>
<td>4.04</td>
<td>0.44</td>
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<td></td>
<td>16+</td>
<td>23</td>
<td>3.37</td>
<td>0.80</td>
</tr>
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<td></td>
<td>Total</td>
<td>51</td>
<td>3.37</td>
<td>0.78</td>
</tr>
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</table>
Temperament types and content area. Results of the Chi-Square Test of Independence indicated that there was no statistically significant relationship between personality temperament types and content teaching area (Core vs. Non-Core), $X^2(3) = 1.438, p = .697$. Table 7 presents the frequencies and percentages of the four categories of temperament types broken down by content teaching area (Core vs. Non-Core).

Research Question #6

Is there a relationship between teaching effectiveness and content area (Core vs. Non-Core)?

Teaching effectiveness and content area. Results of the independent t-tests indicated that there was no statistically significant relationship between teaching effectiveness and content teaching area (Core vs. Non-Core); overall, $t(49) = -0.353, p = .725$, two-tailed; instructional performance, $t(49) = -0.569, p = .572$, two-tailed; professional development, $t(49) = -0.023, p = .982$, two-tailed; and leadership skills, $t(49) = .152, p = .879$, two-tailed. Table 8 presents the means and standard deviations of each TES subscale broken down by content teaching area (Core vs. Non-Core).

Research Question #7

Is there a relationship between teaching effectiveness and teachers' personality temperament types?

Teaching effectiveness and teachers' personality temperament types. Results of the one-way ANOVAs indicated that there was no statistically significant relationship between teaching effectiveness and teachers' personality temperament types; overall,
Table 7

Temperament Types and Content Teaching Area

<table>
<thead>
<tr>
<th>Temperament Types</th>
<th>SJ</th>
<th>SP</th>
<th>NF</th>
<th>NT</th>
<th>Total</th>
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<tbody>
<tr>
<td>Core</td>
<td>10</td>
<td>3</td>
<td>10</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>(35.7%)</td>
<td>(10.7%)</td>
<td>(35.7%)</td>
<td>(17.9%)</td>
<td>(54.9%)</td>
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<tr>
<td>Non-Core</td>
<td>11</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>23</td>
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<tr>
<td></td>
<td>(47.8%)</td>
<td>(8.7%)</td>
<td>(21.7%)</td>
<td>(21.7%)</td>
<td>(45.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>(41.2%)</td>
<td>(9.8%)</td>
<td>(29.4%)</td>
<td>(19.6%)</td>
<td>(100.0%)</td>
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Table 8

Teaching Effectiveness and Content Teaching Area

<table>
<thead>
<tr>
<th>Category</th>
<th>Content</th>
<th>n</th>
<th>M</th>
<th>SD</th>
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<tr>
<td></td>
<td>Teaching Area</td>
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<td></td>
</tr>
<tr>
<td>Instructional Performance</td>
<td>Core</td>
<td>28</td>
<td>3.44</td>
<td>0.81</td>
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<tr>
<td></td>
<td>Non-Core</td>
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<td>3.41</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Non-Core</td>
<td>23</td>
<td>3.42</td>
<td>0.76</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>Core</td>
<td>28</td>
<td>2.64</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Non-Core</td>
<td>23</td>
<td>2.60</td>
<td>0.98</td>
</tr>
<tr>
<td>Overall</td>
<td>Core</td>
<td>28</td>
<td>3.34</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Non-Core</td>
<td>23</td>
<td>3.34</td>
<td>0.81</td>
</tr>
</tbody>
</table>

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\( F(3, 47) = 0.185, p = .906; \) instructional performance, \( F(3, 47) = 0.190, p = .903; \) professional development, \( F(3, 47) = 0.163, p = .920; \) and leadership skills, \( F(3, 47) = 0.843, p = .477. \) Table 9 presents the means and standard deviations of each of the TES subscales as well as the overall TES score in relationship to the four categories of teacher personality temperament types.
Table 9

**Teaching Effectiveness and Teachers' Personality Temperament Types**

<table>
<thead>
<tr>
<th>Category</th>
<th>Temperament Type</th>
<th>n</th>
<th>M</th>
<th>SD</th>
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</thead>
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<td>0.82</td>
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<td></td>
<td>SP</td>
<td>5</td>
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<td>1.08</td>
</tr>
<tr>
<td></td>
<td>NF</td>
<td>15</td>
<td>3.45</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>NT</td>
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<td>3.61</td>
<td>0.82</td>
</tr>
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<td></td>
<td>Total</td>
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<td>0.82</td>
</tr>
<tr>
<td>Professional Development</td>
<td>SJ</td>
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<td>3.50</td>
<td>0.72</td>
</tr>
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<td></td>
<td>SP</td>
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<td>0.88</td>
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<td></td>
<td>NF</td>
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<td>3.34</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>NT</td>
<td>10</td>
<td>3.41</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>3.41</td>
<td>0.74</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>SJ</td>
<td>21</td>
<td>2.80</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>SP</td>
<td>5</td>
<td>2.15</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>NF</td>
<td>15</td>
<td>2.67</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>NT</td>
<td>10</td>
<td>2.44</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>2.63</td>
<td>0.91</td>
</tr>
<tr>
<td>Overall</td>
<td>SJ</td>
<td>21</td>
<td>3.43</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>SP</td>
<td>5</td>
<td>3.16</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>NF</td>
<td>15</td>
<td>3.33</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>NT</td>
<td>10</td>
<td>3.42</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51</td>
<td>3.37</td>
<td>0.78</td>
</tr>
</tbody>
</table>
Chapter 5

Discussion

Introduction

The purpose of this study was to examine the relationship between personality type, as measured by the Myers-Briggs Type Indicator (MBTI), and teaching effectiveness, as measured by the Teacher Effectiveness Survey (TES) in a sample of urban middle school teachers. The overarching question was: Is there a relationship between teaching effectiveness and teachers' personality temperament types? The findings of the study are discussed as they relate to the following areas: Personality and Temperament Types of Teachers; Middle Level Teacher Effectiveness; Temperament Types and Teaching Experience; Teaching Effectiveness and Teaching Experience; Temperament Types, Teaching Effectiveness, and Content Area; and Teaching Effectiveness and Teachers' Personality Temperament Types. In addition, Implications for Research and Practice are followed by a summary of the entire study.

Personality and Temperament Types of Teachers

The results of the study provided some evidence to support past personality and temperament research. Previous research studies found Extroversion-Sensing-Feeling-Judging (ESFJ) as the primary typology of teachers as was found in this study (Hinton & Stockburger, 1991; Lawrence, as cited in Sears & Kennedy, 1997; Marso & Pigge, 1990). In this study, ESFJ was represented by 11.8% of the participants and was one of the top three typologies. In addition, the Extroversion-Sensing-Thinking-Judging (ESTJ) typology was represented by 9.8% of the participants in this study in comparison
to the Lawrence (1993) and Myers and McCaulley (1985) studies in which ESTJ was represented by 9.1% of the middle school teachers. The ESTJ typology ranked in the top five typologies in this study and was the top typology in the Barrett (1991) study of secondary teachers. Two other typologies in this study were found to be consistent with previous research. Introversion-Sensing-Feeling-Judging (ISFJ) was represented by 12.2% of the participants in previous research studies and 11.8% in this study, while Extroversion-Intuition-Feeling-Perceiving (ENFP) was represented by 11.0% of the participants in previous research studies, and 9.8% in this study (Lawrence, 1993; Myers & McCaulley, 1985).

It was anticipated that teachers would have the dominant trait of Extrovert (E). The assumption was supported when 56.8% of the participants represented Extroversion as their dominant trait over Introversion (I). Previous research by McCutcheon et al. (1991) described the Extrovert type teacher as relating better than the Introvert type teacher to student inquiry for information or clarification and to exhibit instruction that accommodated students of different skill levels as well as students with varying interests.

Temperament type representation was found to be consistent with previous research as well. Fairhurst and Fairhurst (1995) adapted from Myers and Myers (1980) and Keirsey and Bates (1984) found the same order of representation as this study found. The Sensing-Perceiving (SP) temperament was the least represented with 11% according to research, and 9.8% in this study. The Intuitive-Thinking (NT) temperament was ranked third in previous research with 15.0%, and 19.6% in this
study. The Intuitive-Feeling (NF) temperament had the second highest representation in the research with 30.0%, and 29.4% in this study. The Sensing-Judging (SJ) temperament was ranked highest in previous research with 45.0%, and 41.2% in this study. Mamchur (1996) and Keirsey and Bates (1984) found the same rank order and similar percentages when looking at all teachers, regardless of grade level, reporting representation of SPs 2-4%, NTs 8%, NFs 32%, and SJs 56-58%.

As in the previous research, the highest percentage of the teachers in this study (41.0%) were represented by the SJ temperament type. Sensing-Judging teachers seek to “maintain the institution as it is” (Dorow, 1989, pp. 1-2). Typical SJ teachers want students to accept the educational hierarchy, and they expect students to comply with the rules. The SJ temperament type teacher will often tend to use a lecture type activity and reinforce the product rather than the process. Middle level research reports that students need to understand the process and have opportunities to explore, understand, think, and adapt. They need freedom, individualization, and cooperation (Morocco, 2002; NMSA, 1995; Wells, 1989). Those traits may be better supported in other temperaments. It is important for the SJ teacher to remember that too much focus on regulation and control of the environment could lead the middle level student to lose the love of learning by not having opportunities to explore, understand, think, and adapt.

Experience and research report that it is imperative to have all temperaments and personalities represented as equally as possible in a middle school. If there is not an equal representation, there should certainly be an awareness of all temperament and personality types (Dorow, 1989; Fairhurst & Fairhurst, 1995; Mamchur, 1996; Myers &
Hopefully, a natural balance of temperament and personality types will create an awareness for teachers that will help in working with both adults and students. In addition to that, teacher self-evaluation may be a useful tool in the quest for temperament and personality type awareness.

Middle Level Teacher Effectiveness

In this study teacher effectiveness was rated with an overall Mean score of 3.37 based on a 5-point Likert scale, which is categorized as "slightly above average." There were several possible explanations for these results during the year of the study.

During that year (2002-03), there were 20 new certified staff and three new administrators added to the school. Research by Hart (1991) and Miskel and Cosgrove (1985) reported that a change in leadership alone causes instability in the school setting. Having 39.7% of the staff new to the building, may have impacted the average results of the Teacher Effectiveness Survey (TES). As Jorissen (2003) reported in a study about improving results, middle schools in urban areas need to retain teachers and create consistency. The Center on Education Policy (2002) reported the importance of recruiting and retaining teachers as well when discussing how "The Teacher Quality" initiative of the "No Child Left Behind" legislation will provide funding to school districts for professional development. Whether a teacher is just beginning to teach or is entering a new teaching setting, the literature reports the need for teachers to have quality staff development to increase teacher effectiveness (Samuels, Rodenberg, Frey, & Fisher, 2001; Stansbury, 2001; Zepeda & Mayers, 2001). The low mean scores in both Instructional Performance and Professional Development could have been due to
the new teachers in the building not having adequate teacher training in their first 5 years at the particular study building. Although there were staff development opportunities provided during the study year, there may not have been enough resources to create consistency and training for maximum teacher effectiveness. Research by Gordon and Rosen (1981) supports the idea that a new principal faces many difficulties that include time to learn the school's norms and informal structures. Because the new principal understood the components of positive change, much emphasis was placed on staff collaboration and communication. Team leader positions, membership in school accreditation committees, and department head positions were assigned to staff who continued to teach in the building. New teachers were not given the opportunities to be placed in leadership positions, resulting in an effect on the overall Mean score.

**Temperament Types and Teaching Experience**

Although there was no statistically significant relationship between personality temperament type and teaching experience, there were some interesting findings. During the year of the study, there were 30 teachers who had less than 5 years of current teaching experience in the building. Several teachers had returned to education after leaving the teaching field for a period of time; some had come from smaller, rural communities; some had been relocated from another school for various reasons; and some were first year teachers. Some of the teachers who appeared to have few years of experience in the Current Years of Teaching Experience category were much older than a beginning teacher who is often between the ages of 22-25. Beginning teachers with 5 or less years of Overall Years of Teaching Experience represented 42.8% of the NT
temperament types reported. The NTs often take the "new idea" and "life-long challenge" perspective. In addition, the new teacher attitude is one of excitement, motivation, and creativity. This type of teaching perspective would probably be indicative of the university's strategies to teach new ways to a new generation.

"Keeping the institution as it is" tends to be the perspective of the 11 SJ veteran teachers with 16 or more years of experience, as was seen in the results of the temperament types for Overall Teaching Experience. In addition, there were 11 SJ teachers represented with 5 or less years of experience, as was seen in the results of the temperament types for Current Years of Teaching Experience. These findings could tell us that several of the teachers in the current years of experience had been teachers for more than 16 years. The SJ temperament type represents the teacher who has taught a long period of time and continues to lecture, test, and encourage students to abide by rules. Some of the teachers in the Current Years of Teaching Experience may not have taught in an educational setting for several years. Although significance was not found, there was some indication that the SJ temperament type was represented by teachers who had taught for more than 16 years overall. It may be wise to pay attention to the veteran teacher to assure that SJ strategies are not the only strategies used during instruction.

Teaching Effectiveness and Teaching Experience

There was a statistically significant relationship between teaching effectiveness and current teaching experience in one area. Teachers with 1-5 years of experience ($M = 2.30, SD = 0.88$) were rated lower in the area of leadership skills than teachers
with 11-15 years of experience ($M = 3.72$, $SD = 0.28$). There are two possible reasons for the result.

The Leadership Skills category asked about functioning as a change agent in school improvement, leadership in curriculum development in school improvement, leadership in staff development, and showing leadership qualities among peers. Thirty teachers had been in the building less than 5 years. Members of school improvement committees are typically assigned at the beginning of a 5 year school improvement cycle. Of the 30 teachers with less than 5 years of teaching experience in the building, few would have been given opportunities to be a leader. Of the four teachers in the 11-15 years of current teaching experience, it is clear that they were viewed as some of the best leaders in the building with a 3.96 Leadership Skills mean score. There are obviously more leadership opportunities for the teachers who had taught in the building for 11-15 years. The results do not necessarily mean that teachers who have taught for 11-15 years are better leaders than those who have taught less than 5 years. It simply may mean that there are probably more opportunities to be a leader when having taught more years in a specific building.

Although there were no significant findings, there was consistency among teacher effectiveness categories and years of teaching experience. Teachers with 11-15 years of experience ranked first in all categories. Four teachers were represented in the current category while 6 were represented in the overall category. Teachers with 16+ years of experience ranked second in all categories. Ten teachers were represented in the current category while 23 were represented in the overall category. The teachers
with 1-5 and 6-10 years of experience ranked third and fourth. The teachers with 6-10 years of experience ranked third in all categories with current years teaching experience and teachers with 1-5 years of experience ranked third in all categories with overall years of teaching experience.

The teachers with more experience showed greater teacher effectiveness. It may mean that the teachers are better or it may mean that teachers planned better prior to a rater entering their classroom to evaluate teacher effectiveness. Rosenholtz (1986) did provide evidence that veteran teachers would show improvement in teacher performance if they were in a setting that emphasized continual learning and collaboration. Rosenholtz (1986) also reported that teachers with less than 3 years of experience tended to be less effective than veteran teachers. Because two categories in the TES deal with leadership abilities, the score may be naturally higher because veteran teachers tend to be placed in leadership positions more than beginning teachers. It should be noted that teachers who scored well in instruction also scored well in professional development and leadership skills.

Temperament Types, Teaching Effectiveness, and Content Area

Regardless of content area, temperament types were relatively consistent. Teachers in the Non-Core content area taught in the areas of physical education, health, art, family and consumer science, industrial technology, foreign language, music, and computers. Non-Core teachers had a high representation of SJ temperaments, showing consistency with Gordon’s and Yocke’s (1991) research, which found high SJ temperament representation with health and industrial technology teachers. The NF
temperament type was the next highest representation for the Non-Core teachers followed by the NT, and finally the SP.

The data for teaching effectiveness indicated that teachers did not differ in their effectiveness ratings based on their content area. Due to the push in accountability for reading, writing, and mathematics, one might assume that Core teachers would be rated higher in teacher effectiveness than Non-Core teachers. Standards and criterion-referenced tests as well as norm-referenced tests in Core classes encourage schools and districts to provide staff development opportunities to include new instructional strategies to improve test results. Currently, staff development focuses on Core teachers rather than teachers who teach physical education, health, family and consumer science, art, music, and computers, etc. The building needs better staff development as a whole to improve teaching effectiveness, however, results seem to indicate that no particular group of teachers had been denied staff development opportunities.

Results indicated that there are professional development and leadership opportunities for teachers in the Non-Core category. Teachers in Core areas tend to be placed in leadership positions more often than Non-Core teachers. However, with the implementation of teaming in the middle schools, two Non-Core teams had been organized in the study building. Results indicated that the Non-Core teaching staff were not excluded as leaders. In addition, Non-Core teachers showed the same commitment to teaching, enthusiasm in work, and interest in trying new ideas as the Core teachers in the Professional Development category.
In a time when there is a push for accountability, it is important not to forget the Non-Core teacher. Students in middle grades need many different opportunities, as research has stated. Two key components in middle level successful schools are an exploratory curriculum and programs and policies fostering health and wellness (NMSA, 1995). Non-Core teachers help support those two components and are necessary for the growth of the middle level student.

**Teaching Effectiveness and Teachers’ Personality Temperament Types**

Although there was no statistically significant relationship between teaching effectiveness and teachers’ personality temperament types, there are certainly some key points to discuss. In this study, the NT temperament type teacher was rated highest in Instructional Performance. The NT traits include “new ideas”, “problem solving”, and “intellectual growth.” The NT temperament teacher does not focus on relating to students. The questions on the TES may not have addressed the middle school “personal/social” component. Research states that good middle school instruction should be both academically rigorous while providing a nurturing environment (Council on Adolescent Development, 1989; NMSA, 1995).

The SP temperament type teacher consistently was rated the lowest in the instructional performance, professional development, and the leadership skills categories. Knowing the characteristics of the SP temperament, it was not a surprise. “SP teachers may find themselves stifled by administrators who like orthodoxy and lesson plans that must be followed” (Fairhurst & Fairhurst, 1995, p. 69). To some administrators the SP teacher’s classroom may look unorganized or chaotic, which in
turn may result in him or her being perceived by an evaluator as having poor instructional performance. The SP teacher probably has some of the best traits for effectively teaching middle school students, such as a lively, hands-on classroom in which students enjoy learning. It would be wise to look carefully at what the SP teacher does during instruction.

**Implications for Research**

A recommendation for a future study is do a longitudinal study in reference to teaching experience and personality or temperament type changes. Would beginning teachers starting out as NTs continue to accept “new ideas” and remain NTs after teaching for 10 years? In addition, it would be interesting to see if teacher effectiveness increases or decreases between 1-5 years of teaching experience and 16+ years of experience. If a teacher has an “Excellent” teacher effectiveness rating as a beginning teacher will that teacher still have an “Excellent” rating after 16 years?

A future recommendation is to have students rate teachers and teachers rate themselves in reference to teacher effectiveness to see if the ratings are consistent. When reviewing research at the study’s building and comparing staff, student, and parent evaluations, there are clear differences. Student evaluations always seem to be the lowest in reference to instruction and the school environment.

Although this study provided a wealth of information, a recommendation for a future study is to include a larger sample size. There were too many MBTI categories and too few teachers, which resulted in some types not being represented and most types with fewer than 4 teacher.
Another recommendation would be to use a different measurement tool for teacher effectiveness. The new tool could do a better job focusing on the personal/social aspect of teaching middle school students.

Another recommendation for a future study is to look at teaching effectiveness and personality traits in a qualitative study. Although there was beneficial information from a quantitative study, analyzing teachers’ temperament types in the classroom may tell more information about teacher effectiveness. Teachers with 11-15 years of experience were rated highest in teacher effectiveness. A qualitative study of those teachers could provide a wealth of information in reference to quality teaching and leading.

Lastly, a recommendation for future research is to study four master teachers with the same years of teaching experience, each with a different temperament type. A qualitative study could compare specific teacher behaviors in the 4 classrooms.

**Implications for Practice**

The overwhelming implication for practice would be to learn how to improve low teacher effectiveness ratings. Scores in Instructional Performance, regardless of years of experience, should be in the 4.0-5.0 Mean range. Research of effective middle level instructional strategies suggests training teachers and schools to incorporate curriculum integration, interdisciplinary teaching, changes in school structures, and an overall change in the way the middle level students are being taught (Morocco et al., 2002; NMSA, 1995; Wells, 1989). Because improving student achievement is always important, training staff in effective middle level instructional strategies is the key.
When districts and schools report test scores to the State, teachers' years of experience is not reported. The "No Child Left Behind" legislation forces schools and districts to be accountable in the area of student achievement and success (Center on Education Policy, 2002). A significant amount of time needs to be spent regularly to ensure that everything is being done to meet the needs of all students regardless of socioeconomic standing, ethnicity, and/or gender. Failure to address the issue is not acceptable.

Professional Development and Leadership Skills should still be monitored, but beginning teachers should focus on Instruction first, before becoming leaders within the building.

Another implication for practice would be to use the temperament information to organize teams. The middle level concept provides 6 teachers on a team of approximately 150 students. Having teachers with different temperament types on each team could provide a better opportunity for teachers to meet student needs.

Lastly, because the teachers with 11-15 years of experience seemed to be the strongest teachers and leaders, it would be wise to utilize their knowledge and expertise. It would be wise to analyze what they are doing both in instruction and in leadership and to use them as mentors for beginning teachers. In addition, staff development opportunities should be led by the teachers with 11-15 years of experience. Staff development sometimes could generate better results when peers lead the in-services, especially if the trainers are well respected as leaders and teachers.
Summary

The study generated a wealth of information regarding the typologies and temperaments of the participants in the study. Research indicates that it is important to have a variety of personality types and temperaments represented at the middle level, and the results of this study were slightly more diverse than research findings for other middle schools.

Years of experience did not seem to determine personality type or temperament. There was a good representation of teachers of all temperament types with varying years of experience. The Sensing-Judging temperament was the highest representation in both the current years (1-5) and overall years (16+).

In addition, a noted finding was the low Mean scores in Teacher Effectiveness. Increased staff development training must occur in order to meet the “No Child Left Behind” legislative guidelines for student achievement. Failure to take teacher effectiveness seriously could be a detriment to the students as well as a detriment to the school in reference to funding and accreditation.

Statistical significance was found in the Leadership Skills category on the Teacher Effectiveness Survey between current years of teaching experience, 1-5 years ($M = 2.30$, $SD = 0.88$) and 11-15 years ($M = 3.72$, $SD = 0.28$). The possible reason for this was the lack of leadership opportunities for new teachers to the building. No significant difference was found in the Professional Development or Instructional Performance categories, however, there were some consistent findings. The teachers
with 11-15 years of experience ranked highest in all categories and teachers with 16+ was ranked second in all categories.

There was no statistical significance between temperament and content area or teacher effectiveness and content area. Core and Non-Core teachers’ effectiveness scores were consistently similar in all categories. It was assumed that neither set of teachers had enough teacher effectiveness training because their TES scores were low.

Although there was no statistical significance between teaching effectiveness and teacher personality temperament types, the mean scores in reference to all temperament types in all categories were remarkably similar. The Sensing-Perceiving temperament ranked lowest in all categories, Sensing-Judging was highest, and Intuition-Feeling was third. Overall, the study generated a wealth of information in reference to the current condition of teaching and learning in the building. The results have provided a focus for the improvement of teacher professional development in the building.
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Nebraska Department of Education. (1997). Quality middle grades education: A Nebraska perspective. Nebraska Department of Education, Lincoln, NE.


Appendix A

Informed Consent for Participation in
The Relationship Between Observable Teaching Effectiveness Behaviors and
Personality Types in a Sample of Urban Middle School Teachers

You are being asked to participate in a study of teaching effectiveness and personality types of urban middle school teachers that I am conducting for my doctoral dissertation. You were selected as a potential participant because you are teaching at the selected urban middle school during the 2002-2003 school year and you will add to the richness of the study based on your professional background and current teaching assignment. From this study, I hope to describe teacher personality types of urban middle school teachers and determine if personality type has a relationship with teaching effectiveness. This research will add to what we know about teaching middle school students and may assist in the implementation of a staff development program for increasing student-teacher relationships and student learning through the knowledge of personality types.

If you decide to participate, you will need to sign and date this consent form and return it to me as soon as possible. A second form will be placed in your box during the third quarter that will ask some personal information. You will use an assigned number, that I will not know, to ensure results are confidential. This should take you no longer than 5 minutes to complete and will be returned to an assigned location upon completion. I will ask you to take the Myers-Briggs Type Indicator (MBTI) within the third quarter of the 2002-2003 school year. The MBTI will take you between 30-45 minutes to complete. You will use your assigned number again when completing the MBTI. Finally, during the fourth quarter of the 2002-2003 school year, Dr. Sterba and Mr. Robertson will fill out, separately and without discussion, a Teacher Effectiveness Survey (TES) in reference to your instructional performance, level of professional development, leadership skills, and teaching style in your current assignment.

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Your identity, results of the MBTI, TES, and personal information will be held in strict confidence. No part of the information discussed or observed will be used in the formal appraisal process of your job performance. Your personality type and its description will be provided to you upon the scoring of the MBTI, late in the fourth quarter. You may share the information with whomever you choose. If you decide to participate, you are free to change your mind and may withdraw from the study at any time with no repercussions. You may keep a copy of this form.

I have decided to participate in the study of the relationship of observable teaching effectiveness behaviors and personality types of a sample of urban middle school teachers. I have read and understand this form. I agree to fill out personal information, complete an MBTI personality questionnaire, and have two separate surveys completed by building administrators regarding teacher effectiveness. I further agree that the "Participant Information" and the results of the MBTI and the TES may be a part of the data collected. My signature indicates that I have agreed to participate. I may withdraw from the study at any time.

______________________________  ______________________________
Teacher’s Signature                    Date

Jeanie Talbott
Lewis & Clark Middle School
557-4300

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Appendix B

Participant Information

1. What is your age?
   a. 22-25
   b. 26-30
   c. 31-35
   d. 36-40
   e. 40 and up

2. What is your gender?
   a. male
   b. female

3. Please provide the content area in which you teach. ________________________

4. How many years have you taught?
   a. 1-5 years
   b. 6-10 years
   c. 11-15 years
   d. 16+ years

5. How many years have you taught middle school (include other buildings, districts)?
   a. 1-5 years
   b. 6-10 years
   c. 11-15 years
   d. 16+ years
6. How many years have you taught at your current school?
   a. 1-5 years
   b. 6-10 years
   c. 11-15 years
   d. 16+ years

7. Please provide the ID number you have been assigned. _____

PLEASE RETURN THIS SHEET TO MS. TALBOTT 'S MAILBOX SO RESULTS WILL REMAIN CONFIDENTIAL.

THANK YOU FOR YOUR PARTICIPATION IN MY DISSERTATION. I COULD NOT DO IT WITHOUT YOUR HELP.
Appendix D

TEACHER EFFECTIVENESS SURVEY 2000

Principals' Survey

This survey is designed to help evaluate the effectiveness of individual teachers within the building. Please assist me in my study of teacher personality and teacher effectiveness by completing this survey about __________ (Provide id number only). He/she has given me permission to be evaluated. All information provided by you will be strictly confidential.

Thank you very much.

Part I

I would like to know your overall assessment of the individual teacher.

1. Compared to teachers of similar teaching experience, please rate this teacher’s performance.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top</td>
<td>Top</td>
<td>Middle</td>
<td>Bottom</td>
<td>Bottom</td>
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<tr>
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<td>40%</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

Part II

I am interested in the instructional performance, level of professional development, and leadership skills of this individual teacher.
For items 2-33 please use the following scale to indicate your response:
A) Poor
B) Fair
C) Good
D) Very Good
E) Excellent

Please rate the teacher’s present instructional performance.

<table>
<thead>
<tr>
<th>Item</th>
<th>Poor</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Competence in communication skills</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>3. Working effectively with exceptional children in the regular classroom</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>4. Developing and maintaining good relations with parents</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>5. Knowledge of subject area</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>6. Planning and organizing lessons and activities effectively</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>7. Relating students’ physical, social, emotional, and intellectual development to planning and organizing instruction</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>8. Flexibility in adjusting plans to deal with unplanned events</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>9. Teaching in a clear and logical manner</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>10. Valuing students’ ideas</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>11. Stimulating students’ interest</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>12. Employing a variety of teaching techniques</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>13. Teaching thinking and study skills necessary for independent learning</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>14. Maximizing instructional time on task</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>15. Making provisions for accommodating individual differences</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

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16. Effectively involving all student in learning  
| Poor | Excellent |
| A    | B        | C    | D | E |

17. Providing prompt feedback to students and assisting them in the evaluation of their own growth  
| Poor | Excellent |
| A    | B        | C    | D | E |

18. Holding high but reasonable expectations  
| Poor | Excellent |
| A    | B        | C    | D | E |

19. Skill in classroom management  
| Poor | Excellent |
| A    | B        | C    | D | E |

20. Practicing democratic principles which show consideration for the rights of others and encouraging students to do the same  
| Poor | Excellent |
| A    | B        | C    | D | E |

21. Consideration and fairness in relations with pupils  
| Poor | Excellent |
| A    | B        | C    | D | E |

**Please rate the teacher's present level of professional development.**

22. Commitment to teaching  
| Poor | Excellent |
| A    | B        | C    | D | E |

23. Understanding of the purposes, organizations, and operation of the total educational program of the school  
| Poor | Excellent |
| A    | B        | C    | D | E |

24. Acting in a professional and ethical manner  
| Poor | Excellent |
| A    | B        | C    | D | E |

25. Interest and enthusiasm in work  
| Poor | Excellent |
| A    | B        | C    | D | E |

26. Seeking professional growth opportunities  
| Poor | Excellent |
| A    | B        | C    | D | E |

27. Cooperating with others in planning instruction  
| Poor | Excellent |
| A    | B        | C    | D | E |

28. Effectively seeking and using feedback to improve instruction  
| Poor | Excellent |
| A    | B        | C    | D | E |

29. Trying new ideas  
| Poor | Excellent |
| A    | B        | C    | D | E |

30. Evaluating own teaching  
| Poor | Excellent |
| A    | B        | C    | D | E |

**Please rate the teacher's present leadership skills.**

31. Functioning as an effective change agent in school improvement  
| Poor | Excellent |
| A    | B        | C    | D | E |

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32. Leadership in curriculum development
   school improvement

33. Leadership in staff development

34. Showing leadership qualities among peers

<table>
<thead>
<tr>
<th>Poor</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A B C D E</td>
<td>A B C D E</td>
</tr>
</tbody>
</table>

Please send this sheet back to Ms. Talbott in the envelope provided.

Thank you for your help!
Appendix E

TEACHER EFFECTIVENESS SURVEY (TES) CONTENT VALIDITY PROCEDURES

I want to ensure that the TES items are appropriate for measuring the teaching effectiveness of middle school teachers. I am asking some teachers within the building to rate the appropriateness of the items in measuring middle school teacher effectiveness.

The Teacher Effectiveness Survey (TES) was developed by a research team of five faculty members and one graduate assistant at the University of New Hampshire during the academic year 1989-90. The faculty members represented the fields of curriculum development, elementary and secondary education, educational administration, and developmental psychology.
TEACHER EFFECTIVENESS SURVEY

Please use the following scale to rate the appropriateness of each statement in assessing the teacher effectiveness of middle school teachers. Please correct or provide ways to improve the items that you rate "1" or "2".

| 1 = Not Appropriate | 2 = Marginally Appropriate | 3 = Very Appropriate |

Teacher's present instructional performance.

1. Competence in communication skills
   1  2  3

2. Working effectively with exceptional children in the regular classroom
   1  2  3

3. Developing and maintaining good relations with parents
   1  2  3

4. Knowledge of subject area
   1  2  3

5. Planning and organizing lessons and activities effectively
   1  2  3

6. Relating students' physical, social, emotional, and intellectual development to planning and organizing instruction
   1  2  3

7. Flexibility in adjusting plans to deal with unplanned events
   1  2  3

8. Teaching in a clear and logical manner
   1  2  3

9. Valuing students' ideas
   1  2  3

10. Stimulating students' interest
    1  2  3

11. Employing a variety of teaching techniques
    1  2  3

12. Teaching thinking and study skills necessary for independent learning
    1  2  3
<table>
<thead>
<tr>
<th></th>
<th>Maximizing instructional time on task</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>13.</td>
<td>Making provisions for accommodating individual differences</td>
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<td>2</td>
<td>3</td>
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<td>14.</td>
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<td>1</td>
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<td>3</td>
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<tr>
<td>15.</td>
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<td>1</td>
<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
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<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>Teacher's present level of professional development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Commitment to teaching</td>
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<td>2</td>
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<td>3</td>
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<td>1</td>
<td>2</td>
<td>3</td>
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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>Not Appropriate</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Marginally Appropriate</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Very Appropriate</td>
<td></td>
</tr>
</tbody>
</table>

28. Trying new ideas

29. Evaluating own teaching

Teacher’s present leadership skills.

30. Functioning as an effective change agent in school improvement

31. Leadership in curriculum development school improvement

32. Leadership in staff development

33. Showing leadership qualities among peers

Please place in Ms. Talbott’s box upon completion and sign your name so I know who has returned their form. This portion of my study does not need to be confidential as I am validating my instrument.

Thank you.