Teachers’ Perceptions of School Climate, Principal Leadership Style, and Teacher Behaviors on Student Academic Achievement in Select Georgia Schools

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ABSTRACT

The purpose of this quantitative research study was to examine teacher perceptions of principal leadership style and school climate and the relationship between school climate and student academic performance. Teacher demographic backgrounds and perceptions were also investigated. In response to accountability issues mandated by federal and state legislation, Georgia’s new Standards-Based School Reform and Curriculum, educators are looking at various aspects within schools to identify relationships between school variables and student performance.

Approximately 370 teachers from ten public middle schools in a midwestern Georgia community were surveyed concerning their perceptions of school climate, principal leadership behaviors, and teacher behaviors. Differences in perceptions of school climate and factors affecting climate were investigated according to teacher demographics. School climate, principal, and teacher openness, as related to student academic achievement, was also studied.

Statistical procedures included Pearson’s product-moment correlations, repeated measures ANOVAs, and two sample t test. Correlations coefficients found no statistically significant relationship between school climate and student academic achievement. A statistically significant difference between teachers’ perceptions of teacher/principal openness and years of teaching experience and ethnicity was found. This study found no differences in perceptions related to gender.
# TABLE OF CONTENTS

## I. INTRODUCTION .............................. 1

- Statement of the Problem .................. 5
- Theoretical Context of the Study .......... 6
- Purpose of the Study ......................... 9
- Research Questions ........................... 9
- Hypotheses .................................. 10
- Definition of Terms ......................... 11
- Procedures .................................. 13
- Significance of the Study .................. 14
- Delimitations of the Study ................. 17
- Limitations of the Study .................... 18
- Organization of the Study .................. 19

## II. REVIEW OF RELATED LITERATURE ................. 20

- Historical Development of the American School Principal ........ 21
- Historical Development of Leadership Theory ...................... 24
- The Principal as Instructional Leader ............................ 38
- School Climate and Student Achievement .......................... 43
- Quality School Climates ..................................... 54
- The Organizational Climate Description Questionnaire – Revised Middle Level (OCDQ-RM) ....................... 56
- Summary ...................................... 62

## III. METHODOLOGY ................................ 66

- Participants .................................. 67
Appendix C: Copy of Survey Instrument ............................................. 137
Appendix D: Approval to Use the OCDQ-RM ........................................... 141
LIST OF TABLES

1. Specific Item Factors of the OCDQ-RM ........................................... 80
2. Normative Sample of School Climates ............................................. 86
3. Standardized Scores Conversions ...................................................... 87
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Chapter 1

INTRODUCTION

According to John Maxwell (1998), everything rises and falls on the leadership within an organization. “It is not by chance that some principals are more effective than others, even when all are faced with the same demands and constraints. Effective principals have a better understanding of how the world of school and school leadership works…” (Sergiovanni, 1995, p.29). With the growing implications of the No Child Left Behind Act of 2001 (U. S. Department of Education, 2002), high stakes testing, and major reform initiatives focusing on accountability, school districts are searching for answers to what will make a difference in a school’s overall performance. Superintendents and school boards can ill afford to speculate as to why a particular school is failing or not making Adequate Yearly Progress (AYP) if the demands of state and national guidelines are to be met.

A number of studies dating back to the 1970s, have investigated characteristics of effective schools (e.g., Edmonds, 1979; Fullan, 1993; Good & Brophy, 1986; Lazotte, 1991; Purkey & Smith, 1983), and much has been reported on specific correlates. This study examined principals’ leadership roles
and school climates as related to school performance in a district located in west-central Georgia.

Some elements such as socioeconomic status, parents’ levels of education, and demographics can have a tremendous impact on student achievement and provide extreme challenges for school improvement. Therefore, a major goal of instructional leaders is to create school improvement through implementing effective practices and fostering a climate that is conducive to both learning and student achievement. School leadership and the learning environment are two areas that can positively affect school academic performance (Wang, Haertel, & Walberg, 1993).

Research on school effectiveness, school climate, and student achievement all reveal that effective schools depend largely on the quality of school leadership. Taylor and Tashakkori (1994) studied data from nearly 10,000 teachers and over 27,000 students concerning positive school climates. They found school leadership was a major factor in determining school climate. Student academic achievement, as reported by studies in the last two decades, is greatly impacted by a healthy school climate. School health refers to organizational climate in regard to vitality and dynamics of professional interactions between students, teachers, and administrators (Blasé & Kirby, 2000; Borger, Lo, Oh, & Walberg, 1985; Bulach & Malone, 1994; Hoy & Sabo, 1998; Winter & Sweeney, 1994).
There is no common understanding of the meaning of school climate and many interpretations exists. Hoy and Miskel (1996) defined school climate as a “relatively enduring quality of school environment that is experienced by participants, affects their behaviors, and is based on the collective perceptions of behavior in schools” (p. 141). Tagiuri (1968) defined climate as consisting of the total environmental quality within an organization. According to Peterson and Skiba (2001), school climate can be defined as feelings that students and staff have about school environment over a period of time. These feelings usually originate from an individual’s perceptions of safety, orderliness, and an environment that is conducive to learning (or teaching) within a school or classroom setting.

Literature on the study of organizational climate is usually associated with perceptions of behaviors while studies of culture typically focus on assumptions, values, and norms (Anderson, 1982; Denison, 1996; Miskel & Ogawa, 1988, Ouchi & Wilkins, 1985). For the purpose of this study, school or organizational climate was examined as a relatively enduring quality of the internal environment of the school that is experienced by the faculty. Shared perceptions of teacher and leadership behaviors were also associated with school climate, (Hoy & Sabo, 1998; Sackney, 1988).

Like many states across the nation, Georgia has embarked on an accountability plan to help public schools better gauge and improve academic
performance of students (Governor’s Office of Student Achievement, 2004). Adequate Yearly Progress (AYP) is one of the cornerstones of the federal No Child Left Behind (NCLB) Act. AYP is normally a measure of year-to-year student achievement on state criterion reference tests. According to NCLB, Georgia and other states must develop target starting goals for AYP and raise the bar in gradual increments so 100 percent of the students are proficient on state assessments by the 2013-14 school year (Georgia Department of Education, 2004a). U.S. Education Secretary, Rod Paige, approved Georgia’s No Child Left Behind Accountability Plan, making it the 20th state to adopt such a plan to enact required accountability measures to improve student achievement (U.S. Department of Education, 2003).

In response to new standards-based educational reforms and accountability, educators are taking a closer look at effective practices which improve student performance and academic achievement at all levels. According to accountability plans passed by some legislatures, schools will be graded from A to F based on student performance on state mandated tests. Florida’s A+ Accountability Plan calls for monetary rewards to faculties whose schools’ receive As, and those who receive Fs will face possible sanctions, including restructuring or providing vouchers for students to attend other schools (Archer, 2000). A growing number of states are tying student promotion to performance
on tests and/or requiring students to pass a test to graduate from high school (Georgia Department of Education, 2004b).

This study attempted to provide information regarding teacher perceptions of principals’ leadership styles and teacher behaviors and their influence on school climate using the Organizational Climate Description Questionnaire (Revised) for Middle Schools (OCDQ-RM) created by Hoy and Sabo (1998). The OCDQ-RM survey provides specific information about climate in middle level schools.

The OCDQ-RM identifies a school’s climate as one of four types: open, engaged, disengaged, or closed. A school with an open climate is considered most conducive to a positive learning environment and a closed climate is considered highly detrimental. The survey instrument provides data about principal leadership styles and teacher behaviors which comprises the internal school environment as experienced by faculty members (Hoy & Sabo, 1998).

Statement of the Problem

Research shows that school leadership is directly tied to school quality and academic achievement of students (Hallinger & Heck, 1996). Not only are principals increasingly held accountable for each student’s success, but research also demonstrates that schools and students cannot be successful without a competent and caring school leader (Brown, Anfara, & Gross, 2002). This study examined teacher perceptions of leadership style and school climate according
to gender, years of teaching experience, level of education attainment, and ethnicity. Relationships between school climate and student academic performance was also examined.

Currently, schools and districts in Georgia generate achievement data for individual students, teachers’ individual classrooms, and entire grade levels within a school. All test data can be disaggregated for comparisons between groups of students within each school or for a total district. School leaders are charged with utilizing this test data to determine strengths and weaknesses in certain academic areas, and address those needs by creating yearly school improvement plans.

Accompanying standardized norm-referenced test and Georgia Criterion Reference Competency Test scores, data related to school performance including, but not limited to, a school’s climate should also be considered when making plans for improvement. Rather than speculating upon reasons for low or high test scores, supporting data on school climate could be most beneficial in helping schools improve student performance. The role of site-based research can become highly instrumental as educators seek to find answers to problems facing schools that fail to meet AYP.

Theoretical Context of the Study

The past decade has witnessed a strong interest by researchers and practitioners as to the effects of schooling on students. In particular, the
emphasis has been on how schools can improve student achievement and the quality of school life. This interest has become particularly focused as a result of legislation surrounding the NCLB act. A sizable body of literature, both theoretical and empirical, has investigated school climate on student academic performance (Anderson, 1982). Educators believe that a student’s personal development, motivation, and academic performance are influenced by the school’s climate (Jackson, Boostrom, & Hansen, 1993).

Several studies have contributed significantly to the various models attempting to explain school climate. Examples would include Halpin’s (1966) study of open and closed school climates, climatic systems that promote individual growth and quality interpersonal relationships (Moos, 1979), and healthy school climates (Hoy, Tarter, & Bliss, 1990). Stockard and Mayberry (1992) proposed that school climate be organized into two broad areas encompassing social order and social action. First, social order would include norms and values, environmental climate, and organizational structure. Second, social action, refers to day-to-day interactions among members and includes the quality of communication, planning, and execution of organizational activities. Research proposed by this study measured school climate as related to the open and closed models advocated by Halpin (1966).

Responding to state and national educational reform efforts, teachers and administrators are involved in school improvement initiatives aimed at increasing
student achievement. Strategies and ideas are proposed as to how schools can affect and improve student performance, most of which have similar themes regarding school climate. Noddings (1992) emphasized the creation of "caring in schools" or "caring learning environments" while others stressed the importance of "building a sense of community" as a means of improving school climate (Sergiovanni, 1994; Whelge, Rutter, Smith, Lesko, & Fernandez, 1989).

The famous American sociologist, W. I. Thomas (1928), theorized that “if men define situations as real, they are real in their consequences” (p. 572). Based on Thomas' theorem, what teachers perceive to be the reality of their school is important information in seeking to understand their activities, values, meanings, and relationships and in determining “what is going on” within the walls of the school. Researchers have focused more attention toward those practices most affecting school change, including school climate. Modeling practices of high achieving schools is becoming a major area of study for educators seeking strategies for improving student performance (Reeves, 2000; Strahan, Carlone, Horn, Dallas, & Ware, 2003).

Typical measures of school climate involve surveys of various stakeholders; students, parents, staff, and sometimes community members regarding their perceptions about the school. Questions or statements on surveys usually include judgments about issues such as teacher-student relationships, security and maintenance, administration, student academic
orientation, and student behavioral values (Kelley et al., 1986). Surveys usually use some form of Likert-type rating items and attempt to identify both specific strengths and weaknesses regarding these issues. Data from surveys may be useful in assessing and intervening in order to positively affect school climate. Districts that ignore school climate and culture may possibly overlook early indicators of schools at risk for a decline in student achievement.

**Purpose of the Study**

The purpose of this study is to examine teachers’ perceptions of principal leadership style and school climate and the relationship between school climate and student academic performance. This study seeks to provide insight into the perceptions of school climate, teacher behaviors, and principal leadership styles from various teacher demographic backgrounds.

**Research Questions**

The following research questions were addressed:

*Research Question 1.* What relationship exists between teacher behaviors, principal leadership style, and school climate as compared to student academic performance?

Research Question 2. What is the influence of teachers’ years of teaching experience, level of education, ethnicity, and gender on their perceptions of teacher behaviors, principal leadership style, and school climate?
Hypotheses

The following four hypotheses were tested:

Null Hypothesis 1. There is no relationship between teacher behaviors, principal leadership style, and school climate as compared to student academic performance.

Null Hypothesis 2. There is no difference in teachers’ years of teaching experience on their perceptions of teacher behaviors, principal leadership style, and school climate.

Null Hypothesis 3. There is no difference in teachers’ level of education on their perceptions of teacher behaviors, principal leadership style, and school climate.

Null Hypothesis 4. There is no difference in teachers’ ethnicity on their perceptions of teacher behaviors, principal leadership style, and school climate.

Null Hypothesis 5. There is no difference in teachers’ gender on their perceptions of teacher behaviors, principal leadership style, and school climate.

Research Hypothesis 1. Schools possessing an open school climate have a higher overall school performance on standardized tests than those schools identified as having a closed school climate. Schools with closed climates lead to low school performance on standardized tests.
Research Hypothesis 2. Teacher demographics will not influence perceptions regarding teacher behaviors, principal leadership style, or school climate.

Definition of Terms

School climate. “School climate is a general concept that captures the atmosphere of a school: it is experienced by teachers and administrators, describes their collective perceptions of routine behavior, and affects their attitudes and behavior in the school” (Hoy, Smith, & Sweetland, 2003, p. 38).

School culture. School culture is defined as a set of values, beliefs, and norms established over a period of time manifested in people’s patterns of behavior (Denison, 1996; Peterson & Deal, 2002).

Hoy and Sabo (1998) provide the following explanations for various types of school climates and faculty behaviors identified using the OCDQ-RM instrument.

Open climate. A school with an Open Climate is characterized by cooperation and respect within the faculty and between faculty and principal.

Engaged climate. A school with an Engaged Climate features teachers that are open with each other, cohesive, committed, supportive, and involved despite weak leadership.

Disengaged climate. A school with a Disengaged Climate features a principal that is open in relationships with faculty, is supportive, flexible, and non-
controlling. However, the faculty is divided, intolerant, uncommitted, and guarded in interactions with each other.

*Closed climate.* A school with a Closed Climate features a non-supportive, controlling principal along with a divided, apathetic faculty.

*Supportive behavior.* A principal with Supportive Behavior is a leader that is directed toward both the social needs and task achievement of faculty. The principal is helpful and genuinely concerned with teachers.

*Directive behavior.* A principal with Directive Behavior is rigid and domineering. The principal maintains close and constant monitoring over virtually all aspects of teacher behavior in the school.

*Restrictive behavior.* A principal with Restrictive Behavior hinders rather than facilitates teacher work. The principal burdens teachers with paperwork, committee requirements, and other demands that interfere with their teaching responsibility.

*Collegial behavior.* A teacher with Collegial Behavior supports open and professional interactions among teachers. Teachers respect, like, and help one another both professionally and personally.

*Committed behavior.* A teacher with Committed Behavior is directed toward helping students develop both socially and intellectually. Teachers work extra hard to ensure student success in school.
Disengaged behavior. A teacher with Disengaged Behavior signifies a lack of meaning and focus in professional activities. Teachers are simply putting in their time; in fact, they are critical and not accepting of their colleagues.

Procedures

Ten middle schools in a large west-central Georgia school system were surveyed to determine school climate types. Each principal was contacted and permission to administer a survey to teachers was granted. School faculty sizes ranged from 30 to 65 teachers with a total of 367 participants from the ten schools.

At regularly scheduled school faculty meetings, introductions and explanations for the study were provided by building level administration. Faculties were informed their participation was voluntary and all results would be presented to the principal and leadership teams for information purposes only. All participants were told that responses would remain confidential and names of all individuals and schools would be kept confidential.

After instructions were provided, every teacher was presented the 50-item OCDQ-RM survey developed by Hoy and Sabo (1998). Surveys were collected after completion, teachers thanked for their participation, and dismissed.

After each school was surveyed, the researcher carefully marked each set of surveys with the correct school name. The names of schools were retained to make accurate comparisons with achievement measures. The names of the
schools were given new names after all data was collected to prevent actual identification from the study.

Data from each school was collected, scored, and computed to determine each school's climate as open, closed, engaged, or disengaged. Student academic achievement, as determined by scores from 8th grade math and reading NCE percentiles on the Iowa Test of Basic Skills 2003 and 2004 administration, was compared to school climate scores. Survey and test data were statistically analyzed using the Statistical Package for the Social Sciences (SPSS) software (Statistical Package for the Social Sciences [SPSS], 2003). Relationships between teachers’ perceptions of principal leadership styles, teacher behaviors, school climate, and student achievement were compared to hypotheses, and conclusions were made.

Individual reports were created for each school involved in this study and findings on school climate were provided to the school leadership. Accompanying reports included articles, suggestions, and opportunities for staff development related to building positive school climates. Total results and individual results were also provided to the district’s director for Research and Evaluation Department.

Significance of the Study

With the increased emphasis on accountability, the principal as instructional leader is again a predominate theme (Fullan, 2002). The term
Instructional leadership focuses the administrator’s attention on high priority instructional activities of the school through close monitoring of teachers’ and students’ classroom work (DuFour, 2002). However, instructional leaders are also involved in building a shared vision, improving communication, and developing collaborative decision-making processes which may be somewhat removed from the classroom yet still have an influence on school climate (Leithwood, 1992).

Literature from the effective-school movement echoed what others had found to be evident; successful schools have strong instructional leadership (Andrews, Soder & Jacoby, 1986; Brookover & Lezotte, 1979; Edmonds, 1979; Purkey & Smith, 1983). Hallinger believed that a major role of instructional leadership was promotion of a positive school climate (Leithwood, Jautzi, & Steinbach, 1999). Goodlad (1978) referred to this phase of leadership as a “return to first principles, to the essence of what education is for…” (p. 324). In his article, Educational Leadership: Toward the Third Era, Goodlad states the role of instructional leader “is to maintain, justify, and articulate sound, comprehensible programs of instruction for children and for youth” (p. 326).

For years researchers have conducted various studies that illustrate relationships between school climate and student academic achievement (Borger et al., 1985; Bulach & Malone, 1994; Newman & Associates, 1996; Paredes & Frazer, 1992; Winter & Sweeney, 1994) and information obtained from this study
may be significant for several reasons. As accountability presses schools and
districts to show academic improvement, strategies affecting student outcomes
may be quite useful for school improvement efforts. Schools failing to make
adequate yearly progress must be helped by their districts. Research based data
can provide information to different groups when making decisions regarding
personnel placement or changes and strategies for improvement. During
strategic planning processes, any data concerning the school climate would be
useful in analyzing a school’s strengths and/or weaknesses as well as helping
construct action plans for improvement.

School leaders would benefit from the findings of this study by comparing
their schools to others within the system and making needed self-adjustments to
personal leadership styles. For principals involved in this study, information from
a school climate survey along with annual district principal surveys conducted by
research and evaluation, could provide a substantial amount of data concerning
principals’ perceived leadership styles on school academic performance.

Parents seeking excellent schools in which to enroll students would
benefit from the data created by this study. Parents choosing non-failing schools
as alternatives from the assigned failing school could use the information to
make quality choices for their children’s education.

Overall, data concerning school climate, leadership style, and academic
performance would provide valuable information regarding the condition of all
middle schools. Establishing baseline data is beneficial in measuring school progress over a specified period of time.

**Delimitations of the Study**

According to Castetter and Heisler (1977, cited in Creswell, 2003), limitations and delimitations are inherent in every research study. The following delimitations affected the application of this study to other settings beyond the school system that was investigated. This study utilized samples of convenience, intact groups, rather than random selection of faculty members. Teacher participants were limited to teachers employed by the school system during the 2004-2005 school year.

The instrument used multiple choice Likert-scale items rather than open-ended responses. Using only one type of measurement may not have accounted for other possible factors affecting school climate. Different instruments can measure different variables affecting school climate and the OCDQ-RM (Hoy & Sabo, 1998) measures the teachers’ perceptions of the relationships between members of the faculty and the school leadership. Student and parent input was not utilized in this study and perceptions from these two groups may have identified certain factors influencing school climate that the OCDQ-RM does not address.

Only test scores from the 2003 and 2004 Iowa Tests of Basic Skills in Reading and Mathematics and the climate survey were used to measure
outcomes. Several of the schools utilized in this study were undergoing various program improvement initiatives such as magnet schools, year-round calendars, America’s Choice, and site-based strategies to improve academic achievement and such factors may contribute to student academic performance.

Teacher data was collected during the mid portion of the academic school year rather than the final few weeks or months. A survey administered at a latter time of year may produce different outcomes and influence the validity of the study. Certain times of the academic year may cause more stressful situations that could influence survey outcomes.

Limitations of the Study

This study had several limitations. Data gathered represented current climate situations at a specific time and may have been influenced by factors beyond the control of the researcher. The use of intact groups as participants removed the generalizability of the findings. This study is not generalizable to all areas of education but possibly limited to school systems demographically similar to the one utilized in this investigation. The study was limited to the selection of ten public middle schools in one large district which contained over 50 elementary, middle, and high school units.

The study applied quantitative procedures through the utilization of a closed-ended, multiple-choice response survey. The survey instrument (QCDQ-
RM) was limited to the quantitative data collected and excluded other potential quantitative data that may contribute to factors influencing school climate.

The use of volunteer respondents to the teacher survey may limit generalizability because of characteristics (e.g., motivation) that may differ substantially from those of nonrespondents. New faculty members may not have had the opportunity to understand or identify with the present school climate as indicated by the survey. No procedures were established to accommodate teachers who may have been absent from the administration.

Organization of the Study

The study was organized and sequenced beginning with Chapter 1 which included the introduction, statement of the problem, theoretical context of the study, purpose of the study, research questions, hypotheses, definition of terms, procedures, significance of the study, delimitations of the study, limitations of the study, and the organization of the study. Chapter 2 contained the review of related literature and research related to the problem being studied. Chapter 3 followed with a short introduction, ethical considerations, research design, and limitations. Also included in Chapter 3 were brief descriptions of participants, instrumentation, procedures, data collection, and data analysis. Chapter 4 will contain research findings from data collected and Chapter 5 will present the conclusions, discussion, and suggestions for future research.
Chapter 2

REVIEW OF RELATED LITERATURE

Research studies on school climate, school effectiveness, and student achievement indicate that successful schools are a result of quality school leadership. In their study of school climates using over 9,000 teachers and nearly 28,000 students, Taylor and Tashakkori (1994) found that school leadership was one of three major factors that determined school climate. In the last few decades, studies have significantly shown the impact of a healthy school climate on positive student achievement (Borger, Lo, Oh, & Walberg, 1985; Bulach & Malone, 1994; Newman & Associates, 1996; Paredes & Frazer, 1992; Winter & Sweeney, 1994).

This review of literature begins with the historical development of the position of school principal and a discussion of leadership theory. Studies on effects of leadership on school programs will also be included. Research on the effective schools movement and current emphasis on accountability are reviewed. Studies on relationships between student academic achievement and school climate will conclude the review of literature.
Historical Development of the American School Principal

Beginning around 1640, the primary purpose for schools in North America was to maintain Protestant religious beliefs and to prepare children to participate in worship. A primary goal of education was to teach common citizens how to read the Bible, religious tracts, and laws (Spring, 1986). After the American Revolution, many leaders began to look to public education as a means for teaching nationalism, creating good public citizens, and reforming society. As a result, public schools soon became a major priority of governmental concern. Using education as a means of creating a unified population became a common theme in the history of American education (Spring, 1986).

Emergence of the school principal began under a bureaucratic model that dominated public schools throughout nineteenth century America. As school populations began to increase, the usual model of a large room accommodating hundreds of multiage students was viewed as outdated and ineffective. The Quincy School of Boston was established to solve such problems and in 1848 John Philbrick, founder, became its first principal (Spring, 1986).

Prior to the Quincy system, a head teacher was assigned duties and responsibilities of observing assistant teachers, keeping school attendance records, reporting directly to the board of education, attending to building maintenance, and coordinating utilization of equipment and supplies. Supervisory responsibilities also included classifying and promotion of students (Brubacher, 1966). The position of head teacher was also referred to as principal teacher and
thus the term principal was assigned to school leader (Campbell, Fleming, Newell, & Bennion, 1987).

Modeled after the Prussian methods of Pestalozzi, the Quincy School was the first graded school in the United States and was designed with a separate room for each teacher and a desk for each of the 56 students. Four floors were included in the construction, three were for individual classrooms, and a fourth was a large room for assemblies. A separate principal’s office was included as a symbol of authority and Philbrick was provided one male assistant or subprincipal and ten female teachers (Spring, 1986). According to Cubberley (1934), this graded multi-room building became the standard for urban elementary schools throughout the nation in the twentieth century.

Adoption of the Quincy School organizational structure, based on classification of students in self-contained classrooms with separate grades, was linked to an establishment of staffing with a male principal as the school leader. As this organizational pattern spread to other cities and states, grade configuration became more clearly defined. Most common schools had seven to eight separate grade levels and this remained standard until junior high schools emerged in the early twentieth century (Tyack, 1974). A graded system with a single male principal in charge of subordinate female teachers fit society’s perspective of a nineteenth century bureaucratic model (Spring, 1986).

As sizes of schools increased, principal-teachers became more administrative and less involved in teaching. One primary duty of school principals became the supervision of other teachers in the school (Spring, 1986).
A principal’s role was not afforded much recognition until city schools became large enough to require full-time administrators (Campbell et al., 1987). As the nineteenth century ended, urban schools were divided into departments supervised by coordinators, but later emerged into graded courses of study under a single head. Within a few decades, the principalship in large urban settings was well established (National Education Association, 1928).

Rapid urbanization of America led to difficulties in the construction and management of large urban school systems. The first reaction to rapid growth was to create larger school committees to manage the schools, but this proved an ineffective method. In an effort to effectively manage large systems, school boards reluctantly gave up their traditional control of schools to professional leadership and management that became known as system superintendents (Reller, 1936).

According to Pierce (2000), the stereotypical school principal is a white male, 50 years old, with an annual salary of $61,000, and works ten hours a day with an additional eight hours on weekends or evenings. Most principals spend their time supervising staff, interacting with students, and managing/disciplining students. Michael Fullan (1998) noted that schools and school principals are under intense pressure from external sources. National and state legislation, most recently the No Child Left Behind Act (2002), have forced educators to focus on improving student performance on mandated tests. Community business members and stakeholders are often required to be included in various plans for school improvement, annual opinion surveys for accreditation, and local
school councils. According to Fullan, what used to be “out there” is now “in here,” as outside influences have entered into the educator’s domain.

*Historical Development of Leadership Theory*

Today’s educational leaders need to possess a broad variety of skills that enable them to function comfortably and effectively in changing environments and under highly politicized conditions. In these new circumstances, change is the only constant. Educational leadership theory, like business and political leadership theory, has evolved in the last fifty years. Several major phases of leadership are reviewed to provide a historical perspective on leadership studies.

*Trait Theories (pre 1900s to 1940s).* Early trait theory was often referred to as “great man” theories and were based on the belief that exceptional people were predisposed with certain qualities destined to make them leaders (Bass, 1990). The term *man* was used intentionally to imply that leadership was primarily a male, military, and western role and may have some foundational roots in the writings of Aristotle (Taylor, 1994). Scottish historian, Thomas Carlyle, proposed that “great men” had shaped world history through the vision of their intellect, the beauty of their art, the expertise of their leadership, and, most importantly, their divine inspiration (Bolden, Gosling, Marturano, & Dennison, 2003).

Study of leadership traits by the American Psychological Association during the early 1920s was associated with the work of Stogdill (1948). This general theory of traits may have been identified by two separate phases: an early period, prior to 1940, and a modern period, beginning around the decade of
1940s. The early period focused on traits of leaders and non-leaders while the second, proposed by Stogdill, emphasized relationships between traits and leader effectiveness.

Early investigations of leadership considered leaders as individuals with certain personality traits that enabled them to lead others effectively. These studies investigated individual traits such as intelligence, birth order, socioeconomic status, and parenting practices (Bass, 1960; Bird, 1940; Stogdill, 1948, 1974).

Trait theory was based on characteristics of leaders that seemed important to followers who allowed individuals with the identified descriptions to have influence over them. If leaders demonstrated certain characteristics, followers seemed willing to be influenced by that particular individual (Kenney, Blascovich & Shaver, 1994). The trait theory of leadership was commonly used in military organizations as a major strategy in selecting candidates to serve as officers. The strategy behind trait theory was to provide a means of identifying potential leaders by seeking persons who demonstrated prescribed characteristics (Bolden et al., 2003).

In the 1930s, Professor Ordway Tead of Columbia University postulated that leaders possessed certain traits more than non-leaders and thus in turn, separated them from others. Tead (1935) listed several traits which he believed were necessary qualities in leaders: a sense of purpose and direction, friendliness and affection, integrity, technical mastery, decisiveness, intelligence,
teaching skill, and faith. Tead believed that a basic tenant of trait theory is that “leaders are born, not made”.

In other studies of leadership traits, Hollander (1958 & 1961) identified potential leadership traits by using an indirect approach. Subjects were provided lists of leadership traits or behaviors and then rated how much a leader possessing a particular trait or behavior would influence them. Hollander advocated that identifying certain characteristics would enable new leaders to behave more effectively as they entered the role of leadership.

In a 1948 study, Stogdill recognized certain traits and abilities as constituting only one aspect of leadership. Possession of specific traits and abilities was not in itself a guarantee that an individual was leadership material. Stogdill concluded, from over 100 studies of leadership, that “A person does not become a leader by virtue of the possession of some combination of traits” (p. 64), and such a narrow view of leadership was insufficient. The attempts to isolate specific individual characteristics led researchers to the conclusion that personality traits are poor predictors of leadership (Tesser, 1995).

Mann (1959) conducted a study on leadership within small groups examining more than 1,400 findings. Mann concluded that personality traits could be used to identify leaders from non-leaders and the most dominate traits were; intelligence, masculinity, adjustment, dominance, extroversion, and conservatism.

Using similar findings as Mann (1959), Lord, DeVander and Alliger (1986) used meta-analysis and found that intelligence, masculinity, and dominance were
significantly related to how individuals perceived leaders. Lord and his associates asserted that personality traits could be used to determine leaders and non-leaders in various situations.

Based on a qualitative synthesis of previous research, Kirkpatrick and Locke (1991) argued that leaders can either be born with and/or learn to develop traits such as drive, desire to lead, honesty and integrity, self-confidence, cognitive ability, and knowledge of business. Kirkpatrick and Locke proposed that these particular differences were part of the process in developing certain individuals as recognized leaders.

A great deal of research validated the trait theory, but failed to identify a consistent list of leadership traits. Trait theory’s greatest weakness was a failure to account for various situations in which leadership must emerge. Therefore, not all traits could be transferred to every situation and this led to more research and investigation into leadership theory (Northouse, 2001).

*Behavioral Theory of Leadership (1950s).* Trait theory began to lose influence as more empirical data seemed to indicate that leadership was more of a dynamic process, varying from case to case, with changes in leadership, followers, and situations. Behavioral theories began to emerge during the 1950s and 1960s with studies focusing on leadership rather than leaders (Doyle & Smith, 1999).

The University of Michigan Leadership studies, under the direction of Rensis Likert, identified two styles of leadership behavior. The first was production centered behavior, where a leader pays close attention to tasks of
workers and the second is employee centered behavior, which focuses on interpersonal relationships (Katz, Maccoby, & Morse, 1950).

Likert (1961) expanded on the Michigan studies with extensive research into what actions separate effective managers from ineffective managers. Likert found those leaders, or managers, who had the greatest success placed more focus on the human aspects of their subordinate’s problems and sought to build effective working groups with high performance goals. He identified two major leadership styles; job-centered, which was least productive, and employee-centered, which was most effective. Likert also noted that successful managers practiced a type of employee empowerment where leaders set specific goals but allowed employees latitude to achieve those goals.

In 1967, Likert expanded his list of management or behavioral styles from two to four. After conducting research on human behavior within organizations, he identified four major management styles used by leaders. First was exploitive-authoritative, which Likert described as top-down threatening with little or no communication between levels. Second was benevolent-authoritative, and viewed as reward based with minimal communication and team emphasis. Consultative systems were characterized by shallowness with some team work and moderate communication. Lastly, participation-group systems were considered as most effective and total trust existed between management and subordinates. Because of his extensive work with the fourth management style, Likert is often associated with participation style leadership practices (Wren, 1979).
After World War II, the United States Department of Defense began to explore why certain people in military leadership roles were highly effective and others were ineffective. Most of these leaders had undergone the same training and selection process, yet there was clear evidence that some had been much more effective. In what became known as the Ohio State Studies, vast amounts of leadership data were collected. The Ohio State researchers, under the direction of Andrew W. Halpin, developed the Leader Behavior Description Questionnaire (LBDQ) to determine how leaders carried out their functions and activities. Researchers found two major variables associated with over sixty percent of the subjects, initiating structure and consideration (Blanchard & Hersey, 1996; Hemphill & Coons, 1957).

Using findings from the Ohio State Studies, Blake and Mouton (1964) devised the Managerial Grid. Blake described leadership styles in terms of two major scales, degree of concern for people and degree of concern for production. Blake believed these two scales were independent of one another and the score on one did not affect the score on the other. The model provided four main styles of management; the first was Task Management – a focus on organizing and completion of tasks. The second, Country Club Management, focused on people’s needs with little concern for production. The third style, Impoverished Management style, described a low concern for both production and people. Lastly and most highly esteemed, was Team Management style, which focused on both achieving outputs and ensuring people’s concerns and needs were being attended.
The weakness of the Managerial Grid was similar to that of the trait theory in that there was no ideal style of management or leadership. Blake’s basic two-dimensional model failed to account for endless combinations of organizational settings, situations, and leadership orientations that managers might encounter throughout their tenure. In some situations, one style worked best and in others, it did not (Blake & Mouton, 1975).

McGregor’s Theory X and Theory Y Managers were associated with behavior theories. In his book, *The Human Side of Enterprise*, McGregor (1960), made an impact on the history of managerial leadership when he proposed his two motivational theories by which managers perceive employee motivation. McGregor (1960) called these opposing motivational theories Theory X and Theory Y. Each theory assumed that management's role was to allocate resources, including people, to benefit the organization but beyond this commonality, they were quite dissimilar. Theory X assumed the primary source of most employee motivation was financial, with security being second. Theory Y was based on the assumption that employees were motivated by continuing needs of self-actualization and esteem. The leaders' beliefs about subordinates determined the type of style of approach they took in supervision (Smith, 1999).

By the 1960s, theories assuming one best leadership style could be applied universally to all situations were discounted and the quest for another leadership style continued. Research began to indicate that situational leadership was perhaps the best approach.
**Situational Leadership (1960s).** The concept of situational leadership, as developed by Hersey and Blanchard (1977), included four leadership styles: telling, selling, participating, and delegating. Situational leaders adapted their style to meet the needs of the particular situation or types of subordinates. The "telling style" was appropriate when staff members were new or inexperienced and needed more direction and encouragement to complete the task or meet the goals. The "selling style" was useful when group members were more able, experienced, and willing to do the task but may not have had the necessary skills. The "participating style" was a supportive style used when groups had the ability to do the job but lacked the motivation necessary to start or complete the task. The "delegating style" was useful when group members were willing and able to take responsibility for directing their own behavior. According to Bolman and Deal (1997), Hersey and Blanchard’s focus of leadership lay primarily on relationships between managers and subordinates rather than structures and tasks.

**Contingency Model of Leadership (1960s and 1970s).** According to the contingency theory, relationships between leadership style and leadership effectiveness was based on situational demands. The appropriate leadership style at a particular point in time depended on several factors: context and previous history, mindset of followers, particular issues involved, and leaders’ personality traits. Thus, although a leader may have a preferred leadership style, this style may need to be adjusted according to the circumstances (Fidler, 1997).
Several contingency models were developed during the 1960s and 1970s when this theory gained popularity. Fiedler’s model is perhaps the best known of the contingency theories and he postulated that there is no one best method to lead. He utilized the Least Preferred Co-worker (LPC) instrument to determine if leaders were either task-oriented or relationship-oriented. Task-oriented leadership emphasized successful group performance rather than harmony and relationship-oriented leaders tended to stress the opposite. Fiedler believed relationship-oriented leaders were most effective in situations requiring moderate control and task-oriented leaders performed more effectively in situations requiring low or high levels of supervision (Tesser, 1995).

Fiedler identified three components that determined favorableness of the managerial situation, personal relationship between the leader and the organizational members, degree of task structure, and a leader's positional power. Leader-member relations were based on how well the leader and employees got along. Task structure was rated as high, medium, or low in regard to needed supervision to complete goals, and positional power related to how much authority the manager possessed (Reavis & Derlega, 1976).

The Path-Goal Theory, devised by Robert House (1971), was an attempt to explain the link between leadership behavior and group satisfaction and performance. House proposed that leaders could influence the performance, satisfaction, and motivation of subordinates by offering rewards for meeting goals, clarifying paths toward reaching the goals, and removing hindrances to the achievement of goals. Four major leadership styles were identified in House’s
theory that have a direct impact on group performance, directive leadership, supportive leadership, participative leadership, and achievement-oriented leadership. Supportive behavior increased group satisfaction, particularly in stressful situations, while directive behavior was suited to ambiguous situations. The Path-Goal theory also suggested that leaders who had influence upon their superiors could increase group satisfaction and performance (Donaldson, 2001).

**Transformational Leadership (1970s and 1980s).** The theory of transformational leadership was first developed by James McGregor Burns in 1978 and later extended by Bernard Bass and others. Burns and Bass based their work on political leaders, Army officers, or business executives (Leithwood, 1992). Burns defined processes or behaviors used by leaders to motivate or influence followers as either transformational or transactional (Portin, 2004).

Transactional leaders sought to motivate followers by appealing to workers' personal goals and interests by focusing on the accomplishment of tasks and relationships in exchange for rewards desired by their subordinates. Transactional leadership behavior was used by most leaders and could lead to a work environment that was permeated by position, power, perks, and politics. Burns wrote that the most effective and beneficial leadership behavior which achieved long-term success and improved performance was transformational leadership (Taylor, 1994).

As defined by Burns (1978), transformational leadership, which contrasts with transactional leadership, occurred "when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels
of motivation and morality ... their purposes (which may have started out as separate) become fused” (p. 20). Burns believed that an organization could experience significant positive change through transformational leadership’s morally purposeful actions.

Burns’ 1978 references to transformational leadership as morally purposeful was also very similar to the 1990s writing of theorist Thomas Sergiovanni (1990). Sergiovanni stated that leaders must ask themselves such questions as "what do I stand for; what, of value, do I want to contribute to young people and to society?" (p. viii), which have a strong transformational basis.

Bernard Bass (Bass & Avolio, 1989), who applied Burns’ ideas to organizational management, developed a questionnaire called the Multifactor Leadership Questionnaire (MLQ) used to measure transformational, transactional, and laissez-faire leadership. Laissez-faire leadership is considered to be an inactive style and inappropriate way to lead.

According to Bass (1985), transformational leadership had four dimensions. The first dimension he called charisma. The charismatic leader provides vision and a sense of mission, instills pride, gains respect and trust, and increases optimism (Bass, 1985; Bass & Avolio, 1989). Charismatic leaders excite, arouse, and inspire their subordinates to perform for the organization (Yammarino & Bass, 1990).

The second dimension of transformational leadership was called inspiration. Inspiration addresses the capacity of the leader to act as a model for subordinates, communicate a vision, and use of symbols to focus efforts.
According to Bass (1985), inspiration and charisma formed a single factor but different behaviors were implied. Charisma required identification with the leader while inspiration did not.

The third dimension was referred to as *individual consideration*. While a leader's charisma may motivate subordinates to a vision or mission, the leader's use of individualized consideration also significantly contributes to individual subordinates achieving their fullest potential (Yammarino & Bass, 1990). Individual consideration is part coaching and mentoring, it provides for continuous feedback and links the individual's current needs to the organization's mission (Bass, 1985; Bass & Avolio, 1990).

Burn's last dimension of transformational leadership was *intellectual stimulation*. An intellectually stimulating leader provides subordinates with a continuous stream of challenging new ideas that are supposed to foster new ways of doing things (Bass, 1985; Bass & Avolio, 1990). Intellectual stimulation is characterized by subordinates' conceptualization, comprehension, and analysis of the problems they face and the solutions they create (Yammarino & Bass, 1990).

Lesourd, Tracz, and Grady (1992) added the category of *visionary* to the four developed by Bass. A visionary is one who displays high personal convictions, strong work ethic, innovative strategies, and a vision of what the organization's future can become. Warren Bennis and Burt Nanus (1985) added yet another dimension to the characteristics of transformational leaders in what is referred to as the *Wallenda factor* (p. 274). The Wallenda factor is defined as "the
capacity to embrace positive goals, to pour one's energies into the task, not looking behind and dredging up excuses for past events” (p. 71). Bennis and Nanus also consider the idea of empowerment as a characteristic of a transformational leader.

*Value Added Leadership (1990s).* Thomas Sergiovanni (1990) is one of the leading proponents of value added leadership and draws heavily from transformational leadership theory. Sergiovanni describes the particular characteristics associated with value-added leadership to include

…the provision of symbols, enabling teachers, a system of accountability, intrinsic motivation, and collegiality. The characteristics are reminiscent of those attributed to transformational leadership; it appears that the combination of all the characteristics leads to a transforming effect on the leader and the led. In the process, both are actually elevated to the next level, that of value-added leadership (p. 32).

*Servant Leadership (2000s).* The movement of servant leadership had its roots in the 1970s writings of Burns and Greenleaf but did not receive popular recognition until the 2000s (Sendjaya & Sarros, 2002). The servant leadership theory proposes that leaders are able to accomplish most when they see themselves as serving others, rather than themselves. According to Greenleaf (1977), servant leaders put other’s needs, aspirations, and interests above their own. Servant leadership theory shares some of the same ideas as Burns’ (1978) transformational leadership.
Greenleaf (1977) was credited with the modern terminology of servant leadership which he acquired through reading *Journey to the East* by Herman Hesse. According to Greenleaf, a servant, who later turned out to be a great noble leader of his tribe, guided the characters in Hesse’s book. The quality of the servant leader’s inner life had helped to make the journey possible for the travelers (Jaworski, 1996).

Patterson (2003) proposed that servant leaders exhibit seven virtuous qualities that work in progression: love, humility, altruism, vision, trust, empowerment, and service. Based on a *Fortune* survey, Levering and Moskowitz (2000) suggested that servant leadership has been practiced and promoted in businesses listed in their research titled *Some of the Best Companies to Work for in America*. Levering and Moskowitz identified six criteria which these companies possessed: openness and fairness, friendliness, opportunities, pride in work and company, pay/benefits, and security.

The above leadership theories provided a framework for the historical development of instructional leadership in educational settings. Influences from commercial, social, and political organizations may also have led to changes in educational leadership. Theories of leadership, traits, behaviors, contingency model, transformational, and now servant leadership, have greatly influenced how principals lead schools. The primary goal of instructional leadership is to lead teachers and students to reach their full potential by creating a school climate characterized by a high focus on academic achievement and promoting and communicating common goals and vision for all stakeholders.
The role of the school principal is perhaps the most crucial and complex within the educational system (Hurley, 2001). Defining the role of principal into one concise definition has been a struggle for educators since the beginning of the principalship in American education. To begin a study of school principal influence, a clear definition of principal leadership must be established.

Hallinger and Murphy (1985) developed an insightful description of principal as instructional leader that consisted of three primary categories of leadership practice: defining the school's mission, managing the instructional program, and promoting school climate. Cuban (1982) proposed a model for principal leadership which included managerial, political, and instructional roles.

The wide variety of demands upon the school principal can create role conflicts. Most surveys routinely find that principals feel the need for instructional leadership as their top priority, but daily management obligations seem to dominate their time (Cooley & Shen, 2003; Goodwin, Cunningham, & Childress, 2003).

The role of instructional leader can be applied to both principals and other educators within the school walls, but in the context of this report, instructional leader applies to the role of the principal. Instructional leadership can be defined as the actions taken or delegated by the school principal to promote growth in student learning.

Present day educational legislation mandates greater school accountability. The nation's schools are facing complex issues related to school
achievement and accountability measures have become both the impetus and
dictum for imposing greater reform. The role of school principal is critical to the
implementation of school reform. The ever-changing role of the school leader is
an enormous challenge that is often difficult to manage effectively in a very
seven common functions of school leadership in all types of schools: instructional
leadership, cultural leadership, managerial leadership, human resources
leadership, strategic leadership, external development leadership, and micro-
political leadership. The degree to which these leadership types functioned
depended on the school and the situation.

In a recent study of school principals (Waters, Marzano, & McNulty, 2003),
a group of researchers analyzed over 70 studies to examine the effect of
leadership on student achievement. All of the studies used quantitative measures
of student achievement as the dependent variable and teachers’ perceptions as
the independent variable. The combined sample size of the studies analyzed
yielded 2,894 schools and over 14,000 teachers. Waters et al. reached the
following conclusions based on those results; a positive correlation existed
between effective school leadership and student achievement and effective
leaders know what, when, and how to lead. Effective leaders understand which
school changes can have the greatest impact on student achievement and use a
style of leadership to make those changes happen. The authors were able to
identify 21 leadership responsibilities and provided explanations of each in their
report.
Teddle and Stringfield (1993) studied principals and found effective principals offer stable and appropriate leadership, use formal and informal structures, practice empowerment, and are willing to adapt to external changes from reforms. The authors stated that a highly effective practice of principals involved modeling the value of instructional time. The researchers also identified motivating staff members to have high expectations for student learning and behavior as an effective leadership function.

Rutter, Maughan, Mortimore, Ouston, and Smith (1979) conducted the widely cited *Fifteen Thousand Hours* study. These researchers found that firm leadership and teacher involvement through empowerment had a clear impact on student outcomes. Mortimore, Sammons, Stoll, Lewis and Ecob (1988) also determined that purposeful leadership had a major influence over the staff and this was brought about by understanding the school’s needs, being actively involved in all aspects of the school program, and the practice of teacher empowerment.

Levine and Lezotte (1990) and Murphy (1990) identified effective principals as instructional leaders of the school where focus was on teaching, pupil learning, and the operation of classroom management. Many of these principal actions also contributed to helping shape the school’s climate (Levine & Lezotte, 1990; Peters & Waterman, 1982). Effective leaders contribute by having direct intervention in the life of the school through being highly visible, frequently monitoring teacher performance by visiting classrooms often each day, conversing informally with staff, and having person-to-person meetings.
Niedermeyer (2004) collected surveys from 106 Indiana elementary low-performing schools to test for relationships between principals’ leadership styles and improved student achievement. The results from this study showed no positive correlation between leadership and student achievement, but did indicate a positive relationship between principals’ leadership styles and teacher satisfaction, perception of principals’ effectiveness, and teacher motivation. Layton (2004) conducted a similar study on transformational leadership styles of Indiana principals and student achievement and found no correlation between the two.

Grove (2004) investigated instructional leadership behaviors of nine principals in the state of California who were deemed successful based on their schools’ three consecutive years performance on the California’s Academic Performance Index. Grove found that these principals adopted the California’s reform goals and effectively communicated strategies to achieve those goals with their staffs. These principals communicated the state’s accountability and standards implementation reforms as a strategy for improving student performance rather than a legislative mandate to change.

In a review of four dissertational studies that focused on the effectiveness of principal leadership on student achievement, no statistical relationship between the two variables were found (Fisher, 2003; Nicholson, 2003; Nolen, 2003; O’Donnell, 2003). However, Herbst (2003) chose to study the effects of servant leadership on student academic performance. In his study, servant leadership included the characteristics of empowering, valuing and developing
people, and building a sense of community. The researcher found that positive relationships existed between servant leadership and student achievement. O’Donnell (2003) used an additional analysis called a zero-order Pearson correlations coefficient, his study suggested a positive association between leadership and academic achievement.

Johnson, Livingston, Schwartz, and Slate (2000) conducted a review of research on factors related to an effective school and found a positive school climate and strong leadership were the most consistently reported characteristics for maintaining an effective school. Wang, Haertel, and Walberg (1993) found that direct influences had greater results in improving student achievement than indirect influences. Direct influences were factors implemented at classroom levels, such as amount of instructional time and teacher interactions with students. Indirect influences were factors implemented from a more removed source, such as school, district, or state level initiatives.

Purkey and Smith (1983) conducted an extensive review of more than 100 studies on effective schools. Their review was limited to those studies that determined or examined school-level factors associated with school effectiveness. Purkey and Smith concluded that an “academically effective school was distinguished by its culture: a structure, process, and climate of values and norms that emphasize successful teaching and learning” (p. 442). Organizational structure, according to Purkey and Smith, included instructional leadership, school-site management, staff stability, curriculum articulation and organization, school-wide staff development, parental involvement and support,
school-wide recognition of academic success, maximized learning time, and
district support.

*School Climate and Student Achievement*

As noted earlier, the accountability reform movement has sparked a
renewed interest by educators and researchers as to what factors can be utilized
to help improve student academic achievement. Although the concept of school
climate has been studied extensively, there is a wide variety of labels associated
with the idea. Words such as *atmosphere* or *feelings* or simply *climate* are used
synonymously. Some refer to the idea of climate as *tone*, *setting*, or *milieu* of the
school (Tagiuri, 1968). Other researchers have chosen to use the term *culture*
(Purkey & Smith, 1983; Deal, 1985) and school *ethos* (Rutter et al., 1979) in
referring to the internal norms and values of the school. The terms climate and
culture may sometimes be used interchangeably, but a discussion concerning
these specific terms will be addressed later.

Just as there are many terms used when referring to a school’s climate,
there are nearly as many definitions. “Climate refers to a general social condition
that characterizes a group, organization, or community, such as the general
opinion in a community” (Brookover, Erickson, & McEvoy, 1994, p. 26) and it
contributes to the overall effectiveness of a school (Ballantine, 2001). School
climate might be defined as the feelings that students and staff hold about the
school environment over time. School climate is a reflection of the positive or
negative feelings regarding the school environment, and may affect a variety of
learning outcomes (Peterson & Skiba, 2001). Climate has also been defined as
perceptions of the physical and psychological school community, the organization of instructional and extracurricular activities, the condition of the school building and grounds, and the encouragement of the development of academic and social values and norms among students (Kelley et al., 1986).

A positive school climate is one of seven correlates associated with the effective schools movement. An effective school climate, according to educational practitioners and reformers, is composed of a strong instructional leader, high academic expectations by the staff, frequent monitoring of student progress, and a safe and orderly environment (Edmonds, 1979). Hoyle, English, and Steffy (1985) stated, "School climate may be one of the most important ingredients of a successful instructional program. Without a climate that creates a harmonious and well-functioning school, a high degree of academic achievement is difficult, if not downright impossible to obtain" (p. 15).

The study of school and organizational climate has it roots both in business and in education. Ouchi’s (1981) *Theory Z* and Peters and Waterman’s (1982) *In Search of Excellence*, brought the concepts of effective organizational climates to the forefront. Because of the popularity of the concept, the examination of organizational climates and cultures is common. For schools, the study of climate helps stakeholders understand the factors that influence students’ successes, including how the school staff supports and encourages a student’s potential for success. The difficulty lies in obtaining a clear understanding of what factors create a school climate that can be measured and
acted upon to bring about the desired academic achievement (Hoy & Sabo, 1998).

The terms *culture* and *climate* are often used interchangeably, but according to Hoy and Sabo (1998) they hold different meanings when attempting to investigate significant properties of organizations. The term *culture* is usually attributed to a deep structural system of shared assumptions about beliefs, ideals, norms, and values held by all participants or members of the organization and helps to provide a type of identity for the organization (Denison, 1996; Hoy & Miskel, 1996). The term *climate* is defined by the shared perceptions of behaviors (Ashforth, 1985). Hoy and Sabo (1998) draw a distinction between the words assumption and perceived:

If the purpose of the analysis is to determine the underlying forces that motivate behavior in organizations or to focus on the language and symbolism of the organization, then a cultural approach seems preferable. But if the aim is to describe perceptions of behavior of organizational members with the purpose of managing and changing it, then a climate approach seem more desirable. (p. 6)

The study of a group’s culture would lend itself well to qualitative type research through such methods as ethnographical and case studies. Researchers of climate would use quantitative techniques and analysis to discover patterns or frequencies of behavior within the organization. The main purpose in the studying of climate is to determine effective strategies of change and how to impact the
organization to better meet the needs of the group members (Koys & Decotiis, 1991).

Theorists and researchers have utilized studies of schools to reveal various factors that influence and affect school climate. Information gained from studies has provided educators with various strategies and actions to affect and improve school climate. Writers have focused on the need for creating "caring in schools" or "caring learning environments" (Noddings, 1992), others have stressed "building a sense of community" in schools (Sergiovanni, 1994, Whelage, Rutter, Smith, Lesko, & Fernandez, 1989), and still others emphasize the development of adult-child relationships (Charney, 1998; Feedman, 1993). Mentoring, peer guidance, character education, community service-learning, school-within-a-school, cooperative learning, teaming/homeroom, looping, and promotion of welcoming and belonging in school are all programs emphasizing a positive school climate and the idea of creating a learning community (Peterson & Skiba, 2001).

Bulach, Malone, and Castleman (1995) in their research on 20 schools found a significant difference in student academic achievement between schools they determined possessed a good school climate and those which possessed a poor school climate. Hirase (2000) and Erpelding (1999) also found in their studies that schools with a positive climate had higher academic achievement than schools possessing what was considered less positive climates.

School effectiveness research espoused a school climate which included high expectations for student learning, high standards for student achievement,
strong instructional leadership, and a safe and orderly climate as the basis for improved student achievement (Brookover & Lezotte, 1979; Edmonds, 1979; Purkey & Smith, 1983; Weber, 1971). The bases of these characteristics are the constructs of what is termed academic press and social support.

Academic press emphasizes rigor and accountability on the basis that students will achieve more academically when what is intended to be learned is made clear, when expectations for academic learning are high, and when students are held accountable for personal performance. Social support focuses on strengthening social relationships among students and adults both within and outside of the school and therefore promoting social, emotional, and academic growth (Lee, Smith, Perry, & Smylie, 1999).

Academic press, periodically referred to as academic rigor, constitutes a focus of the school to attain academic excellence. Academic goals are set for students which are within reach of their abilities and the learning environment is orderly and serious. The teachers have high expectations in their students’ abilities to achieve academic goals and those that do well are respected by all (Murphy, Weil, Hallinger, & Mitman, 1982). The focus on academic achievement is supported by the school through policies, practices, expectations, norms, and rewards that encourage the students and staff to do their best (Hoy & Hannum, 1997). Researchers have found that schools with high academic press show evidence of positive effects on student academic achievement (Brookover & Lezotte, 1979; Edmonds, 1979; Hoy & Sabo, 1998; Hoy, Tarter, & Kottkamp, 1991; Purkey & Smith, 1983).
Research has indicated that social support for students creates motivation, builds confidence, and a sense that academic success is attainable (Bandura, 1986; Dorsch, 1998; Noddings, 1988; Weiner, 1985). Social support also provides students with feelings of trust, confidence, and acceptance that allows them the freedom to take risks, seek help, admit mistakes, and learn from failures as they advance through stages of learning (Coleman, 1988; Schein & Bennis, 1965). In reference to student social support, Urban (1999) stated, "unless students experience a positive and supportive climate, some may never achieve the most minimum standards or realize their full potential" (p. 69).

Lee et al. (1999) examined relationships of academic press and social support to student academic achievement and found that when the two factors were used in conjunction with each other, students showed substantial academic progress. When academic press or social support was missing from the school climate, students showed a decline in academic achievement. The authors suggested that in the effort of making schools accountable for student achievement, the strategies of raising standards and creating high stakes testing should be accompanied by social support from the school as well as home and community resources.

Another factor often associated with school climate is the need to develop within the student body and staff, a sense of school membership, connectedness, or belonging. Goodenow and Grady (1993) explained this aspect of school climate as students feeling personally accepted, included and supported socially by other members within the school. According to Maslow's
(1962) *Hierarchy of Needs*, the sense of belonging is critical to students’ overall self-esteem, emotional, psychological, and social needs. Some sociologists attribute membership of pre-adolescents and teens in gangs as a fulfillment of this need to belong (Omizo, Omizo, & Honda, 1997).

This sense of belonging has been associated with causes of students’ dropping out of school and adolescents’ engagement in risky behaviors (Fine, 1991; Resnick et al., 1997). Some data suggested that many adolescents’ sense of alienation from schooling as an institution increases as they progress toward high school (e.g., Rumberger, 1995). In ethnographic studies of students at risk of dropping out, schools which emphasized a sense of belonging had a greater influence over students’ decisions to stay in school than those schools which did not (Schlosser, 1992). Wang et al. (1993) described the role of school climate as essential in promoting academic resilience in students who were at risk for failure.

Goodenow (1991) studied the relationship between 612 fifth and six grade students’ sense of belonging in school as related to motivation and academic achievement. Research from this study revealed a sense of belonging in school was related to student expectations of their academic success, motivation towards academic work and grades. In a survey of middle school multiethnic urban students, sense of belonging had a significant influence on motivation and determination towards academics (Goodenow & Gady, 1993).

Multiage classrooms foster a sense of belonging in students. Kester (1994) conducted research using African American students remaining with their
teacher for three years in a multiage classroom and students in other classrooms who were not in a multiage model. Kester reported that students in multiage classroom had a stronger connection to their school than those in regular graded structures. Reviews of research on smaller size high schools indicate the ability to create a sense of belonging is much easier to create than in larger population size high schools. Researchers reported that smaller size high schools had better student attendance, more student involvement in extracurricular activities, and lower percentages of discipline incidents involving two or more students (Cawelti, 1995; Cotton, 1996; Raywid, 1996).

In studies of school climates, students’ perceptions of a supportive climate and sense of community are generally related to positive outcomes including motivation, lower levels of discipline among adolescents, and more positive academic attitudes, especially for disadvantaged students (Battistich, Soloman, Kim, Watson, & Schaps, 1995). Ma (2003) studied data from 6,883 sixth grade students in 148 schools and found that discrepancies in climate were mainly within schools rather than between schools. The author revealed that school climate was more important than context in shaping students’ sense of belonging.

When students feel cared for by school staff members and feel a part of their school, they are less likely to use substances, engage in violence or initiate sexual activity at an early age. Students who feel a part of the school also report higher levels of emotional stability and well-being (Brookover & Lezotte, 1979;
Eccles, Early, Frasier, Belansky, & McCarthy, 1997; Edmonds, 1979; Steinberg, 1996).

In a report conducted for the RAND Corporation, researchers Juvonen, Le, Kaganoff, Augustine, and Constant (2004) found, "Middle-school-age students in the United States fare the worst among their peers in all other Western nations on school climate. That is, U.S. teens do not consider their schools to be a pleasant place where they feel they belong. Their ratings of school climate are almost two standard deviations below the 12-nation sample mean" (p. 56).

Gottfredson and Gottfredson (1989) found schools with high discipline problems tended to have similar characteristics such as inadequate resources, poor cooperation between teachers and administration, inactive administrators, teachers with punitive attitudes, and inconsistent administration of rules. The researchers summarized that negative school climate increased the risk of student misbehavior while a positive climate reduced misbehavior.

Research indicated that on the average, students in smaller schools feel more connected, or have more of a sense of belonging to school than students in larger schools. This finding contributes to mounting evidence that mega sized schools are not good for students (Baker & Gump, 1964; Bearman & Moody, 2004; Lee & Smith, 1995). Several researchers suggest that large school size negatively affects school connectedness because, in such settings, teachers cannot maintain warm, positive relations with all students (Eccles, Midgefield, & Wigfield, 1993; Lee & Smith, 1995; Newman, 1981).
There is a common belief that positive school climates disallow bullying and harassment to flourish (e.g., Hazler & Hoover, 1993). Effective schools encourage students to have positive interactions with teachers and establish stiff penalties against bullying (Barone, 1997).

School climate theories have received increased empirical attention as predictors of school disorder (Welsh, 2001). One of the major studies relating school climate to victimization of students and teachers is the National Institute of Education Safe School Study. Using surveys, investigators collected data from students, teachers, and principals in over 600 schools across the United States. Gottfredson and Gottfredson (1985) examined the relationship between victimization and various dimensions of school climate. The worst discipline problems were schools that had unclear, unfair, or inconsistently applied rules. Schools made ambiguous responses to student misbehaviors, staff did not know or tended to disagree on the appropriate responses to student misconduct, teachers ignored misconduct, and students did not believe in the legitimacy of the rules.

Welsh (2001) explored several major dimensions of school climate and individual student characteristics on five different measures of school disorder using responses from 4,640 middle school students. The researcher found that two school climate variables, respect for students and fairness of rules, were the strongest predictors of both offending and misconduct by students. Student school involvement, positive peer associations, belief in school rules, and school
effort were found to also be effective in predicting student offences and misconduct.

In a study investigating the success of a student truancy project, Havsy (2004) used a sample of 56 elementary and secondary students who had been identified as having problems with school attendance. Havsy reported that school climate and home support for learning were significantly related to predicting student attendance.

Benson (2003) studied the impact of school climate on student achievement of children from low-socioeconomic backgrounds. The researcher administered the Charles F. Kettering Limited School Climate Profile to 170 teachers, staff, and principals in four schools. School climate and achievement were positively related based on the analysis conducted with the data.

In another study related to school climate, Busch (2003) administered the Organizational Health Inventory (OHI) survey to 29 schools that were assigned ratings from the Texas Educational System as Exemplary, Recognized, or Acceptable based on achievement scores from the Texas Assessment of Academic Skills (TAAS). The author found that in all ten dimensions of the OHI, statistically significant differences occurred between Exemplary and Acceptable schools. No significant differences were found between Exemplary and Recognized schools on any of the ten dimensions of the OHI.

In summary, the literature supports the importance of school climate in improving student academic performance and creating an environment that is conducive to both students and staff members. School climate can be a positive
influence on the overall school program or a significant barrier to learning. Feedback concerning school climate plays a vital role in schools as reform measures are implemented to bring about change in student academic achievement (Freiberg, 1998).

Quality School Climates

According to Hoy and Sabo (1998) current educational emphasis is now on quality schools rather than effective schools. The difference between the two is that the construct of quality is a broader term that includes elements of organization and not simply outcomes. In summary, quality schools have as their purpose the continual improvement of learning and teaching. Collaborative professional cultures of schools is also referred to as learning communities and the goal is to promote continual instructional improvement. According to Fullan (1999), successful schools implement the strategy of collaboration among their faculty and staff. DuFour (2004) stated that a professional learning community model transfers the focus from teachers teaching to teachers making sure that students are learning. Members of the professional learning community measure their effectiveness based on results.

According to Hoy and Sabo (1998), the concept of openness is an indicator of a quality school. Openness on the part of leadership is defined as support for teachers in providing freedom and encouragement to experiment and act independently with little interference from bureaucratic procedures. Teacher openness behaviors are marked by commitment to serious and engaged
teaching, commitment to students, professionalism, acceptance, and communal respect for each other.

Patterson (1993) noted that values promoting positive cultures in schools are openness to participation, openness to diversity, openness to disagree, openness to reflection, and openness to mistakes. Leadership behaviors that encourage teacher leadership and innovation are considered effective in that they promote change and allow teachers to become creative and willing to experiment with innovative instructional strategies.

Indicators of Quality School Climates

Health of school climate - Hoy and Sabo (1998) described this indicator as the interpersonal dynamics between the school leadership and staff and between the staff and the students. The five sub-indicators are tied together with self-regulation and continuous improvement.

Student achievement - The minimum goal of every school is to have high academic achievement in the three areas of mathematics, reading, and writing. All stakeholders agree that this is a measure of school quality (Hoy & Sabo, 1998).

Overall school effectiveness - Indicators of quality and quantity of resources, efficiency, flexibility, and adaptability are seen as a global aspect of all quality schools.

Culture - The culture of a school should display the key values of shared identity, trust, authenticity, cooperation, and participation. Sergiovanni and Starratt (2002) discussed the sentiment of community that is essential for change
and effective schools. They believe that collegiality can only occur in a caring and collaborative environment and this feeling of community is a basic purpose of supervision. Schools improve if change occurs and change cannot occur without first developing and nurturing the right school climate and culture which are shaped through relationships between leadership and staff during the supervisory process.

**Instrument:** *The Organizational Climate Description Questionnaire – Revised Middle Level (OCDQ-RM)*

The typical measures of school climate are surveys of students, parents, staff, and sometimes community members regarding what they think about the school. They include judgments about issues such as teacher-student relationships, safety and school cleanliness, administration, student academic orientation, and student behavioral values (Kelley et al., 1986). Most surveys usually use a Likert-scale rating system and attempt to identify both specific strengths and weaknesses regarding a variety of concerns. Information obtained from surveys may be useful for assessment purposes and creating strategies for creating a positive school climate (Peterson & Skiba, 2001).

The OCDQ-RM predecessor was the original Organizational Climate Description Questionnaire (OCDQ) developed by Halpin and Croft (1963) to examine elementary school climates. Halpin and Croft’s instrument was a highly popular climate instrument in the 1970s. The instrument consisted of 64 items and used a four-point Likert response format. The instrument was developed to measure degree of satisfaction with teacher-principal interaction in elementary
schools (Owens, 1970). The OCDQ was a 64 item questionnaire designed to identify aspects of teacher:teacher and teacher:principal interactions that established the school’s existing climate. The instrument was created to describe characteristics of both the group and leader using a total of eight subtests. Group subtests included disengagement, hindrance, esprit, and intimacy, while leader subtests included aloofness, production emphasis, trust, and consideration.

Seventy-one elementary schools participated in Halpin and Croft’s (1963) pilot study of the OCDQ. By mapping each school’s profile, the authors identified six basic climates establishing a scale from open to closed. Through several revisions, they were able to address the limitations and established more clarity and logic with the instrument. Years later, the OCDQ was revised to be used with secondary schools (Alig-Medlicarek, 2003).

Hoy and Sabo (1998), in order to provide specific information concerning school climate at the middle level, grades 5-8, revised the Organizational Climate Descriptions Questionnaire based primarily on the work of Halpin (1966) and Hoy et al. (1991). The climates of elementary and secondary schools are quite different both organizationally and conceptually (Hoy & Clover, 1986; Hoy et al., 1991; Kottkamp, Mulhern, & Hoy, 1987) and therefore the need arose to revise the OCDQ to accurately measure middle school climate.

According to Hoy and Sabo (1998), the school’s climate can be characterized as one of four types: open, engaged, disengaged, or closed. To obtain the data necessary to characterize the climate type of a school, three
sources of data related to principal behavior and three sources of data related to
teacher behavior are obtained.

Principal Behavior is marked by a helpful concern for teacher ideas,
constructive support, freedom, encouragement for teachers to experiment and
act independently, and buffering routine duties that may interfere with teaching.
The three subscales of Principal Behavior are:

- Supportive Behavior is leader behavior that is directed toward both the
  social needs and task achievement of the faculty. The principal is
  supportive and genuinely concerned with teachers and staff.

- Directive Behavior is rigid, domineering behavior. The principal maintains
  close and constant monitoring over virtually all aspects of teacher
  behavior in the school.

- Restrictive Behavior hinders rather than facilitates teacher work. The
  principal burdens teachers with paperwork, committee requirements, and
  other demands that interfere with teaching responsibilities.

Teacher Behavior refers to teachers’ interactions with staff that are meaningful
and tolerant, that help students succeed, are professional, accepting, and equally
respectful to each other.
The subscales of Teacher Behavior are:

- Collegial Behavior supports open and professional interactions among
  teachers. Teachers like, respect, and help one another both professionally
  and personally.
• Committed Behavior is directed toward helping students develop both socially and intellectually. Teachers work extra hard to ensure student success in school.

• Disengaged Behavior signifies a lack of meaning and focus in professional activities. Teachers are simply putting in their time; in fact, they are critical and not accepting of their colleagues.

Using the OCDQ-RM’s 50 item survey, principal and teacher behavior scales are tabulated and plotted onto a grid to determine levels of openness for a school.

The four climate types measured by the OCDQ-RM are:

• Open Climate is characterized by cooperation and respect within the faculty and between the faculty and the principal.

• Engaged Climate features teachers that are open with each other, cohesive, committed, supportive, and engaged despite weak leadership.

• Disengaged Climate features a principal that is open in relationships with faculty, is supportive, flexible, and non-controlling. However, the faculty is divided, intolerant, uncommitted, and guarded in interactions with each other.

• Closed Climate features a non-supportive, controlling principal along with a divided, apathetic faculty.

Hoy and Sabo (1998) then began to construct the survey items for the OCDQ-RM by utilizing a combination of items from the elementary and secondary instruments along with an additional 16 for a total of 72 Likert-type items. The participants were to indicate their opinions about each item along a
four point scale from rarely occurs, sometimes occurs, often occurs, to very frequently occurs.

In the pilot study, 78 different middle schools responded to the new OCDQ-RM. The sample was from a set of New Jersey middle schools diverse in size, socioeconomic status and racial make-up. A set of exploratory factor analyses was performed on the data and 24 items were removed from the 72 original. Another factor analysis was performed on the remaining 48 items and yielded six factors that were named Supportive, Directive, and Restrictive principal behaviors and Collegial, Committed, and Disengaged teacher behaviors. These six factors accounted for 59.2% of all the variance. Reliabilities of four of the six scales were high, but the commitment and disengaged scales had low reliabilities (Hoy & Sabo, 1998).

According to Hoy and Sabo (1998) the factor analysis was performed in the following manner:

School mean scores were calculated for each item of the climate instrument, and the item-correlation matrix for the 87 schools was factor analyzed. A principal components factor analysis with varimax rotation confirmed the 6 predicted climate dimensions; however, 10 of the items failed the test of simple structure - strong loading on one and only one factor - and were eliminated. Thus the final version of the OCDQ - RM contained 50 items that defined 6 factors of school climate; their eigenvalues ranged from 1.92 to 16.25 explaining 70% of the variance…the reliability coefficients for all six subtests were high:
Supportive (.96), Directive (.88), Restrictive (.89), Collegial (.90), Committed (.93), and Disengaged (.87)...In brief, validity and reliability evidence is strong (p. 33).

In a study conducted by Alig-Mielcarek (2003), the researcher collected data from 146 elementary schools using the OCDQ-RE instrument to test for a model of leadership. The instructional leadership of the principal was not found to be directly related to student achievement. School climate in the form of academic press did have a direct effect on student achievement in both reading and mathematics. Alig-Mielcarek (2003) summarized the study indicating that principals indirectly affect student academic achievement using leadership to develop organizational climate.

Rafferty (2003) conducted research using the OCDQ-RS to determine relationships between school climate and teachers attitudes toward communication of information to the principal. Twenty-six high schools were used in the sample to determine if teachers in open climate schools differed from teachers in closed climate schools in perceptions and attitudes regarding upward communication with their principals. Rafferty reported that significant differences existed in teacher perceptions related to communication between the principal and the teacher with a more positive communication among open climate schools.

A study of five elementary schools practicing special education inclusion used the OCDQ to gauge the administrative climate and context of inclusive schools. The findings revealed the five schools had commonalities in leadership
practices and core principals, consistent patterns in climate indices and all schools exhibited an open climate (Salisbury & McGregor, 2002).

Van Horn (1999) used the OCDQ to measure climate in 6 inner-city elementary schools located in Duval County, Florida and revealed a high amount of disengaged teachers at all of the schools. Disadvantaged students need engaged teachers and the school developed strategies to create team building and collegiality among the staff. The OCDQ also provided baseline data for the schools to measure the effectiveness of their school improvement strategies for a more positive climate.

Imants and Zoelen (1995) compared the school climates of low absenteeism schools and high absenteeism schools, and sense of efficacy. The researchers questioned as to whether teacher absenteeism related to school climate and teachers’ sense of efficacy in primary schools. The results from the OCDQ showed that school climate characteristics strongly related to absenteeism at the school level.

Relatively few studies have been produced using the OCDQ-MR version of the survey. The need for more empirical evidence using this instrument could be beneficial to the developers to modify or improve instruments used to measure school climate.

**Summary**

The review of literature began with a discussion on the historical development of the school principal followed by an examination of various
leadership theories. The role of principal as instructional leader and other roles performed by the principal were discussed in brief.

Factors associated with school climate and student achievement were discussed and studies investigating the effects of principals’ leadership styles on workplace norms, educational programs, and learning climate were shared. The instrument proposed for use in this study, the Organizational Climate Description Questionnaire for Middle Schools (OCDQ-RM) was discussed in depth.

Meeting the challenges associated with achieving Adequate Yearly Progress (AYP) under the No Child Left Behind Act (2001), has become a major focus of many public schools today. The federal law is demanding schools to meet challenging expectations in performance or face consequences, such as offering school choice or turning over operations to the state (Young, 2003).

As school leaders seek ways to improve student achievement in order to meet AYP, a renewed interest has begun to look at leadership styles and school climates and their affect on overall school performance (Day, Hadfield, Harris, Tolley, & Beresford, 1999). The extent to which school leaders work to create positive learning environments that are both supportive and conducive to student learning and teacher behaviors, may have a direct affect on student achievement (Bulach & Malone, 1994; Erpelding, 1999; Hirase, 2000).

In reviewing the literature, three issues emerged as vital to the understanding of the affects associated with leadership and school climate on student academic achievement. The role of school leaders are largely dictated by circumstances and the specific situations facing a school at a given time.
Sergiovanni (2001) identified seven common functions of leadership in all types of schools: instructional leadership, cultural leadership, managerial leadership, human resources leadership, strategic leadership, external development leadership and micropolitical leadership. Leading schools in today’s politically charged accountability movement is complex work and constantly changing needs of policy makers present school leaders with enormous challenges that are difficult to unravel (Farkas, Johnson, Duffett, Syat, & Vine, 2003; Leithwood & Riehl, 2003). A specific style of leadership that is effective in one school may not be equally effective in a different school. Leaders must adapt to the needs and demands of a given situation at the present time and the ability to understand group dynamics is essential.

Principal leadership style has the capacity to impact school instructional climate which has direct influence on student achievement. This theme emerged often in the review of literature concerning school climate. Studies on school climate showed a direct relationship between high student achievement and schools which create a positive learning environment (Bulach et al., 1995; Hoyle et al., 1985; Purkey & Smith; 1983). School leaders are in a position to create a strong focus on quality instruction and high academic press (Bandura, 1986; Dorsch, 1998; Noddings, 1988; Weiner, 1985). Positive learning environments and positive learning outcomes appear to go together (Haertel, Walberg, & Haertel, 1981).

School leadership that encourages collaboration and shared governance regarding instructional goals can lead to a positive school climate that fosters
student achievement (Hoy & Sabo, 1998; Johnson et al., 2000; Patterson, 1993). Professional collaboration has become a common phrase in education and espoused by some as an important key to the development of learning communities (Friend & Cook, 2000; Fullan & Hargreaves, 1991). According to Boyer (1996) effective schools are true communities of learning.

Factors that influence student achievement are numerous and focusing on one or two specific strategies may or may not prove effective for every school. According to research, the most promising, and perhaps most difficult, is the idea of creating a learning community (Waters et al., 2003). This approach may influence the most people within a school organization and which in turn positively affect the school climate.

There are many different theories concerning what works in regard to improving student achievement. One issue on which the research is clear, however, is the fact that no one method will fit every situation every time.
Chapter 3

METHODOLOGY

This study examined relationships between principal leadership style, school climate, and school academic performance among ten middle schools in a west Georgia school district. The current emphasis for most school systems in this new wave of educational reform is finding ways to improve student achievement and quality of school life (Darling-Hammond, 2000; Marzano, 1998; Marzano, Gaddy, & Dean, 2000).

High stakes testing, No Child Left Behind legislation, and the standards/accountability movement are exerting extraordinary pressure on schools’ instructional leaders to raise test scores. The consequences for not meeting accountability standards are troubling to principals and their staffs. George (2001) surveyed 50 school principals and 25 administrators who are trying to meet the accountability standards for Florida’s A+ Reform Act. Fifty percent of the principals reported that teacher morale has never been lower and stress, among teachers, is at its highest levels. Teachers are focusing on teaching the tests and principals are worried their schools may not meet the standards. Schools are implementing new and innovative strategies to raise student test
scores, but few have focused attention toward measuring the principal's leadership style and its affect on school climate.

With the heightened emphasis on accountability, a renewed interest by both researchers and educators, has given rise to the effects of school climate on school achievement. Of particular importance in this study are how principal leadership behaviors affect school climate based on the perceptions of teachers within selected schools and how this perceived climate has affected school performance.

Described in this chapter are the sample of participants, survey instrument, design of the study, procedures, and data analysis utilized to accomplish this goal. Achievement data from the 2003 and 2004 administration of the Iowa Test of Basic Skills (ITBS) norm reference test as reported in the Georgia (Georgia Department of Education, 2004c) report Card by the Georgia Department of Education provided the basis for the statistical analysis. Demographic data for middle schools used in the study was obtained from the 2004 Georgia Report Card. Discussion on the analysis of collected data were followed by a summary.

Participants

Participants were teaching faculties of ten middle schools within a metropolitan district located in west Georgia. Over 73% of the 367 teacher participants were female and 67% were Caucasian. Over 34% of the participants had over 16 years of teaching experience. Approximately 85% of the teachers
taught basic academic subjects, 10% taught connections classes, music, or physical education, and 5% were counselors. Most participants (i.e., 40%) had a master level or higher education degree. The survey was distributed to the participants during the months of November and December 2004, so that teachers’ reports on their relationships with the principal and other teachers were based on previous months of the school year.

This school district served more than 90% of all school-aged children residing in the county with a total enrollment of more than 31,000. According to the 2000 Census, 50.4% of the residents in this school district were white and 43.7% were black. Hispanics, who can be identified as either white or black in the Census data, made up 4.5% of the county’s population. Demographically for Georgia, 65.1% of residents were white, 28.7% were black, and 5.3% were Hispanic. In this particular county, 26.8% of the county’s residents were age 18 or younger, while 11.7% were age 65 or older. Statewide, 26.5% were age 18 or younger and 9.6% were age 65 or older (U.S. Census Bureau, 2000).

County 2000 Census (U.S. Census Bureau, 2000) reports indicated 11.8% households were headed by females with children under 18 years of age, compared with 9.0% statewide. Total households with children under 18 comprised 34.6% of all households in the county and 35.0% of those in the state.

The ten middle schools in this district had different demographic populations and sizes (Georgia Department of Education, 2004d).
School Size. In the middle schools selected for this study (grades 6-8), the faculty size ranged from 30 to 51 while student populations ranged from 460 to 990.

Socio-economic environment. The percentage of the student population qualifying for free and reduced lunch (SES) for participating schools ranged from a low of 27% to high of 88%. The system average is 62% for students receiving free and/or reduced lunches.

Ethical Considerations

Ethics approval for the project was sought and obtained from the Valdosta State University Institutional Review Board (Appendix A). Written approval was sought and obtained from the superintendent of schools for the county in which the ten middle schools were located (Appendix B). Members of the individual school faculties, who were requested to participate in the confidential school climate surveys, were informed that participation was voluntary. All surveys were anonymous and did not contain any identifying data. Completing the survey was deemed to be consent. All efforts were made to conceal individual names and the names of individual schools in this dissertation. The data collected by the researcher will be retained for two years and then properly disposed as directed.

Instrument

According to Hoy, Tarter, and Kottkamp (1991), the unit of analysis for investigating climate should be the school because certain variables reveal specific characteristics of an organization. Middle school climate, as determined
by principals' behaviors and teachers' behaviors, socioeconomic status, and school academic performance were measured in this study. Each variable was measured using the instruments described below.

The Organizational Climate Description Questionnaire for Middle Schools (OCDQ-ML) is a 50-item instrument designed specifically for use with middle schools for research in the area of school climate. The Organizational Climate Descriptions Questionnaire was revised by Hoy and Sabo (1998) to provide specific information about the climate in middle level schools. Each school's climate was characterized as one of four types of climates: Open, Engaged, Disengaged, and Closed. To obtain the necessary data to characterize each school's climate, three sources of data about principal behavior and three sources of data about teacher behavior were obtained. The three principal behavior scales determined the Principal Openness score that was plotted on a grid. The three teacher behavior scales determined the Teacher Openness score that was also plotted on the grid. The point at which those two Openness scores met on the grid determined the quadrant (type) of school climate.

Principal Behavior was marked by a helpful concern for the ideas of teachers, constructive support, freedom, and encouragement for teachers to experiment and act independently, and structuring the day-to-day duties of the job so that interference with teaching was kept to a minimum. Teacher Behavior referred to teachers' interactions that were meaningful and tolerant, that helped students succeed, were professional, accepting, and mutually respectful.
The psychometric properties for all six subtests measuring principal and teacher behaviors on the OCDQ-RML are considered strong and have high reliability coefficients. The empirical results provided by the authors indicated strong construct-related evidence for the validity of principal and teacher openness for determining school climate (Hoy & Sabo, 1998).

The four climate types measured by the Hoy and Sabo's OCDQ-RML are: Open, Engaged, Disengaged, and Closed. The instrument, administered to participants, consisted of 50 items on a front and back printed form (Appendix C).

Total school participation in the federal free and reduced lunch program is the state’s guideline for determining socioeconomic status of a school. The total percentage of students who met the federal guidelines for free and reduced lunch determined each school’s socioeconomic status. SES was reported as the percentage of enrolled students receiving free and/or reduced meals (Georgia Department of Education, 2004c).

The state of Georgia requires that all eighth grade students be administered the Iowa Test of Basic Skills (ITBS) Form M, on a yearly basis. The math and reading portion of the 2003 and 2004 Fall Eighth Grade ITBS provided the measurement of school academic performance.

The ITBS-Form M (ITBS) are a series of norm-referenced achievement measures of student progress in a broad range of basic academic skills. The test is administered annually to Georgia’s third, fifth, and eighth grade students. The well-established and widely used group-administered test battery has produced
internal consistency and other reliability coefficients in the satisfactory range of low .70s to mid .90s (Hoover, Hieronymus, Frisbie, & Dunbar, 1996). In addition, research studies have confirmed the validity of the ITBS measures (Riverside Publishing, 1997).

Design of the Study

This study employed a cross-sectional design which utilized a survey approach to provide information on attitudes, behaviors, opinions, of various groups for each of the ten schools (Fitzpatrick, Sanders, & Worthen, 2004). Surveys were distributed to each teacher group during a regularly scheduled faculty meeting at each middle school located in the district. Permission was obtained from school principals to administer surveys during regularly scheduled faculty meetings. There was no attempt to re-administer surveys to teachers who were not present. Excluded from the sample were three alternative schools serving middle school students in this district due to small number of faculty members housed at each site.

Procedures

Principals of the ten participating middle schools were sent a pre-notification letter from the system superintendent, director of research and evaluation department, and the researcher. The letter explained how the results would be reported to the school and kept confidential. Each middle school principal was contacted personally by the researcher for a specified date and
time for administration of the survey to the faculty at the beginning of a staff meeting.

The researcher was introduced to the staff, who then explained the purpose of the survey using the following script for each administration:

“My name is Gary Shouppe and I am a doctoral student at Valdosta State University. I am conducting research for my dissertation and for each of the middle schools in this system. I am asking that each of you complete a survey that is designed to measure the school climate based on principal and teacher behaviors. All you will need to do is to read each statement and then mark one of the responses that best characterizes your school; rarely occurs, sometimes occurs, often occurs, or very frequently occurs. Participation in the survey is voluntary and your responses will remain strictly anonymous. Do not write your name on the survey. Please use the number 2 pencil, which I have provided, to mark the survey. When you are finished, I will collect the surveys and place them into this large envelope to ensure everyone’s survey remains anonymous. Thank you.”

The principals of each school were asked to wait in a separate area while the survey was administered to faculty members. After the preceding paragraph was read to the teachers, copies of the OCDQ-RM survey instrument were distributed to each of the participants. An informed consent statement was printed at the top of each survey used in the study. Time was allowed for each
participant to complete the 50 items on both the front and the back of the instrument. The surveys were collected from the teachers and the principal and staff were thanked for their participation. This same process was repeated for each of the ten middle schools in the system. Of the 450 teachers in the study population, 367 completed the survey indicating an 81% participation rate.

After each school was surveyed, the researcher carefully marked each school’s survey from which it came with its correct name. The names of the schools were retained in order to make accurate comparisons with the achievement measures. Numbers were assigned to schools after data was collected to prevent actual identification from the study.

Data Analysis

This study presents a comparative analysis of school climate and school academic performance. Student performance measures used normal curve equivalent (NCE) scores from norm-referenced tests for total reading and mathematics. School academic performance (reported as NCE) on the various subject areas on the Iowa Test of Basic Skills (ITBS) were used for this study and obtained from the system’s department of research and evaluation.

After each school’s Principal and Teacher Openness standardized score was computed, the scores were plotted on a chart to determine the climate profile of the individual schools. Each school’s Principal Openness and Teacher Openness score was determined to be either Open, Engaged, Disengaged, or Closed.
Each school principal was presented with a school profile based on the scored and analyzed data from the survey conducted with their teachers. The school profile included a comparison of their school with the normative sample established by Hoy and Sabo (1998) and a classification of the climate type. Instructions for interpretation were provided as well as possible strategies for improving school climate.

The school system’s director for research and evaluation was provided an analysis of the data for each school based on the findings. All copies of surveys from each of the schools was placed into a sealed envelope and disposed of in a proper manner. School data using alias names will be stored by the researcher for approximately two years and then disposed of in a proper manner.

Responses of individual teachers to the surveys were aggregated for each of the ten schools in the study. Statistical Package for the Social Sciences (SPSS, 2003) was used to aggregate individual responses by school and then to calculate means, standard deviations, and reliability coefficients (Cronbach’s alpha) for all the scales measuring the variables. Measures of central tendency for climate, demographic composition of the student population, and ITBS Math and Reading scores were analyzed.

Research hypothesis 1 stated, schools possessing an open school climate have a higher overall school performance on standardized tests than those schools identified as having a closed school climate. Schools with closed climates lead to low school performance on standardized tests. This hypothesis
was examined by means of a Pearson correlations (Huck, 2000). In addition, a one-way analysis of variance (ANOVA) test was used to address the null hypotheses regarding math and reading scores and school climate. School climate and principal and teacher openness was the independent variables and school performance, as related to math and reading scores, was the dependent variable.

Research hypothesis 2 stated, teacher demographics will not influence perceptions regarding teacher behaviors, principal leadership style, or school climate and was also examined by means of a Pearson correlations (Huck, 2000). A one-way analysis of variance (ANOVA) test was used to address the null hypotheses regarding teacher perceptions of teacher openness, principal openness, and school climate as related to teacher demographics. A two sample t test for principal openness and teacher openness data was conducted for teacher gender.

Summary

Chapter 3 outlined the various components utilized in the research design. Methods, instrument, procedures, and ethical considerations were incorporated into the appropriate sections. As educators across the nation seek to identify factors associated with improving student academic performance, studies involving organizational climate as it relates to leadership style, school climate, and academic performance may contribute in assisting schools in their school
improvement plans to meet Adequate Yearly Progress as mandated by No Child Left Behind Act (U.S. Department of Education, 2002).
Chapter 4

FINDINGS AND DATA ANALYSIS

The purpose of this study was to examine teacher perceptions of principal leadership style and school climate and the relationship between school climate and student academic performance. This study also sought to provide insight into the perceptions of school climate, teacher behaviors, and principal leadership styles from various teacher demographic backgrounds.

Studies of climate usually investigate perceptions of behavior, use survey research instruments, employ multivariate statistics, have their intellectual roots in industrial and social psychology, examine climates, and are primarily interested in improving organizations (Hoy & Sabo, 1998). In response to accountability issues mandated by federal and state legislation, educators are looking at various aspects within schools to identify relationships between school variables and student performance.

Approximately 370 teachers from ten public middle schools in a midwestern Georgia community were surveyed concerning their perceptions of school climate, principal leadership behaviors, and teacher behaviors. Differences in perceptions of school climate and factors affecting climate were investigated according to teacher demographics. School climate, principal and
teacher openness, as related to student academic achievement, was also studied.

This chapter begins with a description of the instrumentation, data collection procedures, sample, and data analysis and findings. The findings are structured according to the two research questions and null hypotheses associated with each. Chapter 5 concludes with a summary of the findings.

Instrumentation

Data were collected from a survey titled, *Organizational Climate Description Questionnaire (Revised) for Middle Schools (OCDQ-RM)*, created by Hoy and Sabo (1998). The OCDQ-RM provides a profile of the school climate at a given point in time. The OCDQ-RM is a 50-item climate instrument with six dimensions that describe the behavior of middle school teachers and principals. The instrument was designed for specific use in middle schools and measures three aspects of principal behavior - supportive, directive, and restrictive - and three aspects of teacher behavior - collegial, committed, and disengaged. The specific items, which provide operational scales for each dimension, are presented in Table 1.
Table 1

*Specific Item Factors of the OCDQ-RM*

<table>
<thead>
<tr>
<th>Principal supportive behavior items</th>
<th>Survey #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The principal compliments teachers.</td>
<td>1</td>
</tr>
<tr>
<td>2. The principal encourages teacher autonomy.</td>
<td>10</td>
</tr>
<tr>
<td>3. The principal goes out of his or her way to help teachers.</td>
<td>11</td>
</tr>
<tr>
<td>4. The principal is available after school to help teachers when assistance is needed.</td>
<td>12</td>
</tr>
<tr>
<td>5. The principal uses constructive criticism.</td>
<td>15</td>
</tr>
<tr>
<td>6. The principal looks out for the personal welfare of the faculty.</td>
<td>19</td>
</tr>
<tr>
<td>7. The principal listens to and accepts teachers’ suggestions.</td>
<td>24</td>
</tr>
<tr>
<td>8. The principal treats teachers as equals.</td>
<td>32</td>
</tr>
<tr>
<td>9. The principal goes out of his or her way to show appreciation to teachers.</td>
<td>36</td>
</tr>
<tr>
<td>10. The principal accepts and implements ideas suggested by faculty members.</td>
<td>44</td>
</tr>
<tr>
<td>11. The principal sets an example by working hard him or herself.</td>
<td>49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principal directive behavior items</th>
<th>Survey #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The principal rules with an iron fist.</td>
<td>9</td>
</tr>
<tr>
<td>2. The principal supervises teachers closely.</td>
<td>20</td>
</tr>
<tr>
<td>3. The principal corrects teachers’ mistakes.</td>
<td>33</td>
</tr>
</tbody>
</table>
4. The principal keeps a close check on sign-in times.  
5. The principal monitors everything teachers do.  
6. The principal closely checks teacher activities.  

<table>
<thead>
<tr>
<th>Principal restrictive behavior items</th>
<th>Survey #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teachers are burdened with busywork.</td>
<td>3</td>
</tr>
<tr>
<td>2. Routine duties interfere with the job of teaching.</td>
<td>4</td>
</tr>
<tr>
<td>3. Administrative paperwork is burdensome at this school.</td>
<td>39</td>
</tr>
<tr>
<td>4. Assigned nonteaching duties are excessive.</td>
<td>42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher collegial behavior items</th>
<th>Survey #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teachers have parties for each other.</td>
<td>2</td>
</tr>
<tr>
<td>2. Teachers invite other faculty members to visit them at home.</td>
<td>13</td>
</tr>
<tr>
<td>3. Teachers socialize with each other on a regular basis.</td>
<td>14</td>
</tr>
<tr>
<td>4. Teachers who have personal problems receive support from other staff members.</td>
<td>16</td>
</tr>
<tr>
<td>5. Most of the teachers here accept the faults of their colleagues.</td>
<td>22</td>
</tr>
<tr>
<td>6. Teachers have fun socializing together during school time.</td>
<td>25</td>
</tr>
<tr>
<td>7. Teachers provide strong social support for colleagues.</td>
<td>34</td>
</tr>
<tr>
<td>8. Teachers respect the professional competence of their colleagues.</td>
<td>35</td>
</tr>
<tr>
<td>9. Teachers help and support each other.</td>
<td>40</td>
</tr>
<tr>
<td>10. The interactions between team members are cooperative.</td>
<td>43</td>
</tr>
<tr>
<td>11. Members of teams consider other members to be their friends.</td>
<td>45</td>
</tr>
</tbody>
</table>
### Teacher committed behavior items

<table>
<thead>
<tr>
<th>Survey #</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Teachers “go the extra mile” with their students.</td>
</tr>
<tr>
<td>6</td>
<td>Teachers are committed to helping their students.</td>
</tr>
<tr>
<td>7</td>
<td>Teachers help students on their own time.</td>
</tr>
<tr>
<td>17</td>
<td>Teachers stay after school to tutor students who need help.</td>
</tr>
<tr>
<td>18</td>
<td>Teachers accept additional duties if students will benefit.</td>
</tr>
<tr>
<td>21</td>
<td>Teachers leave school immediately after school is over.</td>
</tr>
<tr>
<td>46</td>
<td>Extra help is available to students who need help.</td>
</tr>
<tr>
<td>47</td>
<td>Teachers volunteer to sponsor after-school activities.</td>
</tr>
<tr>
<td>48</td>
<td>Teachers spend time after school with students who have individual problems.</td>
</tr>
</tbody>
</table>

### Teacher disengaged behavior items

<table>
<thead>
<tr>
<th>Survey #</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Teachers interrupt other teachers who are talking in staff meetings.</td>
</tr>
<tr>
<td>23</td>
<td>Teachers exert group pressure on nonconforming faculty members.</td>
</tr>
<tr>
<td>26</td>
<td>Teachers ramble when they talk at faculty meetings.</td>
</tr>
<tr>
<td>27</td>
<td>Teachers are rude to other staff members.</td>
</tr>
<tr>
<td>28</td>
<td>Teachers make “wise cracks” to each other during meetings.</td>
</tr>
<tr>
<td>29</td>
<td>Teachers mock teachers who are different.</td>
</tr>
<tr>
<td>30</td>
<td>Teachers don’t listen to other teachers.</td>
</tr>
<tr>
<td>31</td>
<td>Teachers like to hear gossip about other staff members.</td>
</tr>
<tr>
<td>50</td>
<td>Teachers are polite to one another.</td>
</tr>
</tbody>
</table>

*Items scored in reverse
The six aspects of interactions define two openness dimensions of a middle school’s climate – the openness of teacher-principal relations and the openness of teacher-teacher and student-teacher relations. These two general dimensions of climate openness are used to define four school climate types – Open, Engaged, Disengaged, or Closed.

An Open school climate is one in which both teachers and principal are “up front”, supportive, and receptive in their behaviors toward others. An Engaged school climate consists of closed teacher-principal relations, yet the faculty has open interactions with both their students and colleagues. The Disengaged climate is the direct opposite of the engaged climate, although the principal’s behavior is open, teacher behaviors are closed. In schools with a closed climate, both the principal and the teacher behaviors and interactions are distant, restrictive, guarded, suspicious, controlling, and closed toward others.

The OCDQ-RM was administered to 10 participating middle school teaching faculties in separate sessions. The survey instructed participants to respond by circling a number from 1 to 4 on a four-point Likert scale using the phrases, 1 - Rarely Occurs, 2 - Sometimes Occurs, 3 - Often Occurs and 4 - Very Frequently Occurs. The last four questions on the survey, items 51 through 54, asked for teacher demographic data; (a) gender, (b) years of teaching experience, (c) ethnicity, and (d) level of education.

Data Collection Procedures

Permission to conduct research was obtained from the Valdosta State University Internal Review Board and from the superintendent of education in the
district where the ten schools were located. An informational letter, along with a letter of permission to conduct research, was sent to each of the middle school principals in the system. Each principal was then contacted and dates were arranged for surveys to be administered to the various faculties during normally scheduled faculty meetings. At each session, the researcher was introduced and a letter of explanation was read to the faculty. The researcher explained the purpose of the study in general terms, guaranteed the anonymity of the respondents, expressed that participation was voluntary, and stressed the importance of candid responses. A small incentive using a raffle with the names of respondents encouraged participation. The surveys were collected by a teacher volunteer and placed into a labeled envelop. The data were collected during the months of October, November, and December of 2004.

Sample

In the fall of 2004, surveys were administered to the faculties of ten middle schools in a large urban district. Over 450 teachers were invited to participate, two surveys were discarded due to incompleteness, and 367 surveys were obtained from the ten schools representing a participation rate of 82%.

Data Analysis and Results

School socioeconomic status, climate, and the internal attributes of schools (e.g., leadership style, teacher behaviors, etc.) constituted the independent variables of the study. School academic achievement level and school climate were used as the dependent variable.
Participants’ responses to the survey items were entered into the Statistical Package for Social Services (SPSS, 2003) software, version 12.0. Each item was scored for each respondent with the appropriate number (1, 2, 3, or 4). Scores were reversed for two survey items (21 and 50) as directed by the authors (Hoy & Sabo, 1998). Item 21 was categorized under committed teacher behaviors and stated in negative terms. Similarly, item 50 was considered a disengaged teacher behavior statement and phrased in positive terms.

To determine the climate profile of the individual schools, each of the six subscales of the OCDQ-RM were averaged. Principal Supportive behavior was measured using questions 1, 10, 11, 12, 15, 19, 24, 32, 36, 44, and 49 (see Appendix C for complete instrument). Directive behavior was determined from questions 9, 20, 33, 37, 38, and 41. Principal Restrictive behavior utilized questions 3, 4, 39, and 42. The last three dimensions measuring teacher behaviors used the following questions for each aspect of teacher behavior; Teacher Collegial behavior 2, 13, 14, 16, 22, 25, 34, 35, 40, 43, and 45, Teacher Committed behavior 5, 6, 7, 17, 18, 21, 46, 47, and 48, and Teacher Disengaged behavior was reported using survey items 8, 23, 26, 27, 28, 29, 30, 31, and 50. The mean score for each of the six aspects of principal and teacher behaviors was calculated to obtain a standardized score with a mean of 500 for the dimension of Principal Openness and Teacher Openness. To obtain a standard score with a mean of 500, the difference between the school score on supportive behavior (S) and the mean of 29.39 for the normative sample (S – 29.39) was multiplied by 100 \([100(S – 29.39)]\). The product was then divided by the standard
deviation of the normative sample (4.61) and 500 added to the result to obtain a standard score for Principal Supportive Behavior. The process was repeated for each dimension of principal and teacher behavior using the following means and standard deviations from the normative sample provided by the authors in Table 2 (Hoy & Sabo, 1998).

Table 2

*Normative Sample of School Climates*

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive behavior (S)</td>
<td>29.39</td>
<td>4.61</td>
</tr>
<tr>
<td>Directive behavior (D)</td>
<td>12.09</td>
<td>2.40</td>
</tr>
<tr>
<td>Restrictive behavior (R)</td>
<td>9.11</td>
<td>1.52</td>
</tr>
<tr>
<td>Collegial behavior (C)</td>
<td>29.30</td>
<td>3.01</td>
</tr>
<tr>
<td>Committed behavior (Com)</td>
<td>26.76</td>
<td>2.74</td>
</tr>
<tr>
<td>Disengaged behavior (Dis)</td>
<td>15.56</td>
<td>2.18</td>
</tr>
</tbody>
</table>

Each score was then converted to a standard score with a mean of 500 using a prescribed formula. After standardized scores were calculated for each school against the normative data provided by Hoy and Sabo (1998), scores for Principal and Teacher Openness were obtained by formulas (see Table 3).
Table 3

*Standardized Scores Conversions*

---

Standard Score for S = 100(S - 29.39)/ 4.61 + 500

Standard Score for D = 100(D – 12.09)/ 2.40 + 500

Standard Score for R = 100(R – 9.11)/ 1.52 + 500

Standard Score for C = 100(C – 29.30)/ 3.01 + 500

Standard Score for Com = 100(Com – 26.76)/ 2.74 + 500

Standard Score for Dis = 100(Dis – 15.56/ 2.18 + 500

---

Academic achievement level for each school was measured using the Iowa Test of Basic Skills (ITBS) Form M, administered to eighth graders during the fall of 2003 and 2004. Math and reading subtests of the ITBS were used for statistical analysis.

Frequencies were analyzed for participants' gender, ethnicity, years of teaching experience, and level of education. Of 367 participants in the survey, 268 (73%) were females and 99 (27%) were males. Reported number of years teaching experience were 1-5 years – 96 (26.2%), 6-10 years – 78 (21.3%), 11-15 years – 65 (17.7%) and 16 or more years – 128 (34%). In the area of ethnicity, 101 (27.5%) of the participants reported themselves as African-American, 244 (66.5%) reported as Caucasian and 22 (6%) indicated there were other (mixed race, Asian, Hispanic, or Native American). In regard to level of education, 119 (32.4%) had obtained a bachelors degree, 150 (40.9%) a masters, and 98 (26.7%) a specialist or higher degree. Results and data analysis were reported for each research question and null hypotheses.
Research Question 1. What relationship exists between teacher behaviors, principal leadership style, and school climate as compared to student academic performance?

Null Hypothesis 1. There is no relationship between teacher behaviors, principal leadership style and school climate as compared to student academic performance.

Descriptive statistics were used to analyze teachers’ perceptions of school climate, principal openness, and teacher openness. A Pearson product-moment correlation and the Spearman’s rho correlation were used to determine the relationship between scores on the eighth-grade 2003, 2004 ITBS reading and math tests and school climate, principal openness, and teacher openness. An alpha level of .05 was used to determine significance for all statistical measures. Because seven correlations were tested, the Bonferroni technique (Huck, 2000) was used to adjust the alpha level to .007.

Correlation coefficients indicated a linear relationship between several of the variables. It was important to note that this did not imply a direct cause effect relationship, which could only be established through further study and a properly conducted experiment. Pearson’s r indicated a strong correlation between principal openness and school climate (r = .766). A moderate correlation was found between teacher openness and school climate (r = .559) as well as teacher openness and the 2003 ITBS math scores (r = .532). No other notable correlations were found between school climate, principal openness, teacher openness, and student achievement on standardized tests.
To further compare the four climate types, an ANOVA was undertaken to identify differences. Levene’s (1960) test of homogeneity of variances indicated that the variances for the four climate types, closed, disengaged, engaged, and open, were not the same which was indicative that the assumption of equal variances required for the ANOVA F test is violated and results may be suspect. However, the Games Howell (1976) post hoc procedure, which does not require equal variance, found no difference between closed and open climates. The following were found to be statistically different: Disengaged/Open versus Open/Closed versus Engaged. For the 2003 ITBS reading, all climates were found to be different.

There was no statistically significant difference between student academic achievement and school climate on the 2003 and 2004 ITBS reading and math scores. Due to these results, null hypothesis one was not rejected. Analysis revealed that when SES was used as a dependent variable and climate as the independent variable, Open and Closed climates had similar means on achievement test scores.

*Research Question 2*. What is the influence of teachers’ years of teaching experience, level of education, ethnicity, and gender on their perceptions of teacher behaviors, principal leadership styles and school climate?

*Null Hypothesis 2*. There is no difference in teachers’ years of teaching experience on their perceptions of teacher behaviors, principal leadership styles, and school climate.
Frequencies of responses based on participants’ years of teaching experience were calculated by SPSS. Levene’s (1960) test indicated homogeneity of variance between groups. A one-way analysis of variance was used to test for statistical differences between teachers’ years of teaching experience and principal and teacher openness. Tests for principal openness showed at least one of the four experience groups was different from the others at .05 significance ($F(3,363) = 2.94, p = .033$). For teacher openness, at least one of the four experience groups was different from the others at .05 significance ($F(3,363) = 4.63, p = .003$). Duncan’s (1965) multiple comparison procedure found differences between experience levels of 0-5 years and 11-15 years as well as differences between 0-5 years and 16+ years. However, no differences were found for years of teaching experience and principal openness at the .01 significance level. Therefore, null hypothesis two was rejected as it applies to teacher behaviors but not for principal behaviors.

**Null Hypothesis 3.** There is no difference in teachers’ level of education on their perceptions of teacher behaviors, principal leadership styles, and school climate.

Frequencies of responses based on participants’ level of education and differences in perceptions of principal openness and teacher openness were calculated by SPSS. A one-way analysis of variance was used to test for statistical differences between teachers’ level of education and principal and teacher openness. For level of education, post hoc test showed no significant difference of perceptions regarding principal ($F(3,363) = 2.25, p = .082$) or
teacher openness ($F(3,363) = 3.33, p = .020$) when compared to teachers’ level of education. Null hypotheses three was not rejected.

**Null Hypothesis 4.** There is no difference in teachers’ ethnicity on their perceptions of teacher behaviors, principal leadership styles, and school climate.

Frequencies of responses based on participants’ ethnicity and differences in perceptions of principal openness and teacher openness were calculated by SPSS. Levene’s (1960) test indicated that the groups had homogeneity of variance for teacher openness but not for principal openness and an ANOVA should be conducted with caution.

A one-way analysis of variance was used to test for statistical difference between teachers’ ethnicity and principal and teacher openness. An ANOVA $F$ test indicated that at least one of the ethnicities was different from the others in both principal ($F(2,364) = 5.23, p = .006$) and teacher openness ($F(2,364) = 7.45, p = .001$). For teacher ethnicity, the Games Howell (1976) post hoc tests showed a significant difference of perceptions regarding principal openness. African American and Caucasians were significantly different in perceptions of principal openness (.014) and teacher openness (.001). Null hypothesis four was rejected.

**Null Hypothesis 5.** There is no difference in teachers’ gender on their perceptions of teacher behaviors, principal leadership styles, and school climate. Frequencies of responses based on participants’ gender and differences in perceptions of principal openness and teacher openness were calculated by SPSS. A two sample $t$ test for principal openness and teacher openness data was conducted and the $t$ test revealed there was no difference for genders based
on these two variables, principal openness \( (t = .504, p > .05) \), and teacher openness \( (t = .273, p > .05) \). Null hypothesis five was not rejected.

**Summary**

Correlations were used to evaluate the relationship between school climate and student academic achievement. ANOVAs explained differences in teacher demographics in perceptions of teacher and principal openness. Analysis of school climate and student academic achievement revealed that schools with open and closed climates had no significant differences between ITBS scores, possibly due to similar SES. Analysis of teachers’ years of experience showed no significant differences in regard to perceptions related to principal openness. However, teachers with 0-5 years of teaching experience were significantly different in perceptions of teacher behaviors than other levels of years of experience. Inferential statistics found that African-Americans and Caucasians had significant differences in perceptions of principal openness and Caucasians were significantly different in perceptions of teacher openness than African-American and other ethnic groups. A Pearson’s product-moment correlation was calculated to determine the relationship between level of education and teachers’ perceptions of principal and teacher openness. Analysis revealed no statistically significant correlation. A two sample \( t \) test for principal and teacher openness as related to gender revealed no differences.

This chapter explained the data analysis and findings, analyzed the descriptive investigations, and came to decisions regarding the research questions. Participant demographics and survey statistics were discussed and
the procedures for investigation were explained. Chapter 5 will present the recommendations for further study and conclusions.
Chapter 5

OVERVIEW, SUMMARY, LIMITATIONS, DISCUSSION, IMPLICATIONS FOR FUTURE PRACTICE AND RECOMMENDATIONS FOR FUTURE RESEARCH

Chapter 5 includes an overview of the study; summary of findings, conclusions, implications for future practice, limitations of the study, and recommendations for future research. Discussions and references to related studies are cited throughout the chapter. The chapter concludes with suggestions for future research.

Overview of the Study

Educators have long believed that school leadership can have both a direct and indirect effect on school effectiveness through behaviors and interactions that shape a school’s learning environment (Hallinger, Bickman, & Davis, 1996). Waters, Marzano and McNulty (2003) gathered data from over 30 years of quantitative research and an exhaustive review of theoretical literature on leadership and found a substantial relationship between leadership and student achievement. Their findings reported an average effect size of .25 between leadership and student achievement.

Georgia’s Department of Education, under the direction of State School Superintendent, Kathy Cox, has embarked on a plan to develop and implement a
new state curriculum, the Georgia Performance Standards. The success of implementing the new standards and the student assessment accompanying the new curriculum, hinges on the critical role of Georgia’s school leaders (Cox, 2005).

The purpose of this study was to examine teachers’ perceptions of principal leadership style, teacher behaviors, and school climate and the relationship between student academic performance. This study sought to provide insight into the perceptions of school climate from various teacher demographic backgrounds.

Two research questions were examined within the context of this study. School climate, principal openness, and teacher openness and their relationship to student academic achievement was investigated. Differences in perceptions regarding school climate, principal leadership styles, and teacher behaviors according to teacher demographic backgrounds were also investigated.

Data for this study were collected through the use of the Organizational Climate Description Questionnaire (Revised) for Middle Schools (OCDQ-RM) created by Hoy and Sabo (1998). The researcher added four questions pertaining to participants’ demographic data. The 54 item survey instrument required approximately 15 minutes to complete. The number of possible participants were 450 middle school teachers with 367 agreeing to participate by completing the survey which resulted in an 82% participation rate. Survey responses were analyzed using (a) descriptive statistics, (b) Pearson’s product
moment correlations, (c) Spearman’s rank order correlations, (d) a one-way analysis of variance, and (e) a two sample t test.

**Summary of Findings**

Research question 1 examined possible relationships between teacher behaviors, principal leadership style, and school climate as compared to student academic performance. Possible standard scores, with 500 considered the mean for an “average” school, for teacher openness/behaviors ranged from 411 to 568 for the ten schools. The mean score of the ten schools was 497. Principal openness scores ranged from 377 to 535 with a mean of 476. A Pearson’s product moment correlation was calculated to determine if a relationship existed between middle school teachers’ perceptions of teacher/principal behaviors, school climate, and student academic achievement. No statistically significant relationship was found between school climate and student academic achievement. A Pearson product moment correlation indicated a strong correlation between principal openness and school climate, $r = .766$, and a moderate correlation between teacher openness and school climate, $r = .559$. One-way analysis of variance was undertaken to compare differences. Post hoc procedures found no differences in student academic performance between open and closed school climates. Null hypothesis was not rejected and no support was found for research Hypothesis 1.

Research Question 2 was included to determine if different teacher demographics affected perceptions regarding school climate, teacher, and principal openness. An ANOVA revealed a statistically significant difference,
F(3,363) = .183, p > .05 between teachers’ perceptions of teacher/principal openness and years of teaching experience null hypothesis two. Duncan’s (1965) multiple comparison procedure found differences between experience levels of 0-5 years and 11-15 years as well as differences between 0-5 years and 16+ years. However, no differences were found for years of teaching experience and principal openness at the .01 significance level. Null hypothesis two was rejected.

An ANOVA indicated no significant difference of perceptions regarding principal (F(3,363) = .082, p > .05) and teacher openness (F(3,363) = .020, p > .05) when compared to teachers’ levels of education. Null hypotheses three was not rejected.

An ANOVA assessing differences between perceptions when compared to teachers’ ethnicity indicated that at least one of the ethnicities was different from the others in both principal (F(2,364) = .006, p < .05) and teacher openness (F(2,364) = .001, p < .05). For teacher ethnicity the Games Howell (1976) post hoc tests showed a significant difference of perceptions regarding principal openness. African American and Caucasians were significantly different (.014) in perceptions of principal openness. African-Americans and Caucasians were significantly different (.001) in perceptions of teacher openness. No differences were indicated with the Duncan comparison procedure for homogenous subsets for principal openness. Null hypothesis four was rejected.

A two sample t test for principal openness and teacher openness data was conducted and the t test revealed there was no difference for genders based on
these two variables, principal openness \((t = .504, p > .05)\) and teacher openness \((t = .273, p > .05)\). Null hypothesis five was not rejected.

**Limitations of the Study**

*Threats to internal validity.* The OCDQ-RM instrument was used to obtain data concerning teacher perceptions. Self-report instruments, such as the OCDQ-RM, are subject to possible human error due to the perceptions of those completing the instrument. The OCDQ-RM survey instrument used was dependent on the personal perceptions of the responding teachers at a given point in time. Therefore, the survey may not represent actual practices or beliefs and may have provided a threat to internal validity via instrumentation (Ary, Jacobs, & Razavieh, 1996; Campbell & Stanley, 1963). In that the findings of this study were strongly dependent upon the measurement instrument for principal and teacher behaviors, the study was limited to the extent that the instrument is valid and reliable. It also depended on the level of understanding of instrument items by the participants and their trust in the anonymity of the results.

Teacher behavior items on the OCDQ-RM, as determined by Hoy and Sabo (1998), may not include what some researchers would consider important teacher-level factors. Survey items related to professional interactions regarding the student work, teaching strategies, constructively analyzing practices, and collegiality (Fullan & Hargreaves, 1996; Marzano, 2003) may have been lacking.

A sample of convenience rather than a random sample of participants was used for this study. Number of participants from the ten schools ranged from a high of 50 to a low of 19. Variations in survey administration procedures may
have caused a threat to internal validity. Seven of the surveys were administered in the afternoon after a full day of work and three were administered on a teacher planning day. Future research use of random sampling, greater participation, longitudinal design, and strict adherence to survey administration procedures would improve internal validity. Lack of a qualitative component limited the type of information collected and analyzed. Qualitative data would add depth to the findings of this study, and may be a suitable method for follow-up studies.

**Threats to external validity.** The population of this study consisted of only those middle school teachers who chose to participate in the individual school administrations held at each site. Population validity is a threat to the external validity of this research. Caution must be used when generalizing these findings to other educators (Ary et al., 1996). The OCDQ-RM was specifically designed for middle schools and would not be applicable for elementary or secondary school teachers (Hoy & Sabo, 1998). Ecological validity refers to the degree to which the results of a study can be extended to other locations or settings (Fraenkel & Wallen, 1993). Because this study addressed middle school climates located in a west central Georgia district, study findings may only be generalizable to school districts similar to the school district as described in the sample section of this paper.

**Discussion**

Waters et al. (2003) conducted a meta-analysis of over 5,000 studies on effects of leadership practices on student academic achievement. Data from their meta-analysis indicated a substantial relationship between school leadership and
student achievement. These researchers identified 21 leadership responsibilities significantly correlated with student achievement. In contrast to current popular educational theory by Marzano (2003) on principals’ effect on student achievement, past evidence indicated that leadership has a more indirect than direct affect (Hallinger, Bickman, & Davis, 1996). There are many antecedents that may influence principals’ behaviors both within the school and the environment. School characteristics such as community type and homogeneity, school size, student socioeconomic status, and school level have been identified as factors influencing principals’ leadership behaviors (Darling-Hammond, 1999).

Data analysis from this study revealed that principal openness, teacher openness, and school climate did not have an effect on student academic performance.

Analysis revealed that when SES was used as a independent variable and climate as the dependent variable, open and closed climates had similar means on achievement test scores. Most research supports the belief that schools with an open climate and lack of principal restrictiveness coupled with collegial and committed behavior would produce greater student academic performance than schools with closed climates (Eaker, DuFour, & DuFour, 2002; Hallinger & Heck, 1996; Waters et al., 2003). However, the findings in this study did not support the belief that open school climates produce high student academic achievement. Not surprisingly, SES is an important predictor of high student achievement (Hanushek, 1989; Hedges, Laine, & Greenwald, 1994; Kozol, 1991; Wright, 1997).
This study found no significant differences for years of teaching experience in perceptions of principal behaviors and school climate. A slight difference in perceptions of teachers with 0-5 years of experience and teachers with 6-10, 11-15, and 16 or more was found. A review of the literature found mixed results for teacher perceptions of principals' behaviors. In a similar study, McIntyre (2004), found no statistically significant correlations between the years of experience and teacher perceptions. Bankes (1999), in a study of 39 elementary schools, found no significant differences in teachers' perceptions of principal behaviors based on years of teaching experience. In contradiction to these findings, Dinham (1995) reported differences in perceptions regarding principals' leadership styles between veteran and novice teachers. Novice teachers indicated satisfaction on learning environment and success in the classroom while veteran teachers were satisfied through accomplishments in school level activities such as leadership responsibilities or receiving advanced degrees. In a study of 10 public secondary schools, Jarnagin (2004) reported finding significant differences in perceptions of principal leadership practices and teacher morale between teachers with five or fewer years of teaching experience and those with more than five years experience.

No statistically significant differences were found in perceptions regarding principal and teacher openness and school climate when compared to teachers' levels of education or gender. Studies are limited in regard to educational level and gender for teacher perceptions of principal and teacher behaviors.
Data analysis revealed differences between perceptions when compared to teachers’ ethnicity. Results indicated that at least one of the ethnicities was different from the others in both principal and teacher openness. African Americans and Caucasians were significantly different in perceptions of principal and teacher openness. Jones (2002) who also found that African American teachers and European American teachers perceived their principals’ leadership styles differently, supported these findings.

*Implications for Future Practice*

The goal of this research was to examine middle school teachers’ perceptions of principal leadership behaviors, teacher behaviors, and school climate as related to student academic performance. Comparisons of teacher perceptions as related to demographic differences were also investigated.

Georgia has begun the implementation process for a new standards based curriculum which will require a major paradigm shift for educators. New performance standards are not optional and Georgia schools will be measured against these new standards for making Adequate Yearly Progress (AYP). The new standards-based curriculum calls for a school climate characterized by collegiality, professionalism, and continuous improvement (Marzano, 2003). Georgia schools must become learning communities where teacher effort, through a variety of principal and teacher actions, is focused on student learning and the refining of teaching skills (Cox, 2005).

Schools with open climates, and principals and teachers who exhibit open type behaviors of collegiality, collaboration, and commitment, may be better
equipped for successful implementation of the new Georgia Performance Standards (GPS). Schools with closed or disengaged climates and school principals and teachers with closed behaviors may have a difficult time with the standards based reform model. Schools are being held to more accountability for student achievement and government legislatures and stakeholders are no longer willing to pour money into failing educational institutions (Elmore, 2000).

As schools strive to make AYP and meet the rising bar of student achievement as demanded by the No Child Left Behind Act (U. S. Department of Education, 2002), periodic measuring of school climate may provide additional data for making adjustments to improving student learning. Current and relevant information on school climate, levels of principal and teacher openness will help schools make data driven decisions regarding improvement strategies, goals, and professional learning opportunities for staff members.

**Recommendations for Future Research**

As discussed in the review of literature, educators have long known that school leadership makes a difference in student academic performance (Waters et al., 2003). Studies have shown school faculties, which participate in learning communities focusing on concrete instructional practices and collegiality, possess high levels of commitment and satisfaction (Rowan, 1990; Stigler & Heibert, 1999). Further research might consider a survey instrument utilizing items more closely related to collegiality and professionalism than social interactions. The OCDQ-RM measured teacher social interactions and friendliness rather than those behaviors exhibited in professional learning
communities. As Georgia begins implementation of its standards based reform initiative, a school climate instrument should be utilized that more closely measures those behaviors desired in a professional learning community.

An extension of this study might include the use of Georgia Criterion-Reference Competency Test (CRCT) scores. Though these tests are not normed on national scales, they are used for measuring AYP for Georgia schools and all K-8 grades are tested yearly. Data from school climate surveys, ITBS, and CRCT scores can provide relevant information for school improvement plans.

Implications for further research might include a sequential exploratory mixed method design. A sequential exploratory design would use qualitative results to assist in explaining and interpreting any unexpected quantitative findings. Priority would be given to the quantitative data and the two methods would be used in the interpretative phase of the study (Creswell, 2003). Attaching meaning to teacher perceptions of principal and teacher behaviors would provide useful information for school improvement.

Finally, replication of this study is recommended. As Georgia attempts to meet the demands of NCLB and implement a standards-based reform model, more research is necessary to identify those factors which may improve student academic performance. Principal leadership is a key factor to large-scale, sustainable education reform. Leadership focused on the development of teachers’ knowledge and skills, professional community, and school climate will lead to improved student academic performance (Fullan, 2002).
REFERENCES


Appendix A:
Valdosta State University Institutional Review Board
Appendix B:

Written Approval From School District
Appendix C:
Organizational Climate Description Questionnaire-Revised Middle
Organizational Climate Description Questionnaire-Revised Middle

*Completion of this survey implies consent to be a participant in this study which is completely voluntary.*
*Please indicate the extent to which each of the following statements characterizes your school. Circle the appropriate response.*

*Rate each statement on the following scale:*

<table>
<thead>
<tr>
<th></th>
<th>1= Rarely Occurs</th>
<th>2=Sometimes Occurs</th>
<th>3=Often Occurs</th>
<th>4=Very Frequently Occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The principal compliments teachers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>2.</td>
<td>Teachers have parties for each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>3.</td>
<td>Teachers are burdened with busy work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>4.</td>
<td>Routine duties interfere with the job of teaching.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5.</td>
<td>Teachers “go the extra mile” with their students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>6.</td>
<td>Teachers are committed to helping their students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>7.</td>
<td>Teachers help students on their own time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>8.</td>
<td>Teachers interrupt other teachers who are talking in staff meetings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>9.</td>
<td>The principal rules with an iron fist.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>10.</td>
<td>The principal encourages teacher autonomy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>11.</td>
<td>The principal goes out of his or her way to help teachers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>12.</td>
<td>The principal is available after school to help teachers when assistance is needed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>13.</td>
<td>Teachers invite other faculty members to visit them at home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>14.</td>
<td>Teachers socialize with each other on a regular basis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>15.</td>
<td>The principal uses constructive criticism.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>16.</td>
<td>Teachers who have personal problems receive support from other staff members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>17.</td>
<td>Teachers stay after school to tutor students who need help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>18.</td>
<td>Teachers accept additional duties if students will benefit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>The principal looks out for the personal welfare of the faculty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>20.</td>
<td>The principal supervises teachers closely.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>21.</td>
<td>Teachers leave school immediately after school is over.</td>
<td>1</td>
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<td>22.</td>
<td>Most of the teachers here accept the faults of their colleagues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>23.</td>
<td>Teachers exert group pressure on nonconforming faculty members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>24.</td>
<td>The principal listens to and accepts teachers' suggestions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>25.</td>
<td>Teachers have fun socializing together during school time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>26.</td>
<td>Teachers ramble when they talk at faculty meetings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>27.</td>
<td>Teachers are rude to other staff members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>28.</td>
<td>Teachers make &quot;wise cracks&quot; to each other during meetings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>29.</td>
<td>Teachers mock teachers who are different.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>30.</td>
<td>Teachers don't listen to other teachers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>31.</td>
<td>Teachers like to hear gossip about other staff members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>32.</td>
<td>The principal treats teachers as equals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>33.</td>
<td>The principal corrects teachers' mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>34.</td>
<td>Teachers provide strong social support for colleagues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>35.</td>
<td>Teachers respect the professional competence of their colleagues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>36.</td>
<td>The principal goes out of his or her way to show appreciation to teachers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>37.</td>
<td>The principal keeps a close check on sign-in times.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>38.</td>
<td>The principal monitors everything teachers do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>39.</td>
<td>Administrative paperwork is burdensome at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>40.</td>
<td>Teachers help and support each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>41.</td>
<td>The principal closely checks teacher activities.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>42.</td>
<td>Assigned nonteaching duties are excessive.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>43.</td>
<td>The interactions between team members are cooperative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>44.</td>
<td>The principal accepts and implements ideas suggested by faculty members.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>45.</td>
<td>Members of teams consider other members to be their friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>46.</td>
<td>Extra help is available to students who need help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>47.</td>
<td>Teachers volunteer to sponsor after-school activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
48. Teachers spend time after school with students who have individual problems.  

49. The principal sets an example by working hard himself or herself.  

50. Teachers are polite to one another.  

Participant background - please provide information concerning the following. All information will be kept private and confidential and properly disposed after data has been collected.  

51. Gender  
   female = 1  
   male = 2  

52. Years teaching experience (to date)  
   0-5 years = 1  
   6-10 years = 2  
   11-15 years = 3  
   16 or more years = 4  

53. Ethnicity  
   African American = 1  
   White = 2  
   Other = 3  

54. Level of Education  
   4 year degree = 1  
   masters degree = 2  
   Specialist = 3
Appendix D:
Approval to Use the OCDQ-RM