In What Ways Do Principals Impact School Climate in 'Turnaround' Successful High-Poverty Middle Schools?

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Dedication

The efforts of this work as well as the final product are fully appreciated through my family, colleagues, and friends, in particular Michael Jones who have supported, assisted, and relentlessly encouraged me to persevere throughout this entire project. I would like to dedicate this entire study to my parents, especially my mother, Reverend Dr. Carolyn Y. Butler for continuously inspiring, supporting, and motivating me in all of my educational endeavors. Secondly, I would like to dedicate this to my father, John, for portraying and exemplifying the steadfast, never ending perseverance and courage needed to accomplish such a task. Love you.

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Abstract

In What Ways Do Principals Impact School Climate in
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This is a correlational study in which the relationships between one dependent variable, student achievement, and two independent variables, school leadership and school climate, as perceived by teachers were examined in an urban southeastern school district. A purposeful sample of 12 middle schools including 165 teachers participated in the study. The average percentage of free and reduced meals for participating schools was 73.99. Schools were synonymous with high-performing, high-poverty.

Two survey instruments were implemented in the study. The Multifactor Leadership Questionnaire – 5X (MLQ) (Bass & Avolio, 1995) was utilized to assess transformational, transactional, and laissez-faire leadership styles. The Organizational Climate Descriptor Questionnaire – Revised Middle (OCDQ-RM) (Hoy et al., 1996) was employed to assess "open" or "closed" school climate. Student achievement was established and attained from the state standardized assessment, Criterion Referenced Competency Test, in the area of Reading from the school-year 2009-2010. Three research questions directed this study.

Results indicated that six of the twelve schools in this study evinced closed climates. One charter school with a small student population and moderately low percentage in free and reduce meals, revealed an "open" climate. Two schools including a single gender academy evinced "engaged" climates. One school was identified as having a "disengaged" climate. One principal was identified as having a laissez-faire leadership style while the remaining principals manifested a mixture of transformational,

transactional, and laissez-faire leadership. Strong positive correlations existed between a conglomerate of the three principal styles and principal openness as well as teacher openness.

Furthermore, principal leadership was strongly related to student achievement. Results also found that aspects of both transformational and transactional leadership were strongly related to teachers feeling supported by their principals. No specific leadership behaviors were identified for impacting school climate or student achievement. Findings support theories of situational leadership. Teacher leadership is believed to have accommodated for principals lack in the area of instructional leadership. Finally, closed climates seemed to be more related to schools with large student populations with low socio-economic status.

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Chapter I

Introduction

The arena in which principals work is constantly being reshaped by societal forces and conditions. The educational administration field relies on a number of disciplines for concepts and methods, although it depends upon practice in school settings for focus and relevance. If principals are to fulfill their school's responsibility for meeting the educational and developmental needs of their students, they must continually initiate action and respond to problems (Thomas, 1993). The initiatives and responses are often complex, ranging from the implementation of new state or federal legislation to resolving family conflicts. Technical skill alone is insufficient as well as a complete reliance on content knowledge. The essence of professional practice lies between these two poles.

The search for a knowledge and skill base should begin with the work of principals in contemporary schools, defined and organized into identifiable, rational building blocks that are skill-rich and knowledge-rich (Thomson, 1993). Next, the connections between knowledge and skills should be recognized in the many problems principals respond to as well as the many tasks they initiate. The aim of this study is to integrate literature based concepts with the actual practices of urban principals to enrich practitioners with both technical skills in addition to content knowledge.

Urban principals continuously face challenges related to poverty, prejudice, and disadvantage (Shen, Rodriguez-Campos, & Rincones-Gomez, 2000). Furthermore, African-American student achievement is, on average, lower than that of Caucasians and Asians. In fact, the race and gender-gap in African-American students' academic

performance begins to appear during middle school (Davis & Jordan, 1996; Ford, 1992; Ford & Harris, 1992; Greene, 2001).

The relationship between race, student achievement, and the distribution of society's wealth are reasons often cited for ineffective schools (Alston, 2004). Racial stratification relates to class stratification in the United States (Cooper & Jordan, 2003). The link between these two factors has led some to argue that minority students fail to achieve in school to the same extent as Caucasians mainly because of social class factors such as income, family breakdown, child neglect and abuse, emotional stress, poor health, and feelings of hopelessness and hostility (Becker & Luthar, 2006; Hamovitch, 1999; Jackson & Moore, 2006; Mickelson & Greene, 2006).

The effects of growing up in poverty, particularly for children raised in socially isolated, economically depressed urban areas, warrant greater concern. One out of three African-American children grows up in disadvantaged living conditions (Noguera, 2007). As opposed to serving as a source of hope and opportunity, some schools are sites where African-American children in particular are marginalized and stigmatized (Noguera, 2007). Bracey (2006) reported that in the 2002 National Assessment of Educational Progress (NAEP) reading assessment, African-American 12th graders scored lower (266) than Caucasian 8th graders (271). In 2000, African-American children accounted for 17% of the school population; however, they accounted for 22% of children classified as having one of the following three disabilities: Emotional Disturbed, a Specific Learning Disability, or Mental Retardation (National Center for Educational Statistics [NCES], 2005).

Students of color disproportionately attend urban schools which are beset by their own problems. Urban schools are more incline to serve low income students than other schools (Lippman, Burns, & McArthur, 1996; Noguera, 2007). Moreover, students of such schools are more likely to be identified as having only one parent in addition to having less educated and/or unemployed parents. Disadvantages associated with urban students extend to learning, emotional, or health disabilities. Furthermore, difficulties speaking English as well as homelessness are among the other issues associated with inner-city children (Lippman et al., 1996; NCES, 2001a). Ultimately, children attending urban schools are more likely to have more than one of these attributes afflicting their school experiences (NCES, 2001a).

Concentrations of less advantaged students may lower levels of engagement, effort, and aspirations of all students in a school and some peer groups in inner cities may even develop an aversion to academic work and learning (Noguera, 2007). Students considered non-poor, attending schools with high concentrations of poor students have been reported more likely to fall behind as opposed to non-poor students attending schools with small populations of poor students. The mean student achievement level declines as school poverty concentration increases (Coleman et al., 1966; NCES, 2001a; Noguera, 2007).

Urban students attend school in an environment of disruption, violence, decaying buildings, sub-par quality teaching, and insufficient resources (Lippman et al., 1996). It has been reported that students in urban schools have lower levels of achievement; completion of high school and higher education, and post-school employment (Council of the Great City Schools, 1994). Urban students present problems related to poverty,

limited English proficiency, dysfunctional familial background, discriminate race relations, disability, malnutrition, and poor health (Council of the Great City Schools, 1994). Lack of parental support and unsafe communities are also cited as detrimental to urban students (Ho Sui-Chu & Willms, 1996; NCES, 2001c).

Urban public schools are larger, on average, than suburban or rural schools at every level: elementary, middle, and high school (Lippman et al., 1996). At the secondary or high school level, the average size of urban schools is more than twice that of rural schools, with 1,313 students compared with 577 students, and it is slightly larger than suburban schools, which have an average of 1,197 students (NCES, 2001a). And, violence and disruptions have been reported to be more prevalent in urban schools.

Student behavior has been reported to be worse in public urban schools than in suburban or rural schools, even after accounting for the higher concentration of poverty in urban schools (Skiba, 1999). More time was reported maintaining classroom discipline in urban schools than suburban schools (Lippman et al., 1996). Furthermore, student absenteeism, possession of weapons, and student pregnancy were problems also associated with urban schools (Skiba, 1999). Discipline was more likely to be a problem in urban high-poverty schools than in any other high-poverty schools (Skiba, 1999).

Despite the adverse characteristics of urban public schools, student achievement can be positively impacted. Typically, schools' student achievement is predictable by the mean economic status of its students. Yet, several of America's high-poverty schools have been reported as achieving high student performance (Bell, 2001; Hoffman, 1991; Johnson & Asera, 1999; Loeb, 2003; McGee, 2003; Miles & Darling-Hammond, 1998). High-performing, high-poverty schools are distinguished from their counterparts because

they routinely provide for low-income and other historically marginalized groups of students the opportunities to acquire intellectually challenging subject content. Furthermore, they tend to engage in school practices that reflect a culture of success and excellence.

Organizational health is a prominent factor of high-performing, high-poverty schools (Hoy & Hannum, 1997). Organizational health includes academic focus, teacher affiliation, and resource support factors that more directly influence student performance (Erb, 2006). The key to organizational improvement seems to be a healthy school culture (Anderson, 1982; Hoy & Hannum, 1997; Hoy & Miskel, 1996; Schein, 1993). School culture is the conglomerate of both written and unwritten norms that lead to rules and expectations for adult and student behavior, which in turn exerts pressure on members in a school to conform their actions and attitude to that range which is considered acceptable by the group (Frymier & Joekel, 2004). Individual schools are organizations unique in culture.

Climate and culture have been established as two separate entities; however, a relationship exists between the two in regard to individual organizations, particularly schools (Fisher, 2003; Marshall, 2003). For instance, organizational climate is a set of internal characteristics that distinguishes one organization from another and influences the behavior of organizational members (Hoy & Hannum, 1997; Schein, 1993). The principal is the primary individual for establishing a school's tone in addition to assuming responsibility for student achievement. Climate has been linked to employee satisfaction (Bogler, 2001; Hoy, Sweetland, & Smith, 2003) morale, loyalty to the organization, a sense of belonging trust, innovation, and productivity. Principals attuned to what teachers

find valuable are able to effectuate the organizational culture. Strong professional orientation among teachers has been indicative that the school culture reflects and serves professional values and that the transactions among teachers will be consistent with an improvement in the school's performance (Friedkin & Slater, 1994). A principal's success stems from his or her values, character and leadership style, creating a climate where everyone is working toward the same goals (Fullan, 2002). School leaders can serve to transform school cultures or maintain them (Hoy & Hannum, 1997). Principals' impact on student achievement may be assessed by the effect they have upon the climate of a school.

Statement of the Problem

African-American students and African-American males are the most "at-risk" for low student achievement, particularly in urban schools (Ford, 1992; Fritzberg, 1999; Hamovitch, 1999; Fenzel, Magaletta, & Peyrot, 2003; Mickelson & Greene, 2006). Educational reforms of the last decade have failed to close the achievement gap among racial ethnic groups. Achievement in most of America's public schools can be predicted by income, race, language background, and other demographic variables (Uline & Johnson, 2006). State assessment scores, college entrance exams, dropout rates, advanced placement enrollments, reading inventories, and many other indicators generally have confirmed that some groups of students are more likely to succeed and other student groups were more likely to fail (Uline & Johnson, 2006).

The African-American-Caucasian gap is made up partly of the difference between the achievement of all lower-class students and that of middle-class students; however, there is an additional gap between African-American students and Caucasian students

even when the African-Americans and Caucasians come from families with similar incomes (Rothstein, 2004). Children's achievement can be predicted by their race and family economic status which is totally unacceptable as it relates to our democratic ideals. Many policy makers conclude that these gaps are the result of poorly designed school policies, expectations that are too low, insufficiently qualified teachers, poorly designed curricula, classes that are too large, school climates that are too undisciplined, leadership that is too unfocused, or a combination of these factors (Rothstein, 2004).

With the exception of some progress in reading for 9-year-olds, the gaps between advantaged and disadvantaged students, and Caucasians and African-Americans, in reading (as measured by scores on the National Assessment of Educational Progress [NAEP]) remained essentially unchanged between 1990 and 2004 (Williams, 2006). Performance measured by the NAEP administered in 2003, evinced that 13% of African-American students demonstrated proficiency in reading compared to 41% of Caucasian students (Uline & Johnson, 2006). Economic conditions, funding, family involvement, cultural differences, expectations, grouping arrangements, and English language acquisition are among the complex factors influencing the achievement gaps among groups (Williams, 2006). Nevertheless, a growing number of researchers have underscored the power of schools to overcome the disadvantages of families and communities (Bell, 2001; Education Trust, 1999; Johnson & Asera, 1999; Williams, 2006).

African-American children are the proxy for what ails American education in general (Axelman, 2006; Becker & Luthar, 2006; Noguera, 2007; Tucker & Herman, 2005). "Endangered," "uneducable," "dysfunctional" and "dangerous" are frequently the

words used to portray the character of African-American students (Jackson & Moore, 2006). Based on national statistics regarding unemployment, education, incarceration, and mental and physical health, African-Americans face numerous challenges in American society (Jackson & Moore, 2006; NCES, 2003). Such depictions can negatively impact perceptions regarding the aptitude and behaviors of African-Americans, thus impeding their schooling in addition to their success in American society. Therefore, it is not surprising that African-Americans often experience difficulty in social domains, such as education.

Throughout the United States educational pipeline (elementary, secondary, and postsecondary), many African-Americans lag behind their Caucasian counterparts (Jackson & Moore, 2006; Mickelson & Greene, 2006). They are more likely to be suspended or expelled from school, to be underrepresented in gifted education programs or advanced placement courses, and to underachieve or disengage academically than any other ethnic group (Becker & Luthar, 2006; Jackson & Moore, 2006; Mickelson & Greene, 2006).

In 1999, 35 % of African-American students in grades 7 through 12 had been suspended or expelled at some point in their school careers, higher than the 20% of Hispanics and 15% of Caucasians (Campbell, Hombo, & Mazzeo, 2000). Seventy-one percent of African-American students were enrolled in schools where minorities represented 50% or more of the population (Holzman, 2006; NCES, 2003). The majority of African-American students, 51%, were enrolled in schools in which the majority of the student body is African-American (Holzman, 2006). The majority of African-American, public school, students lived either in a large city (32%) or in the urban fringe (24%) of a

large city (NCES, 2003). In 2000, 13% of African-American 16 to 24 year olds had not earned a high school credential (Holzman, 2006). This rate was significantly higher than the rate for Caucasians, 7%. The plight of the African-American student is further impacted by the poor performance of urban schools. Urban schools face a host of problems – low achievement, lack of financial and educational resources, absenteeism, high student dropout rates, young inexperienced teachers, and undisciplined students (Lippman, et al., 1996; NCES, 2001; Riel, 1992).

The race and gender gap in African-American students' academic performance begins to appear during middle school (Davis & Jordan, 1996; Ford, 1992; Ford & Harris, 1992; Mickelson & Greene, 2006). Many of the changes associated with the transition to, and experience of, the middle school environment conflict with the developmental needs of adolescents (Becker & Luthar, 2002). In urban schools, African-Americans are triply threatened by race, location, and age. Advances in educational research provide solutions to these dilemmas. A problem of research is the lack of study of middle schools that "work" to reduce the achievement gap.

Citizens have been calling upon schools to reform education for decades so that graduates will be more advanced than basic skill level and more capable of working with fellow employees. It is difficult for any single instructional strategy or restructuring plan to address all of the problems simultaneously. To be successful, any reform would need to affect students' attitudes about learning, students' relationships to each other and to their teachers, teachers' relationships with each other and other professionals, and the relationship of schools to society (Riel, 1992). The effective school principal comes to

the fore as an instructional or educational leader who affects school climate and student achievement (Kelley, Thornton, & Daugherty, 2005; Witziers, Bosker, & Kruger, 2003).

Effectiveness in a school is characterized by strong leadership, a climate of expectation, and an orderly, but not rigid, atmosphere (Alston, 2004; Bell, 2001; Brookover & Lezotte, 1979; Edmonds, 1979; Hoffman, 1991; Lezotte, 1991; Patrick, 1995). With schools facing increasingly complex situations, uncertainty, ambiguity, and high expectations for innovation and reform, Murphy and Hallinger (1992) and Hallinger (1992) have concluded that school leaders needed to adopt more collaborative forms of leadership, which involve parents, teachers, students and other stakeholders in the process. Power has been viewed as domination through formal authority, flowing from the top down and vesting decisions in a small number of people, but facilitative models of leadership emphasize collaboration or empowerment (Alston, 2004). Principals bear the brunt of responsibility for achieving school goals; nonetheless, they need to involve those who do the work in determining how to make schools better (Alston, 2004).

Researchers have shown that school principals are able to "beat the odds" or support student-success despite the low predicted student outcomes based on student socio-economic status ((Brookover, Beady, Flood, & Schweitzer, 1979; Ellis, 1975; Lezotte, 1979; Reeves, 2003; Weber, 1971). In order to rectify the trend of poor achievement in America's urban public schools, empirical data has evinced that principals can employ certain behaviors as well as possess specific characteristics that positively impact school culture (Waters, Marzano, & McNulty, 2004).

Principals, the helm of school reform, can create a school culture that helps set the foundation for change. Studies of successful schools linked principal functions directly to

student achievement (Brookover et al., 1979; Edmonds, 1979; Hoffman, 1991; Patrick, 1995; Waters et al., 2004; Witziers et al., 2003). Reforming schools requires both restructuring and re-culturing, during which the role of the principal is reshaped as well (Fullan, 2002). Principals must use positive micro-politics to negotiate between managerial, technical, and institutional arenas in addition to creating a professional community and networks for communication within the school (Datnow & Castellano, 2001; Kruse & Louis, 2009; Kruse, Louis, & Bryk, 1994).

Principals of these schools are charged with the challenge of creating a culture for academic success. Much of the research on school climate has typically centered on a narrow population: urban elementary schools, often in large districts (Heck & Marcoulides, 1993). Such studies do not take into consideration the unique characteristics of an environment designed to meet the learning and developmental needs of young adolescents.

Middle schools have been designed to link small teaching teams to young adolescents to support need for a sense of belonging and security, and to improve family relationships to enhance the support system children need through puberty's ups and downs (Beane & Lipka, 2006). Middle schools integrate curriculum to add meaningful context for learning and provide more appropriate teacher preparation to the many ways in which young adolescents differ from younger children and older adolescents (Beane & Lipka, 2006).

Middle schools have successfully improved student performance when they have also had a common decision-making vision that led to creative, inviting, supportive and safe school environments (Erb, 2006; Hoy & Hannum, 1997). Students in middle schools

experience an entire program with a climate that is either inviting or isolated and either promotes learning or hinders it (Beane & Lipka, 2006). While problems with leadership and organizational health may help to explain the failure of 6-8 grade schools to perform in some urban settings, the effects of other factors which have been shown to affect student performance have reduced the power of the middle grades reform models to improve student outcomes (Erb, 2006).

Two significant factors underscore the value of concentrated school reform efforts at the middle school level (Becker & Luthar, 2002). First, disadvantaged children, in particular, show deteriorating interest in academics and escalating levels of emotional distress during the middle school years. There is a need to attend to the academic and mental health needs of these students more vigilantly (Becker & Luthar, 2002). Second, the lack of fit between the middle school environment and early adolescent developmental needs is also responsible for the shift toward more negative student self-evaluations and school achievement attitudes (Becker & Luthar, 2006). During the middle school years, adolescents' teacher, classroom, and school experiences have critical effects on future educational and life opportunities.

Currently there is no conclusive evidence that relates the environment of urban middle schools, and what actions principals can take to shape school culture into an atmosphere which will encourage teachers to incorporate higher standards and reform methods into their classrooms leading to enhanced student achievement. Research into school effectiveness is considered the starting point for examining educational leadership and its impact on student outcomes (Brookover et al., 1979; Edmonds, 1979; Hoffman,

1991; Witziers et al., 2003). Research is scant surrounding leadership behaviors positively impacting school climate, high-performing, high poverty middle schools.

Statement of Purpose

The purpose of this study was to explore the relationship between principal leadership and school climate in high-performing, high-poverty, middle schools whose student population is primarily African-American.

The urban education system represents a fundamental paradox for African-Americans. School continues to be held up by the broader society and by African-Americans themselves as the institution that makes possible upward mobility. African-Americans' encounters with school have resulted too often in destroyed aspiration and failure. Cultural mismatches and inappropriate policies have immobilized urban males, in particular, creating a technologically marginalized, obsolete, and disposable subpopulation (Noguera, 2010; Yeakey, 2002).

Early adolescence is a crucial developmental period; the habits of thought crystallized during this time can have long-term effects on lifelong learning, quality of life, and career success (Rathunde & Csikszenthmihalyi, 2005). Unfortunately, young adolescents encounter many difficulties in the transition to middle school (Rathunde & Csikszenthmihalyi, 2005). Researchers suggest that these academic risks emerge in response to a mismatch between adolescents' developmental needs and the nature of middle school classrooms and cultures (Rathunde & Csikszenthmihalyi, 2005).

Schools are institutions that reflect the culture of the dominant class (Mickelson & Greene, 2006). Children from families with access to elite knowledge and who possess similar values and norms succeed in these institutions. These students are successful

because the culture of the dominant class is transmitted and reinforced through the curriculum and the authority relations in the classroom (Mickelson & Greene, 2006). The lived culture and traditions of African-Americans and other minorities, and of working-class and poor people, typically do not prepare them for the official curriculum, which tends to reflect elite Caucasian's stocks of knowledge, norms toward authority, and culture (Mickelson & Greene, 2006).

Policy makers at all levels are increasingly emphasizing higher learning standards and school accountability. Educators involved with school reform research have found that the culture of a school impacts how new standards, goals, and methods are incorporated by teachers into their classrooms (Hoy & Sabo, 1998).

Climate is the total environmental quality of a school (Fisher, 2003; Halpin, 1962; Hoy & Hannum, 1997; Marshall, 2003; Niebuhr, 1995). Norms shared by students are viewed as cultural elements of climate. Cognitive behavior along with other student outcomes, have also been related to climate (Brookover et al., 1979; Bulach, 1994). Several traits of successful schools in low-income communities have been identified. Empirical data indicate that academic climate exists as a social force separately from, but related to, the individual student's characteristics, and that it exerts a positive influence on student outcomes.

Principals can create a positive school climate. Information obtained through school climate scales permits principals to assess the status of perceptions and opinions of school personnel and other aspects of the school (Marshall, 2003). The study of specific leadership traits related to positive school climate can assist principals and other leaders strive for a more complete understanding of how to mold a positive culture within

their schools leading to school improvement. Middle schools are key linchpins in the k-12 education system; therefore, the need to understand the social and institutional forces that impact student outcomes for this grade level is crucial. Furthermore, information relating leadership and climate in successful schools would provide school leaders the ability to develop strategies to address those climate factors that may inhibit or limit the effectiveness of the school (Butler, 1995). A paucity of research exists regarding leadership and school climate and how they relate to student achievement. If leadership style can be identified with the culture conducive for positive student achievement among high-performing, high-poverty schools, principals of reform can match their techniques and behaviors to those of principals of such existing schools.

Conceptual Framework

The assumption in this study was that principals who demonstrate high levels of leadership behaviors as measured by the Multifactor Leadership Questionnaire (MLQ) would have positive school climate as measured by the Organizational Climate Descriptor Questionnaire Revised for Middle School (OCDQ-RM) and positive student outcomes. Hence, leadership impacts culture, which impacts climate, which impacts teacher professional motivation which impacts student achievement. Positive school cultures were expected to enhance learning among the teachers and students through increased professional motivation. This relationship was investigated through the primary research question, "What is the relation between leadership and climate and student achievement in predominately African-American middle schools, as perceived by teachers?"

Organizational climate

Climate is a general concept used to capture the basic and enduring quality of organizational life (Tagiuri, 1968). School climate is a stable set of organizational characteristics that capture the distinctive tone or atmosphere of a school (Fisher, 2003). A consensus about climate incorporates the following attributes: it is representative of the whole organization, it is a conglomerate of members' perceptions, develops from members' behaviors, and is psychologically influential (Anderson, 1982; Hoy & Miskel, 1996; Marshall, 2003). Psychological influences are factors primarily behavioral based such as norms, belief systems, and values.

Organizational climate is a set of internal characteristics that distinguishes one organization from another and influences the behavior of its members (Hoy & Miskel, 1996; Sweetland & Hoy, 2000). School climate is an enduring quality of an educational institution, and describes the collective psychological perceptions in school. Although there is not one commonly accepted definition for school climate, the vast majority of researchers and scholars suggested that school climate, essentially, reflects subjective experience in school (Cohen, 2006). Literature suggested that the following ten dimensions color and shape the subjective experience in schools: (a) environmental, (b) structural, (c) safety, (d) sense of school community; (e) morale; (f) peer norms, (g) school-home-community, (h) ongoing communication, and (i) learning community (Cohen, 2006; Freiberg, 1999).

Schein (1993) indicated that human systems are complex force fields and that many of the active forces are psychological defenses and cultural assumptions that will not reveal themselves easily to uninvolved observers, surveyors, testers, or

experimenters. Clinically obtained data (Anderson, 1982; Hoy & Hannum, 1997; Schein, 1993) drew attention to important variables and concepts such as organizational culture, and showed how they have to be measured or assessed by methods that allow members of the organization to reveal what they would ordinarily tend to conceal. Once such concepts are understood and turned into variables to be studied, they provided the building blocks for better theories and provide a check on some of the alleged wisdom that operates in the industrial-organizational field (Schein, 1993).

One of the principal's primary tasks should be to focus on analyzing and understanding the existing culture within a school (Hoy & Miskel, 1996). Once the basic culture of a school has been discerned, the principal has many options for how to shape culture. For instance, Bates and Deal (1987) believed that cohesive cultures can lead to the identification of a common destiny and shared values which contribute positively to attitudes, relations with others and increased skill-building. Effective cultures interact with structure to produce organizations of high morale, productivity and quality (Freidkin & Slater, 1994). Through the development of a positive cohesive school culture, educational leaders expect to inspire teachers to incorporate into their classrooms higher-level student goals, as well as the necessary teaching strategies to meet those goals (Hoy & Hannum, 1997).

Social network analysis is concerned with the interpersonal transactions that constitute the social structure of a group (Kruse & Louis, 2009; Freidkin & Slater, 1994). An informal organization not only rests on an individual's hierarchical rank but also stems from the centrality of an individual's location in the intra-organizational network (Freidkin & Slater, 1994). Principals' acceptance into their school's culture is based upon

how well they interpret the existing social structure and culture and how accommodating the culture is to the changes they have in mind (Deal & Peterson, 1993).

School climate (Anderson, 1982) includes the total environmental quality within a given school building; it is not one of a set of dimensions but rather a broader construct defined by a composite of variables from the four dimensions (ecology, milieu, social system, and culture). A healthy school climate supports children's healthy development and facilitates their acquisitions of the effective social and intellectual skills they need to survive and thrive (Hoy & Miskel, 1996).

Viewing school climate as an antecedent rather than an outcome variable, school-effects research examined cultural elements of climate, such as the norms shared by students (Niebuhr, 1995). For the purpose of this study, school climate was defined as the characteristics of the total environment that contribute to positive student outcomes, in this case, academic achievement. Positive student, teacher, and administrator interrelationships characterize a healthy climate (Hoy & Miskel, 1996). Teachers are collegial, and driven; the learning environment is serious and orderly; consequently, academics are respected by students (Hoy & Hannum, 1997; Hoy & Miskel, 1996).

Six dimensions of climate define the health and general well being of interpersonal relationships in schools: (a) teacher affiliation, (b) academic emphasis, (c) collegial leadership, (d) resource support, (e) principal influence, and (f) institutional integrity (Hoy & Hannum, 1997). Teacher affiliation and academic emphasis refer to aspects of teacher and student behaviors at the *technical level.* Three aspects of principal behavior: collegial leadership, resource support, and principal influence address

important administrative functions at the *managerial level.* One aspect of the school environment relationship, institutional integrity, is examined at the *institutional level*.

The openness of organizational climate is typically measured by exploring open and authentic relationships between teachers and principals and among teachers themselves. Typically, four to six dimensions of these relationships are measured by the Organizational Climate Description Questionnaire (OCDQ), with various versions having 34 (Hoy & Tarter, 1997) to 64 Likert-items (Halpin & Croft, 1963).

The six dimensions of the OCDQ could be reduced to the following four general dimensions of climate that captured both openness and health. The first is *environmental press*, the relationship between the school and community Secondly is *collegial leadership,* the openness of the leader behavior of the principal. Next is *teacher professionalism,* which is the openness of teacher-teacher interactions. The fourth dimension is *academic press,* which is the relationship between the school and students. These four dimensions describe the relationships between the school and community, between teachers and the principal, between the school and students, as well as the interpersonal relationships among the teachers themselves. Thus, three vertical linkages (institutional, administrative, and teacher) are assessed as well as horizontal relationships among teacher colleagues (Halpin & Croft, 1963). Moreover, these four aspects of climate capture the general dimensions of both openness and health.

The climate of a school is considered "open" when both cooperation and respect exists not only among the faculty, but between the faculty and principal as well. The principal manifests a leadership style that is high in supportiveness, but low in both

directiveness and restrictiveness. Teachers in the same environment illustrate high collegiality and intimacy and low levels of disengagement.

An "engaged" climate incorporates a principal who is high in directiveness and restrictiveness, but low in the area of support. Teachers manage to maintain high levels of engagement and intimacy despite principal's behaviors.

Components of the *technical level* are academic emphasis and teacher affiliation. Academic emphasis is the extent to which the school is driven by a quest for academic excellence. Teacher affiliation is a sense of friendliness and strong affiliation with the school. The managerial level is related to the smooth operation of the school. Collegial leadership is friendly supportive and open, and guided by norms of equality. Resource support refers to availability of classroom supplies. Principal influence implies the principal's ability to influence actions of superiors favorably (Hoy & Hannum, 1997). Institutional Integrity relates to the vulnerability or the extent to which a school is susceptible to a few vocal parents and citizen groups. High vulnerability suggests that both teachers and principals are unprotected and put on the defensive (Hoy, Smith, & Sweetland, 2003).

The principal has to use his/her influence and leadership to connect with what happens in the classroom. A healthy school is a place where teachers like the school; they see the principal as their ally in the improvement of instruction (Hoy & Hannum, 1997). The principal is viewed as friendly, open, respectful, supportive, and yet establishes and is committed to high standards of teacher performance (Hoy & Hannum, 1997). Moreover, the principal also has influence with organizational superiors and is seen as someone who can deliver and who can accommodate teachers with the instructional

materials they need. Principals can influence teaching either by administrative support and collegial leadership or by administrative control. Supportive and collegial relations seem more effective than control. When teachers are supported by their superiors, they are likely to experiment and take risks to improve the quality of instruction (Hoy & Hannum, 1997).

Two related aspects of principal behavior that are part of the healthy school configuration are the influence of the principal and the extent to which the principal is able to furnish teachers with the adequate supplies and additional instructional materials to do their jobs (Hoy & Hannum, 1997). Principals who are able and willing to exert their influence with superiors on teachers' behalf are respected and valued by the teachers; they are likely to earn the confidence, support, and loyalty of their teachers.

Collegial principals who are friendly, openly supportive, egalitarian, and committed to excellence are most likely to create a school climate conducive to student achievement (Hoy & Hannum, 1997). Certain types of leadership are associated with the qualities principals demonstrate when they promote healthy school climates.

A healthy school climate is imbued with positive student, teacher, and administrator interrelationships (Hoy et al., 2003). Hoy et al. (2003) found that the perception of teachers of the principal's total effectiveness was related to open climates. Openness of a school's organizational climate was significantly related to the principal's emphasis on human skills. These principals are expected to promote strong student outcomes. This study is based on the premise that principals who demonstrate transformational leadership characteristics are likely to develop a positive school climate at the technical, managerial, and institutional levels and thus, positively impact outcomes.

Research Questions

Using statistical analyses, this study assessed whether a relationship existed between principal leadership style and school climate in high-performing, high-poverty schools. This study measured principal leadership using the Multifactor Leadership Questionnaire 5X (MLQ) as the independent variable and student achievement as the dependent variable, while controlling for school climate using the Organizational Climate Descriptor Questionnaire Revised for Middle Schools (OCDQ-RM) also an independent variable.

This study explored three research questions germane to the leadership styles of middle school principals and the relationship of these styles to school climate and student achievement.

1. What is the relationship between principal leadership and school climate in predominately African-American middle schools, as perceived by teachers?
2. What is the relationship between leadership style as perceived by teachers and student achievement in predominately African-American middle schools?
3. What is the relationship between leadership and student achievement, controlling for school climate in predominately African American middle schools?

Research Design

This study employed a quantitative research design. A survey analysis along with a correlational and causal-comparative approach was utilized. Information about leadership style was obtained by surveying teachers using the MLQ. School climate data was also measured by surveying teachers using the OCDQ-RM. Student achievement measures in reading were measured by the Georgia Standard Assessment also known as

the Criterion Reference Competency Test (CRCT). These data were analyzed using simple linear regression analysis, Pearson's product moment correlation, and analysis of variance.

Significance

Compared to other adolescents, African-Americans are particularly at-risk for experiencing adolescent delinquency and poor school adjustment that can reduce the chance of future success (Caldwell, Wiebe, & Cleveland, 2006; Noguera, 2007). Evidence showing that relative to Caucasian students, minority youth receive lower grades, score lower on standardized tests of academic ability, and have higher rates of grade retention (Becker & Luther, 2006). Furthermore, minority youth are disproportionately assigned to low-ability groups in elementary and middle school, and vocational tracks in high school which reveals the seriousness of the achievement gap between the test scores of both low-income and minority students and others (Becker & Luther, 2006).

Traditionally, the role of the principal was primarily managing the operation of the school (Patrick, 1995). School reform which accounts for new patterns of management, curricular innovations, increased student testing, as well as accountability measures has impacted the role of school leadership. Educators can often indicate examples of exemplary leadership behaviors in a specific setting. Nonetheless, replication of specific leadership behaviors from one school setting to another remains an issue. Research is lacking in the area of principal leadership style and its combined influence on school climate and student achievement. Data from this research contributed to the research base on principal leadership effectiveness and further clarifies the importance of

transformational leadership in educational settings. This study may impact the selection, evaluation and training practices of administrators across the country where few studies of this kind have been conducted in the past.

Delimitations

One of the purposes in this study was to explicate the characteristics of principals' leadership styles that positively relate to school culture insofar as to impact student achievement. Focusing on 12 schools at the middle school level in one district allowed for an in-depth study but did not allow for generalizations to another school district or other levels of education. Furthermore, this study sought to determine if there was a relationship between leadership, school climate, and student achievement measured exclusively by standardized assessment. Perceptions gathered through surveys were based on predetermined definitions of the constructs. Surveys are useful but define the way in which data will be captured and do not allow for alternate possibility in describing a situation.

State-developed tests are not the perfect measure of what individual students can or cannot do and cannot measure everything that students learn. Furthermore, many factors can affect a particular score such as whether a student guesses, receives clear direction, follows the directions carefully, is comfortable, and so forth.

Restrictions may exist by utilizing school climate characteristics as defined by the Organizational Climate Descriptor Questionnaire as there are other definitions of school climate (Anderson, 1982). Furthermore, restrictions may also exist by employing transactional and transformational leadership characteristics as identified by the Multifactor Leadership Questionnaire as there are other instruments that measure other

leadership characteristics (Bass & Avolio, 1995). Regardless of how schools scored on the OCDQ-RM and the MLQ-5X, it is possible that a field observation may manifest a different portrayal.

Limitations

There were several limitations to this study which may limit its generalizability and should be considered when reviewing the results.

The results of this study are limited to the middle school level and the results are limited to the sample utilized for this study. The researcher could not control the return of completed questionnaires. Furthermore, the OCDQ-RM and the MLQ-5X survey instruments were used to obtain data concerning teacher perceptions. Self-report instruments, such as these are subject to possible human error due to the perceptions of those completing the instrument. Surveys 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).

Teachers' opinions may not be generalized throughout the country, and only reflect opinions of the teachers in their particular school. Teachers' opinions may not reflect reality.

The small number of principals and teachers in this study was a limitation. The results of this study represent the teachers' perceptions of their principals' leadership behaviors. The actual practices of the principals may not have been documented. The non-respondents might have differed from those teachers who actually completed the survey.

The southeastern school district in which this study was conducted might have unique factors that make the findings less generalizable to principals in other school districts. The population for this study consisted of only those middle school teachers who chose to participate in the individual school administrations held at each site. It is unknown if these results are generalizable to elementary or high school principals. Teachers at the elementary and high school levels may perceive their principals' leadership behaviors differently than those of middle school.

Also, this study measured school climate using six measures on the OCDQ-RM. There may be many more variables such as parent involvement, student-teacher interactions, and principal interpersonal skills that are related to school climate. Salient variables described in the literature (Hallinger, 2003) include the following antecedents of instructional leadership behavior: school level, school size, school SES.

Teacher behavior items on the OCDQ-RM, as determined by Hoy and Sabo (1998), as well as principal behavior items as determined by Bass & Avolio (1995) 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 may have been lacking (Fullan & Hargreaves, 1996; Marzano, 2003).

With schools facing increased pressure to improve teaching and learning, the duties and responsibilities of principals expanded further to include the responsibility for leading school reform that would raise student achievement. Academic press as it relates to standardize testing is the result of No Child Left Behind (NCLB) the federal law that imposed consequential accountability on all states and schools. The impact NCLB has

had on student achievement since its implementation in 2002 has always been difficult to gauge. This is especially true since the law applied to all public school students, and there has been no comparison group and therefore impossible to determine which of countless factors contributed to student achievement (Boghossian, Dee, & Jacob, 2010).

Student achievement was measured by use of state-developed tests. Many school districts have developed performance targets for individual schools based on each school's performance the year prior in regard to meeting annual yearly progress (AYP) requirements established by NCLB. School leaders often seek aggressive but not unrealistic measures for meeting these targets.

Nevertheless the findings provide a picture of how some middle school teachers in one school district are reacting to the leadership behaviors of their educational leaders.

Definitions

Culture

The basic assumptions an organization makes as it struggles with internal and external forces in addition to the established assumptions that worked well enough to be taught to new members of the organization comprises its culture (Schein, 1990).

School Climate

School climate includes the total environmental quality within a given school building. It is not one of a set of dimensions but rather a broader construct defined by a composite of variables from the four dimensions (ecology, milieu, social system, and culture) (Anderson, 1982).

The next chapter will further explore the existing empirical literature.

Chapter II: Literature Review

Introduction

The review of literature encompassed knowledge based content that pertained to the affectation of leadership styles of urban school principals and its impact on school climate and student achievement. The manner in which to observe, assess, and possibly replicate the impact of this phenomena was sought throughout this review.

This investigation drew from research in a number of related fields. Few studies exist at the middle school level in which principal behaviors have been identified, that positively correlate with school climate and student achievement. The following discussion will review the major research findings presented in the areas of principal leadership; effective schools; success with impoverished African-Americans; high-performing, high-poverty schools; school climate; professional community; principal development of climate; climate and student achievement; and climate measures.

This literature search employed sources from 1980 to 2010 in which the following key terms were identified: (a) school reform, (b) urban schools, (c) Black students, (d) student characteristics, (e) African-American achievement, (f) achievement gap, (g) principal leadership, (h) school climate, (i) professional community, (j) school effectiveness, (k) culture, and (l) measurement techniques. Literature from sources utilizing (a) African-American students, (b) disadvantage students, (c) high-risk students, and (d) middle schools as key terms was also employed. The following databases were employed for this study: ERIC, Education Abstracts, and Dissertation Abstracts.

Studies of effective schools particularly, high-performing, high-poverty schools linked principal functions directly to student achievement. The principal is the key figure

in setting the tone for the school while assuming responsibility for instruction. School climate is suggested to be linked directly to teacher's perceptions of a principal's effectiveness. The review of literature evinced that a significant difference between leadership and school climate is inconsistent. Significant differences between student achievement and principal leadership style were found to be inconsistent as well.

Leadership

Theories about the phenomena of leadership behaviors began to materialize through pioneers as early as the late 1930s. Early studies found it necessary to categorize leader behavior and the effects thereof into style types. The three oldest styles found were autocratic, democratic, and laissez-faire. Autocratic leadership is the oldest of styles as it relates to schools. However, the review of literature has identified that a collaborative style of leadership has been more effective as it relates to teachers efficacy.

Leadership is a process through which an individual secures the cooperation of others toward goal accomplishments (Barnard, 1968). Leadership is the art of mobilizing others to work toward a common goal. In regard to education, the artistry of leadership is a dynamic process in which principals get extraordinary things done (Dufour & Eaker, 1996). There are several theories of leadership that have been utilized both within education and across the professions.

Beginning in the 1950s, a growing number of studies began to focus attention on leadership behavior (Thomas, 1997). This increased attention paralleled the powerful behavioral movement in psychology and education which asserted that all observable phenomena could be understood by being divided into components that would then be individually studied (Thomas, 1997).

A history of research on leadership and leadership style has resulted in many theories with respect to the behaviors associated with it (Thomas, 1997). To some degree, all research on leadership styles prior to Burn's (1978) introduction of the concepts of transformational versus transactional leadership could be conceived as being about democratic, autocratic, or laissez-faire leadership. These three styles of leadership were first articulated in 1938 with Lewin and Lippitt's seminal experiment (Patrick, 1995; Thomas, 1997).

Thomas (1997) compiled an information analysis, *"What Research Says about Administrator's Management Style, Effectiveness, and Teacher Morale."* The report encompasses a literature review regarding the following: leadership theories; leadership styles; and the effect of principal leadership on teachers' morale, performance, and student achievement. The researcher highlights that principal leadership styles and leadership effectiveness are related to teachers' morale and performance. Thomas (1997) deemed that principals uplift their teachers when they define the school mission, manage the instructional program, and promote a positive school climate. Moreover, a collaborative leadership style was identified as having the most significant impact on teacher morale.

According to Thomas (1997), behavioral studies in the area of leadership lead to a number of useful models. Lewin and Lippitt (1938) distinguished the three different approaches to leadership as the following: (a) autocratic, which is characterized as directive and task-oriented; (b) democratic, which is seen as participative and process and relationship-oriented; and (c) laissez-faire, which is said to be non-directive and lacking formal leadership.

Another major model of thinking about leadership emerged out of the work of Getzels and Guba in the 1950s. In their approach to thinking about organizations, they suggested both the idiographic and the nomothetic approach. Getzels and Guba (1957) theorized that an organization should be considerate of the needs of the organization, its tasks and its production structures, and the personal needs and values of its members. This model of organizations resulted in the establishment of the two-dimensional paradigm for analyzing and theorizing about leadership phenomenon.

Many studies in the 1950s and 1960s in educational administration were based on the work of Hemphill (1950) and the Leadership Behavior Description Questionnaire, which incorporated two factors of leadership. In his work, the two factors were titled, Consideration, and Initiation of Structure. Consideration deals with the extent of the leader's concern for the welfare of group members. Initiation of structure addresses the extent to which the leader organizes and defines the work of the group.

Patrick (1995) compiled a report in which he synthesized the literature on administrative styles and presented findings of a study that explored the relationship between principals' leadership styles and school climate. A principal-evaluation survey was distributed to 30 students in the curriculum and instruction department at Chicago State University. Findings showed a statistically significant correlation between respondents' scores on school climate and those of principals' administrative style, gender of the principal, respondents' teaching experience, and respondents' job position. Findings also evinced significant correlation was between perceptions of school climate and gender of the principal. The data showed an overall correlation between administrative style and school climate.

The autocratic leadership style is considered the oldest conception of management found in local schools (Patrick, 1995). Autocratic leadership warrants subservience from students and teachers alike. Democratic leadership involves shared decision-making and includes staff in the assessment of the school program (Patrick, 1995). A conglomerate of teachers, parents, and students such as a local school council is often an indicative element of this style of leadership (Patrick, 1995). Personnel are at liberty to work in areas of individual aptitude regarding school goals.

Laissez-faire leadership style describes the principal as lacking in the areas of gumption, planning, and direction. The most distinct of the three leadership styles was the democratic approach which is strongly related to a healthy climate (Patrick, 1995).

The results of the studies clearly showed democratic leadership to be superior to autocratic and laissez-faire leadership (Patrick, 1995). Although autocratic leadership produces the greatest quantity of product, the product tends to be of such poor quality as to be nearly useless. Laissez-faire leadership produces both poor quality and quantity (Lippitt and White, 1938). The importance from the above study showed an increased interest in the leadership behavior studies in contrast to leadership trait studies which resulted in divergence from the one-continuum model of Lippitt and White to the development of the two-dimensional leadership model for which Halpin is known (Halpin, 1959). Halpin's model identified two major dimensions of leadership behavior that predict subordinate performance, namely Consideration and Initiation of Structure or Task Orientation.

Situational leadership

Situational theorists of the 1960s and 1970s began to expand upon the previous models of leadership. Their definition of leadership developed from a combination of leadership styles that was deemed most appropriate for a particular, current situation. Nevertheless, their concept of leadership was embedded in the leader-follower relationship as opposed to the task or goal at hand. The literature review revealed situational theorists agree that leaders are in fact affected by a given situation; however, the theorists disagree in terms of the most appropriate style for approaching a given situation. Situational leadership involves leaders who react to their environment rather than effectuating the environment itself.

People and task dimensions have long been used to investigate leadership (Kirby, Paradise, & King, 1992). Consideration and Initiation of Structure as two leadership factors related to subordinate satisfaction and effectiveness are dimensions common to leadership models. Situational theorists argued that the most effective combination of people and task-oriented behaviors varied. Fiedler (1967) believed that leadership style was not amenable to change; therefore, the situation was the major determinant in leader effectiveness. Hersey and Blanchard (1977) agreed that style was difficult to adapt to different situations, but they argued that with training in the appropriateness of different styles, leaders could learn to expand their range and become effective under varying conditions.

Fiedler (1967) developed a leadership contingency model from which three major situational factors were derived. These factors in interaction with one another, determine the best leadership style for a situation. The first factor, leader-member relations, refers to

a leader's personal relations with subordinates. Teacher-principal relations can affect performance outcomes. The second of Fiedler's situational factors is task structure, which is described specifically as the degree of structure in the task that the group has been assigned to perform. Faculties overburdened with paperwork and reporting mechanisms often described their work as structured. Fiedler's third factor is leader position power. It is the power of the position itself. Therefore in schools, it is the power of the principalship within a given building and not the power of the principal per se. Different leadership styles work better with different combinations of the three factors rather than seeing a leader as constant (Kirby et al., 1992). The principal is less likely to adapt his/her approach to the situation; the more appropriate principal must be found for the necessary approach to a particular situation.

Situational theorists have been criticized on a number of fronts (Kirby et al., 1992). There is little agreement as to when a particular style is likely to be effective. In contrast to Fielder, Hersey and Blanchard (1977) supported both high people orientations and task orientations when working with followers of moderate maturity. They developed the Situational Leadership Model that identified four styles of leadership: (a) autocratic (telling), (b) democratic (selling), (c) encouraging and social (participating), and (d) laissez-faire style (delegating). These leadership behaviors range from very leader-directed to non-directive approaches. Hersey and Blanchard (1977) believed that no single leadership style was paramount. The most successful leaders are those individuals who adjust or alter their leadership style accordingly.

Like Hersey and Blanchard, Blake and Mouton (1964) believed that leaders could adapt to the situation. Ultimately, they prescribed that a 9,9 style on their Managerial

Grid as most effective regardless of the situation. Blake and Mouton evaluated an instrument designed by Hersey and Blanchard according to their Situational Leadership Theory. This particular instrument presents 12 management situations with four separate supervisory styles. Blake and Mouton contended that the maturity level of the subordinates is contingent upon the most effective alternative. Selecting an alternative which is a clear 9,9 oriented statement of leadership was not possible in any of the 12 situations. The researchers tested their notion in the context of a 9,9 orientation by preparing a fifth alternative for each of the situations. The fifth alternative identified the 9,9 orientation in behavioral terms. The instrument developed by Hersey and Blanchard (1977) including the fifth alternative was administered to 100 experienced managers in two different settings. Under the conditions provided by this assessment, the data lead to rejection of the Situational Leadership Theory and the acceptance of the One Best Style as the basis for exercising effective leadership.

The Hersey and Blanchard approach to Situational Leadership Theory and measurement, displayed no 9,9 oriented behavior as an adequate leadership behavior. These researchers also indicated that leaders who fully understand leadership theory and improve their ability to lead are able to reduce employee frustration and negative attitudes in the work environment. Fiedler (1967) purports the appropriate style depended on the leader's position, power, relationship with subordinates, and structure of task. Furthermore, Kirby et al., (1992) also emphasized that situation and leadership style, which is common to the situational theories, may neglect the substance of leadership.

Criticism from organizational scholars has stemmed from the situational theorists' definition of leadership. The definition was established on the basis of easily observable

leader-follower relationships with little regard for the goals accomplished (Lippman et al., 1996). Organizational scholars studied "extraordinary leaders," who were able to inspire followers to perform beyond commonly held expectations. They agreed with the idea that leader effectiveness can be determined in part by context, and they believed that transformational leaders are able to alter their environments. Avolio and Bass (1987) purported that transformational leaders do not necessarily react to environmental circumstances but have the tendency to create them.

Transformational leadership

The history of transformational leadership derived from presidential biographer and leadership theorist James MacGregor Burns (Bass, 1985; Burns, 1978). The concept of transformational leadership is evident in terms of Burns (1978) when "leaders and followers make each other to advance to a higher level of moral and motivation," *(sic)* (Burns, 1978, p.18). This leadership style is vision inspired and precipitates change in followers. Researcher Bernard M. Bass (1985) later expounded upon the work of Burns and developed what is today referred to as Bass' Transformational Leadership Theory.

To accomplish the reforms central to school restructuring, scholars of education espoused a model of transformational leadership. Transformational leadership focuses on problem finding, problem solving, and collaboration with stakeholders with the goal of improving organizational performance (Hallinger, 1992). To develop the collective capacity of the organization and its members to achieve these results, transformational leadership sought to raise participants' level of commitment (Burns, 1978). It also sought to encourage participants in reaching their fullest potential, and to support them in transcending their own self-interest for a larger good (Bass & Avolio, 1993).

Burns (1978) conceptualized two factors to differentiate ordinary from extraordinary leadership, transactional and transformational. Transactional (ordinary) leadership is based on an exchange for expected rewards. Transformational leadership is development oriented for the purpose of change (Kirby et al., 1992). The leader's focus on the individual development of subordinates enhances their performance which, in turn, leads to organizational growth. Routines are transcended by articulating and focusing on vision and mission, creating and maintaining a positive image in the minds of followers, and behaving in a manner that reinforces the vision and mission (Burns, 1978).

The transformational leader plays a pivotal role in precipitating change, followers and leaders are bound together in the transformation process (Bass & Avolio, 1993). The importance of developing followers to their fullest potential extended the concept of transformational leadership. Transformational leaders motivate followers by raising their consciousness about the importance of organizational goals and by inspiring them to transcend their own self-interest for the sake of the organization. In their relationships with followers (Kirby et al., 1992) transformational leaders exhibit at least one of these leadership factors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Geijsel, Sleegers, Leithwood, and Jantzi (2003) conducted a study entitled, *"Transformational Leadership Effects on Teachers' Commitment and Effort toward School Reform."* They examined the effects of transformational school leadership on the commitment of teachers to school reform, and the effort they are willing to devote to such reform. Researchers build on the knowledge from both educational and non-educational research. A model of such effects was tested using two approximately comparable sets of

data collected from samples of Canadian and Dutch teachers. Structural equation modeling is applied to test the model within each data set. Results of the Canadian and Dutch studies were then compared.

The Canadian study took place in one district serving a population of approximately 58,000 urban, suburban, and rural elementary and secondary students. All 1,444 teachers in 43 junior high and high schools in the district were surveyed, though researchers attained a 56% response rate. The Dutch study was based on a survey of secondary (ordinary) education teachers. Of the approximately 2,000 teachers in 45 schools surveyed researchers attained a 62% response rate. Both studies collected data about length of teaching experience and gender. For both teaching experience and gender, the background variables were not expected to have a serious impact on the results of the study. The Dutch survey consisted of 60 items rated on four-point scales with five variables measured on a Likert scale (disagree to agree) and two variables (participation in decision making and professional development activities) using the options "never," "sometimes," "often," and "always." The Canadian instrument contained 186 items rated on a five-point scale ("strongly disagree" to "strongly agree") with a "not applicable" response option as well.

Although each study used its own instrument, they both addressed the same three sets of variables: transformational leadership, teacher commitment to change, and extra effort. Transformational leadership encompassed the aspects of vision building individual consideration, and intellectual stimulation. Teacher commitment to change encompassed both capacity beliefs and context beliefs. Capacity beliefs consist of the extent to which teachers feel uncertainty and self doubt about their own capabilities and behavioral

competence. Context beliefs involve the extent of collaboration and support of their colleagues. The third variable was extra effort.

The research presented, examined the effects of transformational school leadership on teachers' commitment to change and teachers' extra effort for change, using both Dutch and Canadian data sets for analyses. The research model depicted transformational leadership dimensions directly influencing teachers' motivational processes and teachers' extra effort. Structural Equation Modeling (SEM) was deemed the appropriate test. The Linear Structural Relations (LISREL) approach was used to conduct SEM because it allows for testing the validity of causal inferences for pairs of variables while controlling for the effects of other variables. In addition to the Chi-square test, three other indices were reported as follows: (1) Root Mean Square Error of Approximation (RMSEA); (2) the Expected Cross-Validation Index (ECVI), and (3) the Comparative Fit Index (CFI).

Results of both studies show the direct effects of transformational leadership on teachers' extra effort to largely augment the indirect effects. In the Dutch study, capacity beliefs appeared to be the main link between transformational leadership and teachers' extra effort. In contrast, results of the Canadian study suggested that context beliefs and personal goals are the most relevant sources of commitment to mediate transformational leadership influence on teachers' extra effort. Emotional arousal process and capacity beliefs seemed to have less to do with participation in decision making.

This study failed to identify any specific leadership attributes that positively relate to school climate and student achievement in middle schools with a dense population of African-American students.

Leithwood (2005) has described and assessed the effectiveness of transformational leadership in schools. He has distinguished nine functions of transformational leadership clustering in three areas: (a) mission centered, (b) performance centered, and (c) culture centered. By seeking to foster collaboration and to activate a process of continuous inquiry into teaching and learning, transformational leaders attempt to shape a positive organizational culture and contribute to organizational effectiveness.

To improve organizational performance, transformational school leaders focus on the individual and collective understanding skills, and commitments of teachers (Kirby et al., 1992). Transformational leaders may challenge teachers to examine their assumptions about their work and to rethink instructional processes; they may establish expectations for quality pedagogy and support teachers' professional growth (Bass, 1997). Transformational leadership builds organizational capacity whereas instructional leadership builds individual and collective competence (Marks & Printy, 2003). Instructional leadership is shared in that specific leadership functions are carried out by many people working in collaboration (Lezotte, 1991).

Transformational vs. Transactional leadership.

Transforming leadership, as opposed to transactional leadership, forms the foundation of recent study on leadership (Fairholm, 2001). With the utilization of words such as vision, culture, values, and teamwork, transformational leadership's primary focus is the more personal side of organizational interactions. However, transactional leadership focuses on rewards and/or punishments in exchange for subordinate's performance. This style of leadership in many ways defines the essence of management.

Such leadership occurs when one person takes the initiative in making contact with others for the purpose of an exchange of valued things (Fairholm, 2001). The review of literature highlights the input of Bass (1985), who has extended the literature related to transformational leadership since its inception derived from Burns (1978).

Bass's (1985) research in business and military settings led to his conclusion that both transactional and transformational leadership are used by most leaders, but that their relative use varies from one leader to another. The transactional image of leadership refers to exchange relationships between the leaders and their followers: each enters the transaction because of the expectation to fulfill self-interests, and it is the role of the leader to maintain the status quo by satisfying the needs of the followers.

Transformational leadership bonds leader and followers within a collaborative change process and thus contributes to the performance of the whole organization (Bass, 1985). Transactional leadership does not bind leaders and followers in any enduring way; therefore, it results in a routine, non-creative but stable environment as compared to the responsive and innovative environment that the transformational leadership brings about (Bogler, 2001). Burns (1978) found that transformational leadership significantly augments the power of transactional leadership in predicting follower satisfaction and perceptions of leader effectiveness.

In 1997, Bogler administered a Likert-type quantitative questionnaire to 930 teachers. The researcher sought to examine the effects on job satisfaction in three areas relating to teachers' perceptions. A path analysis was conducted to further explicate teacher job satisfaction. The areas of teachers' perceptions analyzed were as follows: principals' leadership style, decision-making strategy, and occupation. Seven hundred

forty-five teachers accounted for an 80% response rate in the study. Ninety-eight elementary, middle, and high schools located in northern Israel participated in the study. Of the total population of teachers that participated in the study, 51% taught on the elementary level, 20% middle, and 26% on the high school level. Findings indicated that teachers preferred to work with a principal who exhibits a transformational type of behavior rather than a transactional one. The most significant finding reported was that teachers' occupational perceptions strongly affected their satisfaction.

Bass (1985) operationalized Burns' (1978) model of transformational and transactional leadership with the development of the MLQ. After several revisions, Bass produced an 80-item questionnaire (MLQ-Form 5, Revised) consisting of six leadership factors and two outcome scales. Both follower (MLQ-5F) and leader self-report (MLQ-5S) versions are available (Bass & Avolio, 1988).

Four factors of the MLQ – charisma, individualized consideration, intellectual stimulation, and inspiration measure transformational leadership. Charisma is the leader's ability to arouse devotion and involvement through personal dynamics such as self-confidence, ideological stance, and dramatic and emotional appeal. Inspiration is closely related to charisma (Bass & Avolio, 1988). Leaders inspire by increasing follower awareness and understanding of mutually desired goals through symbols and simplified emotional persuasion.

Transformational leaders also strengthen followers by raising their needs, perspectives, and by providing opportunities for them to develop their capabilities. To elevate goals and develop skills, they treat followers on a one to one basis; this factor is therefore referred to as individualized consideration. Finally, intellectual stimulation is

the encouragement to challenge the status quo and take risk. Followers are supported for creativity and self direction (Bass & Avolio, 1988).

In contrast, transactional leaders concentrate on clarifying, explaining, and implementing the status quo requirements, roles, and rewards of the tasks. Two MLQ factors, contingent reward and management-by-exception, account for assessing transactional leadership. Contingent reward is the exchange of appropriate rewards for meeting agreed-upon objectives (Bass & Avolio, 1988). Transactional leaders also rely on management-by-exception. They leave organizational members alone to do their jobs unless problems are perceived; only then will the manager correct, sanction, or criticize behavior. In essence, management-by-exception is a form of negative contingent reinforcement. In addition to the transformational and transactional factors, the MLQ assesses laissez-faire, a non-leadership factor, and two outcomes – satisfaction with the leader and perceived effectiveness of the leader.

Transformational leadership provided for intellectual direction and innovation within the organization, while empowering and supporting teachers as partners in decision making (Marks & Printy, 2003). Transformational leadership affirmed the centrality of the principal's reform role, particularly in introducing innovation and shaping organizational culture (Friedkin & Slater, 1992). Transformational and instructional leadership are complementary, yet neither conceptualization embraces the other (Marks & Printy, 2003). Therefore, the two styles of leadership ignore the reciprocal relationship that exists between leaderships and environment, i.e. leadership and culture.

Instructional leadership

The principal encourages educational achievement by making instructional quality the top priority of the school and brings that vision to realization Clark, Martorell, & Rockoff, 2009; Lezotte, 1991). The review of literature highlights the development and behaviors of principals who assume the role of instructional leader.

Two primary images of school principalship have prevailed from the 1970s throughout the 1980s, instructional leadership and transformational leadership (Hallinger; 1992; Marks & Printy, 2003). Instructional leadership, developed during the Effective Schools Movement of the 1980s, viewed the principal as the primary source of educational expertise. Instructional leadership is often defined as a blend of several tasks, such as supervision of classroom instruction, staff development, and curriculum development (Blase & Blase, 1999). It also comprises the following tasks: defining the purpose of schooling; setting school-wide goals; providing the resources needed for learning to occur; supervising and evaluating teachers; and creating collegial relationships with and among teachers (Lezotte, 1991; Wildy & Dimmock, 1993).

Aimed at standardizing the practice of effective teaching, the principal's role was to maintain high expectations for teachers and students, supervise classroom instruction, coordinate the school's curriculum, and monitor student progress (Barth, 1986; Marks & Printy, 2003). Instructional leadership (Egley & Jones, 2005) involves frequent monitoring of the teaching process to assess the instructional capacity of the educational organization. The leadership of the principal can foster or restrict teacher effectiveness (Kelley et al., 2005). As instructional leaders, principals are responsible for ensuring that each student has the opportunity to receive a quality education.

The hierarchical orientation of instructional leadership faced several conflicting factors (Marks & Printy, 2003) with the democratic and participative organization of schools that emerged in the late 1980s. These factors were school restructuring and the movement to empower teachers as professional educators. Schools' failure to educate effectively was attributed to the educational bureaucracy (Marks & Printy, 2003). A fundamental restructuring initiative evolved which entailed decentralizing to schools authority over such matters as budgets, hiring, curriculum, and instruction. Adoption of this model by principals indicated shared management decisions with teachers and constituents. Hierarchical leadership as expressed in instructional leadership does not adequately take into consideration the context of climate.

Shared instructional leadership

The review of literature expanded upon the concepts of instructional leadership and collaborative leadership and derived at the theory of shared instructional leadership.

Theories of shared instructional leadership emerged as a way to bridge transformational leadership and instructional leadership. Shared instructional leadership involves the active collaboration of principal and teachers on curriculum, instruction, and assessment (Marks & Printy, 2003). Within this model, the principal seeks out the ideas, insights, and expertise of teachers in these areas and works with teachers for school improvement. Thus, the principal is not the sole instructional leader but the leader of instructional leaders.

The role of the principal is the articulator of the mission of the school which is crucial to the overall effectiveness of the school (Lezotte, 2001). By persistently reinforcing the school's mission, the principal creates a shared sense of purpose and

establishes a set of common core values among the instructional staff (Brookover et al., 1979; Venezky & Lezotte, 1979). Having common core values and a shared sense of purpose helps guide all members of the instructional team and avoids individuals straying from the intended goals.

The principal is not the sole leader; he or she is a "leader of leaders" (Lezotte, 1991) empowering teachers and including them in decisions about the school's instructional goals. The effective school movement emphasizes teacher excellence, collaboration, and mentoring so that schools become places where every educator is recognized as a valuable contributor with unique strengths and impressive potential to learn, grow, and improve (Lezotte, 1991).

As opposed to instructional leadership, shared instructional leadership is an inclusive concept, compatible with competent and empowered teachers. The principal invests teachers with resources and instructional support and maintains congruence and consistency of the educational program (Marks & Printy, 2003). Leadership for instruction emerges from both the principal and the teachers. Principals and teachers discuss alternatives rather than directives or criticisms and work together as "communities of learners" in service to students. When teachers interact with principals as they engage in these activities, the teachers report positive changes in their pedagogical practices, including using various and innovative techniques and being willing to take risks (Marks & Printy, 2003).

Principals and teachers are integral in forging an effective leadership relationship. Strong leadership on part of the principal affirms teachers' responsibility and accountability for change (Marks & Printy, 2003). The relationship is a reciprocal one,

where those informal roles step aside to let others step into leadership roles. Shared instructional leadership, therefore, is not dependent on role or position; its currency lies in the personal resources of participants and is deployed through interaction (Marks & Printy, 2003). However, shared leadership does not take into consideration the aspect of climate in addition to the fact that it is theoretical as opposed to empirical.

Invitational leadership theory

The English term "invite" is a derivative of the Latin word "invitare," which means "to offer something beneficial for consideration;" moreover, when translated literally it means to "summon cordially, not to shun" (Coates, 2010). Thus, the term "inviting" implies an ethical process involving continuous interactions among and between human beings. Invitational theory (Coates, 2010) is a collection of assumptions that seek to explain phenomena and provide a means of intentionally summoning people to realize their relatively boundless potential in all areas of worthwhile human endeavor. Coates (2010) contended that it is based on two successive foundations: "perceptual tradition" and the "self-concept theory."

The review of literature expanded on how these foundations provide a rationale for the four basic assumptions (Coates, 2010) made in the theory and are the means by which invitational leaders "take guard" in order to face the challenges of leading. These four assumptions provide the "character challenge" for Invitational leadership and provide the personal raw material from which purpose, direction and behavior can best be shaped (Coates, 2010). The four assumptions are: trust, respect, optimism, and intentionality.

Invitational Theory asserts that every person and everything in and around schools, colleges, and other human service organizations adds to, or subtracts from, the process of being a beneficial presence in the lives of clients, colleagues, and customers (Stafford, 1998). This concept is built on the idea of educating in and for a democratic society ought to be based on doing-with approach rather than a doing-to relationship (Novak, 2005). The idea of leadership incorporates five factors that tend to create an environment in which every person is cordially summoned to develop intellectually, socially, physically, psychologically, and spiritually (Stafford, 1998).

Invitational leadership is an attempt to focus an educator's desires understandings and actions in order to create a total school environment that appreciates individuals' uniqueness and calls forth their potential (Coates, 2010; Novak; 2005). Furthermore it is built on the guiding ideal that education is fundamentally an imaginative act of hope, and this hope is communicated through persistent, resourceful and courageous practices (Coates, 2010). Invitational Leadership Theory (IET) is a theory of practice that addresses the total environment in which leaders function (Egley & Jones, 2005). It is a powerful process of communicating caring and appropriate messages intended to summon forth the greatest human potential as well as for identifying and changing those forces that defeat and destroy potential (Egley & Jones, 2005). The goal of invitational leadership is to create schools with a climate that invites everyone in the school to experience success. Educators should operate from a consistent stance of respect, trust, optimism, and intentionality (Egley & Jones, 2005).

The tenets of IET deal with the five Ps of any organization: people, places, programs, policies, and procedures (Egley & Jones, 2005). The model of invitational

leadership is one that encourages leaders and their associates to pursue more joyful and meaningful professional and personal lives through the guiding principles: respect, trust, optimism, and intentionality. This style of leadership offers a systematic approach to the educational process and it provides strategies for making schools more inviting.

IET furnishes educators with principles of practicing behaviors that seek to integrate in creative and ethical ways, research, theory, and practice. Invitational leadership derives from the standard theories of leadership that emphasize the process of influencing others through the use of power (Egley & Jones, 2005; Stafford, 1998). It promotes collaboration and shows compassion and respect for individuals in the educational system. Barth (1991) noted that improving the interactions among and between teachers and principals is a significant factor in the school improvement process.

Egley and Jones (2005) conducted a study in which they sought to assess administrators' professionally and personally inviting behaviors using self-report scales. Additionally, the researchers examined whether administrators' reported behaviors were correlated with school rankings, job satisfaction, school climate, or time spent on instructional leadership. Thirty-two school districts located in Florida participated in the study. Principals at all of the elementary schools in the 32 districts were selected to participate in the study. A total of 325 administrators returned surveys. Administrators accounted for 212 principals, 96 assistant principals, and 17 who did not indicate their administrative rank. The administrators represented 41.6% of the schools (264 out of 635 schools) within the participating school districts.

Administrators rated their professionally and personally inviting behaviors by completing a 12-item questionnaire. Seven items assessed their professionally inviting

behaviors and five items assessed their personally inviting behaviors. Each item was rated utilizing a 5-point Likert scale whereas: 1=very seldom or never, 2=seldom, 3=occasionally, 4=often, and 5=very often or always. Administrators were asked to select the response that best described his/her own perception of his/her leadership behaviors. The researchers reported that principals and assistant principals reported engaging in high levels of professionally and personally inviting behaviors.

The second purpose of the study was to determine whether the reported inviting behaviors were correlated with school rankings, job satisfaction, school climate, or time spent on instructional leadership. Principals, who perceived themselves as having higher professionally inviting behaviors also tended to have higher student scores on state standardized tests. Principals' inviting behaviors were correlated with the amount of time per day that they reported spending on instructional leadership. This theory starts to approach climate in a more specific way and links to student achievement, although it is a single study.

Leadership and Effective Schools

The review of literature explicated that in the effective school, the principal acts as an instructional leader and effectively and persistently communicates the mission of the school to staff, parents, and students (Edmonds, 1982; Lezotte, 1991). In addition, the principal understands and applies the characteristics of instructional effectiveness in the management of the instructional program.

The effective schools movement developed from the mediocrity of public education revealed during the 1980s' *"A Nation at Risk."* The concept was all students can learn if prescribed approaches were utilized. The correlates of effective schools were

research based and incorporated the following: (a) strong administrative leadership, (b) a safe orderly school environment, (c) clear instructional focus on academics, (d) frequent monitoring of student success, and (e) the belief that all children can learn (Boysen, 1992).

Effective schools research has proposed that strong principal leadership affects school academic achievement at least indirectly (Ellis, 1975; Lezotte, 1979; Weber, 1979). The principal's effects on student learning, center on the principal's role in shaping the school's instructional climate and instructional organization. Leadership behavior also was thought to depend on both the person and the specific organization in addition to political variables related to the school such as: district size, school socio-economic background, school language background, district pressures, community, and staff as well as the principal's own beliefs and values (Heck & Marcoulides, 1993). Principals must also create and maintain a sense of trust in the school, use positive micro-politics to negotiate between managerial, technical, and institutional arenas; and create a professional community and networks for communication within the school (Datnow & Castellano, 2001; Friedkin, 1994).

Systematic observation of effective schools indicated instructional leadership as a definitive quality in student outcomes (Brookover et al., 1979; Edmonds, 1979; Hoffman, 1994). The theoretical framework surrounding effective school leaders, as instructional leaders, began development during the 1970s (Waters et al., 2003). Waters et al. 2003 contended that principals exude a confluence of characteristics in order to positively impact student achievement.

In 1993, Heck and Marcoulides conducted a study within 32 elementary and high schools in California Public Schools. The purpose of their study was to identify important parameters of secondary instructional leadership. Furthermore, the researchers sought to estimate the effect on school achievement, and to determine whether these parameters of leadership behavior were the same or different for secondary and elementary school principals.

A questionnaire was administered to the principal and a random selection of six teachers in each school. Requisites involved the principal and a minimum of four returning teachers who had to complete and return the questionnaire. Furthermore, the principal had to have been present in the school for the entire three years of the study so that respondents would be describing the behavior of the same individual. The sample consisted of 32 elementary and high schools. Of the principals, 56% were on the elementary level while 44 % were on the high school level. Forty-eight percent of the teachers were on the elementary level while 52% represented the high school level.

In regard to the development of school culture, the study focused on the following abilities of the principal: (a) to communicate instructional goals and high expectations for performance, (b) encourage the instructional issues, (c) recognize the accomplishments of students and report academic progress to the community, (d) keep faculty morale high, and (e) establish an orderly environment for learning with a clear discipline code.

Findings indicated that teacher and principal perceptions about how the principal governs the school are strongly related to the manner in which the principal is perceived to organize the school's program. Moreover, findings were strongly related to the principal's role in building productive school climate. Instructional organization of the

school is indicative of the perceptions of the principal's efforts to build school climate. Thus, climate and instructional organization in turn, show a small positive relationship in explaining school achievement. Finally, secondary and elementary school principals can have a similar positive influence on school achievement. Although this study incorporated both elementary and high schools, there was no data reported for urban middle schools with a high density of African-American males.

Researchers Witziers et al. (2003) utilized a quantitative meta-analysis to examine the extent principals directly affect student outcomes. Their study focused on the direct effects of educational leadership on student achievement conducted between 1986 and 1996. A total of 37 studies were selected that included explicit and valid measures of student achievement as well as those for educational leadership. In addition, data collected in the study of the International Association for the Evaluation of Educational Achievement (IEA) on reading literacy in 25 countries were used for meta-analysis purposes. The Principal Instructional Management Rating Scale (PIMRS) instrument developed by Hallinger (1987) was used as a framework to categorize the principal behaviors. The results indicated that school leadership has a positive and significant effect on student achievement. Furthermore, defining and communicating mission are relevant leadership behavior in terms of improving student achievement qualities related to school climate. The findings are indicative of effective school research as it relates to principal leadership and student achievement. Nevertheless, the findings do not highlight specific leadership behaviors as they relate to positive school climate, and student achievement in predominantly African-American middle schools.

O'Donnell and White (2005) conducted a study in which they sought to identify significant relationships between principals' instructional leadership behaviors and student achievement with school economic status as a secondary variable of interest. The study was a quantitative correlational study limited to middle schools in Pennsylvania. Grade configurations of the middle schools consisted of the following: 5-8, 6-8, and 7-8. Student achievement data from the Pennsylvania System of School Assessment for all participant schools served as the dependent variable. Four teachers along with the principal of qualifying schools accounted for the participants. A total of 325 educators provided for the feedback which consisted of 75 principals and 250 eighth-grade English and mathematics teachers. The study required principals to have served in their current position for 2 years.

Instructional leadership was defined as the behaviors and tasks included in Hallinger's (1987) PIMRS. The PIMRS was used to measure faculty and principal perceptions regarding the frequency of instructional leadership behaviors exhibited by principals. The reading and mathematics components of the 2000-2001 PSSA provided for student achievement data. In addition to school test scores, this study considered school SES as a context variable.

Findings of this study indicated a low number of respondent schools with low-SES percentages. Due to this limitation, researchers recommended a more in-depth investigation of low-SES schools. Principal and teacher ratings of principals identified each of the three leadership dimensions as having significant positive relationships with both mathematics and reading achievement. Higher teacher perceptions of principal instructional leadership behaviors relate to higher student achievement and vice versa.

Teacher perceptions of principals' efforts to promote the school learning climate had the largest explanatory power for predicting mathematics and reading scores. This study is significant to the present study; however, it is a single study with limited generalizability.

Waters, Marzano & McNulty (2004) reported on the *"School Leadership That Works"* study conducted by the Mid-continent Research for Education Learning (McREL). The study examined the areas of leadership responsibility correlated with student achievement. The study analyzed 70 published studies since 1978 that reported standardized, objective, and quantitative measures of student achievement. The sample comprised of 2,894 schools, 14,000 teachers, and more than 1.1 million students. The final studies used in the study met the following criteria: (a) the outcomes of student achievement in quantitative format, (b) a standardized assessment of student achievement, (c) leadership perceptions of teachers as the independent variable, and (d) student achievement as the dependent variable. Findings indicated a positive correlation between effective school leadership and student achievement. Twenty-one elements of leadership responsibility were identified to correlate with student achievement.

Significantly, Waters et al. (2004) contended:

> Leaders can act like effective leaders, but if they fail to guide their schools toward making the correct changes, these changes are likely to have a diminished or negative impact on student achievement. (p.50)

Much of the research in this study indicated which behaviors are important, although much of it surrounded urban elementary schools in large districts as opposed to middle schools with a large density of African-American students. For the purposes of

the current study, findings aid in supporting the idea that principal leadership directly relates to student achievement.

Several leadership theories have developed from the research of leadership as it relates to behavior. Principal leadership has been highly influenced by the ideas of instructional leadership and transformational leadership. More recently, the notions of shared instructional leadership and invitational leadership practices have evolved in the literature. All theories of principal leadership tend to encompass communication skills on part of the principal which ultimately aim to positively impact student achievement.

High-Performing, High-Poverty Schools

Public schools are clearly responsible for educating all students, yet historically greater success occurs when educating middle to upper income students as well as white students. There is a general assumption that an inextricable relationship exists between poverty, ethnicity, and academic achievement. Although the impact of poverty clearly has not been eliminated, the prevailing hypothesis is that poverty and ethnic minority status are invariably linked to low student achievement; however, data exists indicating that not all schools conform to this trend. Hence, high-performing, high-poverty schools are those public institutions in which poverty is high as determined by percentage of free and reduced meals, in addition to a high percentage of minority students, as well as the percentage of students who score on high on standardized assessments. The review of literature traces the developments which lead to the characterization of schools of this nature.

In 1966, the U.S. Civil Rights Commission released the landmark Coleman Report. The purpose of the report was to identify the variables that contributed most to

student learning. This two year investigation, *"Equality of Educational Opportunity,"* was sanctioned to uncover whether all children were afforded equal learning opportunities in America's schools. This report is considered the first, prime example of an "input-output" study (Hoffman, 1994). Such studies, primarily addressed questions that relate directly to program efficiency where the degree of variations in program inputs such as teacher experience relate to such variations of outputs or student learning (Hoffman, 1994).

Coleman et al. (1966) examined nearly 4,000 elementary and secondary schools nation-wide. Participants comprised approximately 570,000 students and 60,000 teachers. Four primary factors were assessed: family background of the students; characteristics of the teachers; school resource inputs; and mean socio-economic status (SES) of each school. The most salient finding was that school variables or physical attributes have very little effect on student achievement as opposed to social-class background. The Coleman findings fed the school integration process and served as a rationale for bringing children of different races and classes into the same schools (Boysen, 1992).

This report presented the findings of a national study of academic achievement as it related to pupils, school, and community background. This study did not identify any specific principal leadership behaviors that are associated with school climate and positively impact student achievement.

Effective Schools

The literature on school effectiveness has emerged in attempt to validate the assumption that the differences among schools have significant effects on student academic achievement. This idea grew out of the Coleman report (1966) who indicated

that schools bear little effect to a child's education outside of his/her family's socio-economic background. By lending official credence to the notion that "schools didn't make a difference" in predicting student achievement, the report stimulated a vigorous reaction, instigating many of the studies that would later come to define the research base for the Effective Schools Movement (Lezotte, 1991).

Researchers of the Effective Schools Movement identified existing effective schools, which were those that were successful in educating all students regardless of their socioeconomic status or family background. Researchers found that all of these especially effective schools had strong instructional leadership among other attributes which would eventually become known as the Correlates of Effective Schools.

Traditionally, poor students have been deprived of academically challenging opportunities (Anyon, 1995; Ford, 1992; Fritzberg, 2001; Hamovitch, 1999). Consequently, many high-poverty schools are also low-performing. Most of early school effectiveness research (Hoy et al., 2003), came from comparisons of so-called effective and ineffective schools. The study of program effectiveness evolved from studies of student learning (Anderson, 1982). The early definition of effective schools rested on the concept of equity between children from differing socio-economic classes (Effective Schools Products, 2001). The effective schools movement emerged from the pandemonium during the 1970s surrounding urban education, promising that all students could learn if prescribed approaches were implemented.

The literature on school effectiveness supports the notion that differences among schools do affect students' academic achievement. Easily measured differences among schools' class size, teacher salaries, number of books in the library, the reading series, the

age of the school building, or whether or not the school had a compensatory education program were found to bear little relationship to achievement (Coleman et al., 1966; Edmonds, 1979; Purkey & Smith, 1982).

Studies on the determinants of achievement have been concerned with variables relating to the following: (a) how schools and school districts are structured and make decisions, (b) the process of change in schools and school districts, and (c) the way in which classrooms and schools can increase the amount of time spent on productive instruction (Purkey & Smith, 1982). This concept grew out of the research of Edmonds and others in the late 1970s, who refuted the findings of Coleman by demonstrating that schooling can be a powerful factor in student success.

Edmonds noticed that some urban schools with educationally disadvantaged students worked much better than others. He studied a group of such schools in New York City and compared them to schools with similar students that were getting inferior results. The list of factors that made the good schools work became known as the Effective Schools Correlates. These research-based correlates of high-achieving schools included: (a) strong administrative leadership, (b) a safe, orderly school environment, (c) clear instructional focus on academics, (d) frequent monitoring of student success, and (e) the belief that all children can learn. Boysen (1992) reported that the combined influence of all the correlates of effective schools is 15 times more powerful than student social class background in predicting school achievement. The movement gained momentum in the 1980s.

The effective schools strategy (Boysen, 1992) is what educational experts know about the enterprise of teaching and learning. The effective schools approach has had its

best success in small and medium sized systems where the influence of a proponent superintendent and board of education could insist on the approach. Recreating the effective schools culture turned out to be far more difficult than identifying the correlates of strong student achievement (Boysen, 1992). Another change in the urban school context was the shift from basic skills to higher-order skills in the focus of concern about student performance. Effective schools were identified by basic skill achievement measured on multiple-choice tests (Boysen, 1992).

High-performing schools surfaced in the research because their students made big gains on standardized achievement tests (Bell, 2001; Boysen, 1992). Studies of high-performing, high-poverty schools have provided valuable information about best practices in school leadership, organization, and instruction (Bell, 2001). The Education Trust (2001) reported 3,592 high performing, high poverty schools; 2,305 as high-performing, high minority; and 1,320 schools as high performing, high poverty and high-minority schools in America (Loeb, 2003). Those schools accounted for over 2 million students.

High-performing, high-poverty schools, (Bell, 2001) are deemed to provide for low-income and other historically marginalized groups of students the same learning opportunities as their counterparts in more affluent communities. They are more likely to embrace, and at times surpass, requirements imposed by a state's accountability system. Furthermore, schools of this nature tend to rely upon results stemming from what worked in their particular context as opposed to the promotion of specific ideologies or programs. High-performing schools provide students with more academically oriented curricula and more challenging tasks (Stringfield, 1994). These effective schools are typically

characterized as learning, collaborative communities in which staff: (a) assume a shared responsibility for all students' learning, (b) monitor progress as a way of planning instruction for groups and individuals, (c) help one another learn more about the art and science of teaching, (d) in addition to family outreach (Taylor, Pressley, & Pearson, 2000). Importantly, these are some of the characteristics described by Bass and Avolio as elements of a strong climate.

Puma, Karweit, and Price (1997) conducted a study, *"Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity."* The study was one of a series whose purpose was to examine the effects of Chapter 1 on student achievement and other school-related educational outcomes. Data pertaining to the study were gathered during 1991-1994 from a nation-wide sample of students.

Three cohorts of students were selected from an original sample of 365 schools. Data were collected from students, parents, teachers, principals, district-level staff, and students' school records. The sample was composed from a grade span from first through ninth grade levels. The first grade cohort was a group of students who began first grade in 1991 and were tracked from their entry through completion of third grade in spring of 1994. The third grade cohort consisted of students enrolled in grade 3 in the 1990-1991 school year and were tracked from the end of their third grade year through completion of grade 6, spring 1994. The third cohort was a group of seventh grade students tracked from the end of their seventh grade year in 1991 through completion of ninth grade in spring 1993.

Data were compiled from the following; student data, parent questionnaire, academic achievement, teacher instrument, principal questionnaire, and the Chapter 1

district coordinator. Several types of student data were gathered: attendance, teacher ratings, in addition to a student questionnaire. The Comprehensive Test of Basic Skills 4th Edition was the assessment of student achievement. The teacher instrument provided information about certification, experience, school climate, and instructional strategies.

One finding was related to the comparison of average scores of high- and low-poverty, schools. Children in the poorest schools tended to perform lower than students in wealthier schools. Disadvantaged children were reported to exhibit growth over time despite not erasing the achievement gap between themselves and their non-disadvantaged counterparts. Finally, students selected to receive Chapter 1 assistance had test scores, or were rated by their teachers, below their nonparticipating classmates; and Chapter 1 students failed to close the achievement gap over time. This study like Coleman et al. (1966) suggested the fact that poor or disadvantaged children typically do not excel in school.

Several studies have demonstrated that proper schooling can impact impoverished African-American students' achievement levels in a manner that is consonant with non-poor Caucasian students (Brookover et al., 1979; Edmonds, 1978; Stringfield & Herman 1997). Studies of high-performing, high-poverty schools are valuable in terms of providing knowledge about best practices in school leadership, organization, and instruction. Moreover, such studies further support the idea that schools can be held accountable for all students' performance levels.

Hoffman (1991) is credited for producing copious research on the topic of high-performing, high-poverty schools, in a paper, *"Teacher and School Effects in Learning to Read."* Hoffman and Rutherford (1994) synthesized major findings from studies

published from 1970-1980. The literature relevant to effective schools is scanty from the 1980s through the1990s.

Hoffman highlighted eight elements related to effective schools: (a) clear school mission, (b) effective instructional leadership practices, (c) high expectations, (d) safe, orderly and positive environment, (e) ongoing curriculum improvement, (f) maximum use of instructional time, (g) frequent monitoring of student progress, and (h) positive home-school relationships. Hoffman and Rutherford's findings resulted from a synthesis of studies involving the Coleman Report (1966); Weber (1971); The New York State Study (1974); Ellis (1975); Wilder (1974); Brookover, et al., (1979); Brookover & Lezotte (1979); Phi Delta Kappa (1980); and Venezky & Winfield (1979).

In Hoffman's synthesis (1994) of the aforementioned studies, he concluded that effective schools exist where factors such as community background suggest otherwise. Furthermore, Hoffman identified three dimensions that were pertinent to effective reading programs: program characteristics, leadership behaviors, and psychological conditions. Psychological conditions pertain to the personality of a school. Personality involves the elements of community, commitment, order, expectations, and attribution which suggest student failure results from flaws in the program as opposed to the student. Further, these characteristics point to elements in the schools' climate as well as leadership behaviors as determinants of success in high-poverty-high-performing schools.

Most of early school effectiveness research derived from the comparisons of so-called effective and ineffective schools. Effective schools have been identified by measures on basic skill achievement tests. Several studies have demonstrated that proper schooling can impact impoverished African-American students' achievement levels in a

manner that is consonant with their white counterparts. High-performing, high-poverty schools provide for low-income and other historically marginalized groups of students the same learning opportunities as their counterparts in more affluent communities. Typically these effective schools are characterized as learning, collaborative communities in which staff members assume a shared responsibility for all students' learning.

Success with impoverished African-American students

Unique characteristics of the majority of effective schools are correlated with student success (Lezotte, 1991); these characteristics are called *correlates* by researchers. The correlates are the means to achieving high and equitable levels of student learning. It is expected that all children (whether they be male or female, rich or poor, black or white) will learn at least the essential knowledge, concepts and skills needed so that they can be successful at the next level next year (Lezotte, 1991).The following review of literature identified common attributes and components incorporated to successfully impact academic achievement with impoverished African-American students.

Researchers Stringfield and Herman (1997) reported on three promising programs, reform designs, and school components that have been found to support or enhance achievement among historically disadvantaged Americans. The researchers conducted a longitudinal evaluation of Barclay, a kindergarten through eighth grade school located in inner-city Baltimore, Maryland. The school is 94% minority and almost exclusively African-American. Eighty-two percent of the population receives free or reduced lunch.

Researchers reported on Barclay's implementation of the Calvert School's curriculum. Calvert is a private school located also in Baltimore, Maryland. Calvert's

curriculum is described as a reflection of the middle class clientele that it services. It was noted for imposing high academic and traditional demands. Student-generated products seemed to be at the center of the curriculum. Students were required to spend extended amounts of time writing and revising until final products were free of error. Students who participated in the Calvert program were compared to prior classes of students at the Barclay school.

Findings revealed that program students surpassed the control group at every grade level in the areas of reading and mathematics. Comparisons were made utilizing the Comprehensive Tests of Basic Skills and the Educational Records Bureau Test. Program students were also reported to have surpassed the city average in numbers of students achieving at least a satisfactory grade on the test.

The second school in Stringfield and Herman's study was Francis Scott Key Elementary School located in Philadelphia, Pennsylvania and servicing 622 students in grades kindergarten through five. An evaluation study was conducted observing the impact of the whole school reform program, Success For All. Of the schools' population, 21% were classified as Caucasian and the remainder was classified as African-American and immigrants from Southeast Asia. Ninety-six percent of Key Elementary received free or reduced lunch. Researchers reported all races had experienced consistency in low achievement.

Success For All, a whole-school reform program designed to ensure that all students are reading and computing at grade level by the end of grade three, was implanted. Dramatic increases in student achievement were reported during the first three years of program implementation. Subsequent studies were reported in which

achievement level maintained above national averages while the percentage of free and reduced lunch averaged over 95%.

The third and final school reported in Stringfield and Herman's study was Aynesworth Elementary School, a K-6 school, served 998 students in Fresno, California. Free and reduced lunch percentage was 88%. Population percentages were listed as follows: limited English proficient 33%; Hispanic 56%; Asian 23%; and African-Americans accounted for 14.5%. Aynesworth Elementary endured a school restructuring program for ten years. Researchers reported that two studies conducted at the school eight years apart found the students "high-performing, high-poverty." The mean academic achievement results were reported above the 50th percentile nationally and above the district average in practically every area and grade. Results stemming from the Individual Test of Academic Skills, indicated sixth grade students who ranked 90% free and reduced lunch scored in the 70th percentile in mathematics and averaged in the 60th percentile in reading comprehension and language arts. Researchers suggested that the intensity and duration of an intervention made a difference in the duration of their effects. More significant long term effects are made with intensive interventions surrounding staff and resource allocations. The greatest effects are associated with interventions implemented for at least a year and closest to birth.

Stringfield and Herman (1997) noted the most common federally funded compensatory education tool for helping "at-risk" students had been pullout remedial instruction provided under Chapter 1/Title I of the Elementary and Secondary Education Act of 1965. Stringfield and Herman suggested tutorials and computer assisted instruction as more effective than remedial pullout programs. Overall, findings supported

that school improvement plans involving curriculum and instruction rely heavily on focus, conviction, and high reliability on part of the staff members.

Ultimately, the researchers identified a formula for success that was stated as follows: high concentrations of poverty plus the identifiable racial/ethnic minority population along with carefully chosen innovations augmented by multi-year support for sustained implementation effort would dramatically improved academic achievements (Stringfield & Herman, 1997). This study substantiates that poor children as identified by Chapter 1, can improve academic achievement through appropriately applied program implementation. This is indicative of instructional leadership.

Outlier Schools

Studies of outlier schools have particularly concentrated on positive outlier schools (Brookover et al., 1979; Brookover & Lezotte, 1979; Ellis, 1975; New York State Study, 1974; Venezky & Winfield, 1979; Weber, 1971; Wilder, 1974). Variously referred to as studies of "exemplary schools" (Weber, 1971), "unusually effective schools" (Levine & Lezotte, 1990), and "high-flying" schools (Anderson et al., 1992), these positive outlier studies have made important contributions to effective schools. These schools have found a way to avoid the predicted negative achievement associated with urban schools (Clark, Lotto, McCarthy, 1980). Nevertheless, the review of the literature accentuates the terminology primarily with elementary schools (Brookover et al., 1979; Brookover & Lezotte, 1979; Ellis, 1975; Venezky & Winfield, 1979; Weber, 1971; Wilder, 1974).

The study of “outlier” schools derived from implications of the Coleman Report. Schools bring little influence to bear on a child’s achievement that is independent of his

background and general school context (Coleman et al., 1966). The term, "outlier," derived from statisticians who referenced studies that do not result in predicted patterns of behavior (Hoffman, 1994). One major strategy of school effectiveness research (Purkey & Smith, 1982) has been to statistically determine highly effective schools (positive outliers) and unusually ineffective schools (negative outliers). Outlier studies of program effectiveness can only occur after individual schools have been successfully identified in terms of high student achievement.

Purkey and Smith (1982) explained that outlier studies employed regression analyses of school mean achievement scores, controlling student body socio-economic factors. Furthermore, based on the regression equation, an "expected" mean achievement score is calculated for each school. This expected score was subtracted from the actual achievement level of the school to give a "residual" score for each school. The researcher then selected the most positive and the most residual scores and labels the schools they represent as unusually effective or ineffective.

Characteristics of these two types of schools were then assessed by surveys or case studies to determine the reason for the outcomes. Moreover, factors such as community characteristics in association with the school such as poverty and violence, should predict patterns of low achievement. In addition to the aforementioned, outlier studies rely on systematic and qualitative studies of school conditions that relate to such programs (Purkey & Smith, 1982).

One of the pioneers of effective schools research, Weber (1971), studied four inner-city outlier schools across the country. Weber sought proof that inner-city schools were capable of successfully teaching reading. Participants were inner-city third graders

from schools in each of the following school districts: New York, Kansas City and Los Angeles.

Participants illustrated the following criteria: a national grade norm median achievement level on a standardized reading achievement test and a low number of gross reading failures. Ninety-five schools nation-wide were nominated; Weber visited 17 of them. Four schools qualified in the final selection process. Reading scores of participating schools were located either at or above national average. Interviews were conducted with the faculty and administration. Weber reported that schools do make a contribution to student achievement. Common elements found in these successful programs were strong leadership that emphasized reading, continuous evaluation of pupil progress, an environment conducive to learning, use of phonics and individualization attention and responsiveness within the curriculum to needs of the students.

Research by Weber supported the importance of strong leadership in a school's reading program. For instance, reading specialists in these particular schools coordinated the curriculum in addition to overseeing staff development. Also reported, the status, "effective school" or "successful school" requires a process which could transpire within a three to nine year period. These findings further substantiated the importance of school leadership's relevance to student achievement particularly in urban areas. Despite the identification of such schools through quantitative studies, this study employed qualitative measures which limit generalizability of findings.

The New York State Office of Education Performance Review released a report in 1974 similar to the study conducted by Weber. Researchers in this study were searching for influential school factors of reading achievement. Two elementary schools were

selected from New York, to participate in the study. An analysis of reading achievement related to both a state adopted criterion referenced test as well as the Metropolitan Achievement Test. A review conducted by evaluators finalized the participating schools as one low-achieving school and one high-achieving school. Conclusions were drawn from interviews and observations.

The schools shared the following commonalities: median family income, percent of families on welfare, pupil ethnicity, percentage of pupils with second language difficulty, percentage of pupils with free lunch eligibility, as well as pupil mobility. The Macmillan Textbook Test and the Bank Street Informal Placement test were administered to a sample of students from both schools. The tests results were scrutinized to determine achievement differences between schools.

Although significant differences were reported at both the fourth and sixth grade levels, differences were not found at the second grade level. Reading instruction was reported as being similar between both schools. Conclusions indicated the following: personnel in the more effective school were driven toward producing positive student outcomes despite out-of-school factors. Students in the less effective school were described as disruptive and illustrated a lack of interest due to an un-stimulating learning environment. Furthermore, communication between the regular classroom teacher and support personnel was highlighted as key regarding the more effective school.

Greater emphasis on testing and program continuity was also attributed to the more effective school. Administrators were reported as encompassing a good balance between management and instructional skills. The New York report expanded Weber's work insomuch as concurrently conducting a study of an effective and ineffective school

for comparison purposes. Although findings support those aforementioned, the number of schools provide for limited generalizability. This study was conducted utilizing qualitative means opposed to quantitative means which are typical of such studies.

Wilder (1974) performed research as part of a national study of compensatory reading programs funded by the U.S. Office of Education. Seven hundred forty-one schools were randomly selected from an original national sample. Family income and minority representation were the stratifying variables used to identify the sample. Principals and teachers at each school responded to survey questionnaires. Participating teachers in the study were those of second, third and sixth graders.

Two hundred sixty-two schools were selected for a second phase of the study. In this portion of the study, students responded to grade level standardized assessment for reading. Students' reading attitudes were measured as well. Interviews along with attendance records were utilized to determine a degree of measurement for effectiveness in all classes. Students who performed as predicted according to pre-test were differentiated from students whose performance conversely improved or worsened in reference to predictions.

A factor analysis for essential program characteristics was used to form clusters of schools. These clusters, in addition to the schools within clusters were then ranked in reference of effectiveness measure. The most effective schools within the two most effective clusters and the least effective schools within the two least effective clusters were then selected for on-site visits by researchers.

A total of twenty-nine schools were visited. Predictions were made about the effectiveness of the schools. Findings identified these commonalities: reading as priority,

leadership in the reading program, focus on basic skills, abundance of materials, principal catalyst for communication amongst teachers. A large population of high quality teachers was not manifested in the results as noted by Wilder. The researcher's confidence in the findings, stem from the number of schools in the sample in addition to the methodology which incorporated in-depth analysis of teacher perceptions through interviews. The researchers in this study utilized quantitative measures despite the qualitative measures that typically define most studies of this caliber. Nevertheless, this study did not identify any specific principal leadership behaviors that are associated with school climate and positively impact student achievement.

Ellis (1975) was reported as conducting the first attempt to systematically test for a set of hypothesized program effectiveness variables with a control group (Hoffman, 1994). Twenty public, inner-city elementary schools located in Massachusetts were visited, observed, and characterized. School selection was based upon standardized reading achievement test administered to sixth grade students. Ten of the schools were identified by the average performance of students which placed them at or above the national norm grade for that grade level. These schools were then matched with a failing school according to measures of poverty, ethnic/racial composition, and proportion of bilingual students.

Participating schools underwent classroom observations and interviews with both faculty and staff. Testing accounted for student attitudes and teacher knowledge of children's literature. The data collected were designed to relate to one of 11 factors. The factors were leadership, coordination, additional reading personnel, atmosphere,

individualization, expectation, and strong emphasis on reading, use of phonics, staff training and experience, and quality of teaching.

With the exception of teaching quality, the factors of school level were derived from Weber. Each team developed a consensus rating for the schools they visited on each of the 12 factors. The rating scale ranged from 5 = definitely successful and 1 = definitely failing. Four types of schools were identified from the teams' analyses.

1. True positive (N = 4) high achievement / High on factors
2. False positive (N = 5) low achievement / High on factors
3. False negative (N = 6) high achievement / Low on factors
4. True negative (N = 3) low achievement / Low on factors

Schools in Group 1 were found to be low in individualization and high on teaching quality. Schools in Group 2 were reported as high in area of teaching quality. Schools in Group 3 are described as "drill schools," or "the true contradiction in the study." Ellis argued that a school may assume one of many patterns to be effective or successful, no single set existed. This study furthered the general findings of previous studies which also utilized qualitative measures. Weber as well as the New York State study omitted the concept of teaching quality as a significant factor; although Ellis incorporated this concept as a factor in this particular study, this study clearly delineated different patterns in school climate. This study did not identify any specific principal leadership behaviors that are associated with school climate and positively impact student achievement.

Brookover and Lezotte (1979) studied eight elementary schools in Michigan. Researchers examined the process in which a given school becomes less or more

effective. These schools were identified from a state-wide population according to need and achievement trends. A school was considered as high-need if less than 50 of the fourth grade students achieved 75% or more of the objectives on the 1974 state-wide basic skills achievement test. The status of low-need was applied to schools if 50 or more of the fourth grade students achieved 75% or more of the objectives on the state assessment.

Also reported, more achievement variables were applied to further determine characteristics. For example, a school was identified as an improving school if it showed an increase of 5% or more on the percent of students attaining at least 75% of the objectives tested and a simultaneous decrease of 50% or more on the percent of students attaining less than 25% of the objectives tested between 1974 and 1976. A declining school was identified if it evinced a 5% decrease or more in the percentage of students achieving less than 25% of the objectives tested between 1974 and 1976. Selection was finalized to eight sites, six improving (five high-need/one low-need) and two declining, low-need, schools.

The schools varied in characteristics such as ethnicity, socio-economics, and community. Improving schools were described with the following characteristics: high student expectations, extended direct instruction, teacher accountability, rejection of status quo, principal performs as strong instructional leader who emphasizes program's goals, and teacher commitment. Schools viewed as declining or less effective were described as being unknowledgeable about the problem of low achievement.

This study was the first of its kind. Data gathered from one level, the fourth grade, provided for a weak representation of the entire school's effectiveness. The study utilized

quantitative measures as opposed to measures which are typically qualitative. This study did not identify any specific principal leadership behaviors that are associated with school climate and positively impact student achievement.

Brookover et al. (1979) attempted to compare racially different but comparably achieving schools. Researchers conducted a comprehensive analysis of instructional programs in Michigan elementary schools. In addition to the analysis, a portion of the study focused on a case study analysis of four schools.

Two of the schools were reported to have predominantly Caucasian populations and the remaining two were predominantly populated with African-Americans. One of the schools in each pair was high achieving while the other was low achieving. Achievement was determined by the Michigan School Assessment. Qualitative data were collected by research teams that employed questionnaires, interviews, and observations. The following factors were identified as distinguishing the more effective from the less effective schools: (a) time spent on instruction, (b) teacher commitment, (c) prevalence of teaching games, (d) student expectations, (e) better use of reinforcement, and (f) principal as program leader.

Findings revealed some inconsistent facts about principal leadership effectiveness. For instance, the principal of the more effective school and the principal of the less effective school were rated as good administrators despite not being rated strong instructional leaders. Further reported, findings were clouded by the fact that the students in the high achieving African-American schools were actually achieving a lower level on the test used to identify schools than the students in the low achieving Caucasian school (Hoffman & Rutherford, 1994).

Venezky and Winfield (1979) sought to determine what program factors are related to teaching disadvantaged students to read successfully. Two urban schools served as participants. Researchers reported that both schools had evinced different patterns of success from 1971. One school was indicated as having 60% of the children reading above grade level in 1975. The other school was identified as having maintained a relatively low level of reading achievement.

Data were collected using extensive interviews, classroom observation, analyses of school records and memos, and an examination of reading specialists' logs. Principal leadership was cited as a significant factor on the instructional program at the more effective school. The principal was attributed for the manner in which the importance of the school's reading program was communicated, in addition to being very task oriented. Homogenous grouping was accounted for restricting the range of student abilities in classrooms. Consistency was a term also applied to the more effective school. Consistency implied utilization with the same program for several years. Researchers recommended one reading program with a single scope and sequence.

A weak process undertook for how the study underwent in the selection of an effective school. The comprehensive use of data sources portrayed this study as an ethnography as opposed to a case study.

Phi Delta Kappa (1980) conducted a study that sought to determine why effective schools looked as they did as opposed to what they looked like. A total of eight Midwestern urban districts participated by submitting a case history of an improving school in their district. Each case study responded to four major elements of interests. Personnel, parental involvement, school environment, and instructional programs were

the aspects pertaining to the results of the study. Variance in the quality as well as the coverage was noted in the results.

Synthesis of the eight reports manifested a broader scope in the elements of effective schools than anticipated. Findings in the area of personnel supported the importance of the principal as an instructional leader and teachers working with parents along with possessing high expectations for students. Instructional programs were described as being priority while parental involvement was also considered a contributing factor. A healthy school climate as well as a new physical plant or expanded facilities were cited as significant in the area of school environment.

This study was unique regarding its data collection processes, particularly the manner in which participants produced results. Although the findings supported strong principal leadership, the instrumentation utilized to gather data appeared to lack reliability. This study involved measurements that were truly subjective and did not incorporate any quantitative measures. The study did not identify the grade level of the schools supplying the analyses let alone the characteristics of the students in the schools.

The outlier studies provided for a good start for examining and determining the constituents and correlates of student achievement in urban schools. Nevertheless, the studies typically analyzed elementary schools utilizing qualitative measures. Furthermore, most of the studies recognized the significance of strong principal leadership but did not identify any specific behaviors that were conducive to school climate that positively relate to student achievement in African-American students at the middle school level.

Researchers since the Coleman Report (1966) have been manifesting results indicating all children in America can learn. In 1982, Ron Edmonds published a document, *"Programs of School Improvement: An Overview."* Edmonds supported the view that family is paramount in the extent a child excels in school. His report identified correlates of effective schools as: instructional leadership, instructional focus, orderly environment, strong teacher beliefs/expectations, and student achievement as basis of evaluation. Basic beliefs of the effective school movement are: all children can learn, schools control enough variables that all students do learn, schools should be held accountable for pupil achievement, and schools should disaggregate data to ensure all children are learning, and finally, internal and external stakeholders are the persons qualified to plan and implement necessary change (Effect Schools Products, 2001).

Correlates have developed over years of research into the following: instructional leadership, clear and focused mission, safe and orderly environment, climate of high expectations, frequent monitoring of student progress, positive home/school relations, an opportunity to learn, and student time on task.

Successful Urban Schools

A large portion of high poverty schools are also deemed as low performing. However, high poverty, high performing schools have demonstrated that students attending schools with a low mean socio-economic status can be successful. In addition to believing that all students can learn, successful in association with high poverty, are based on the belief that all students can excel. High performing schools tend provide students with more academically oriented curricula and more challenging tasks (Bell,

2001; Stringfield, 1994). They are particularly noted for huge gains made on standardized achievement tests.

Successful schools are frequently defined with positive changes in any one or a combination, of the following four variables: (a) student achievement, (b) student attitudes toward the school or themselves as learners, (c) teacher attitudes toward the school or students as learners, (d) community/parent attitudes toward school (Clark, Lotto, & McCarthy, 1980). In most instances the evidence of exceptional performance was based upon higher than predicted levels of student achievement. The review of the literature typically highlights elementary schools that meet this criteria and a very scant number of secondary schools.

Designs for Change, (1998) conducted a study to examine the progress of elementary schools in Chicago, Illinois. Another major focus of the study was to determine whether schools with substantially improved reading achievement were inclined to employ a distinct set of strategies when compared with schools that showed no reading test improvement trend. The study, *"What Makes These Schools Stand Out,"* utilized a school-by-school-analysis of the Iowa Test results. The years in the analysis ranged from 1990-1997.

The report indicated the following factors as problems for assessing academic achievement: student mobility, practices for student retention in grade, exemptions from testing, non-equivalence of alternate forms of the test at specific grade levels, and differences among student cohorts. Student mobility applied to the influx of students with high or low levels of achievement that may affect test results. Practices for student retention in grade, refers to an increase or decrease in student achievement due to low

achievers being retained or promoted prior to testing. Exemptions from testing, refers to the exclusion of special education or limited English proficient students as well as those students who go unidentified for make-up tests.

The phrase, difference in student cohorts, is indicative of the contributing factors of students each new, school-year. Non-equivalence of alternate forms of the test at specific grade levels implied the difficulty in judging progress observed in the analysis due to alternate forms of the Iowa Test that were employed each year of the analysis to prevent cheating.

One hundred eleven elementary schools had significantly improved their reading achievement, including the achievement of their lowest-scoring students. The number of students served by these improving schools is larger than the elementary school enrollments of half of the nation's 50 largest cities (Designs for Change, 1998). The group of 111 schools that were "Substantially Up" included 87 schools that were low-achieving in 1990. These schools improved their percent of students at or above the national norm by 14%. They also reduced their percentage of students in the lowest quartile nationally by 14%. After these schools were identified, analysis of whether the most improved schools elicited a set of distinctive practices was sought.

A multivariate analysis of covariance was conducted to discern the differences between the practices of schools that were low-achieving in 1990, yet subsequently showed a trend of substantially improved reading achievement, versus schools that showed a low-achievement trend. Designs for Change found five essential supports for student learning: (a) school leadership, (b) family community partnerships, (c) school environment/culture, (d) staff development and collaboration, and (e) instructional

program which referred to staff priority and program coherence. The results further substantiated findings associated with high-performing achievement trends in urban elementary schools.

Miles and Darling-Hammond (1998) investigated how teaching resources are organized at five schools that support high levels of student learning in *"Rethinking the Allocation of Teaching Resources: Some Lessons from High-Performing Schools."* A total of five schools participated in the study in the following locations: Maine, New York, Ohio, and Tennessee. Free and reduced lunch eligibility was utilized to determine the level of SES. The lowest measurement of SES among the population of the five schools was 60% free and reduced lunch. Criteria for schools included student performance and high graduation/college admissions.

To understand the resource of allocation practices of each of the five schools, information about school expenditures, staffing and student scheduling was gathered. District level budget and staffing information allowed comparisons of the sample schools with more traditional schools. The analysis focused on resources providing the school's academic program and support services. Researchers conducted interviews with administrators and teachers and examined written materials available at each school to understand how the school had reorganized and how this reorganization was linked to educational purposes.

Also reported was that researchers observed staff meetings and classes. Resource allocations strategies used by the sample sites incorporated the following: (a) reduction of specialized programs, (b) more flexible student grouping, (c) structures to create more personal environments, (d) longer and varied blocks of instructional time, (e) more

common planning time, (f) and creative definition of staffing roles and work day. Findings further indicated that elementary schools allowed for more flexible individual instruction than secondary schools.

Researchers at Education Trust (1999) highlighted principles of resource allocation: reduction of specialized programs (such as Title I and special education), increased flexibility of student grouping, structures that create more personalized environments, longer and varied blocks of instructional time, more common planning time for staff and creative definitions of staff roles and work schedules. The team of researchers also indicated that large-scale quantitative studies suggested that achievement is correlated with schools' designs that enable teachers to both spend more time over extended periods with small groups of students and to make instructional decisions in teams.

Wang, Wong, and Kim (1999) conducted *"A National Study of Title I School-Wide Programs: A Synopsis of Interim Findings."* The researchers sought the identity of effective policy and practices for achieving student success in Title I school-wide program schools. The schools selected were comparable in terms of demographic characteristics. Site selection included data on achievement test scores, percent of students qualified for free and reduced lunch, enrollment, racial characteristics, and level of the schools.

Instrumental measurements included the following methods: classroom observations, staff interviews, surveys of staff and parents. Surveys were designed to obtain information on the level of implementation of Title 1 legislative expectations and school climate. The teacher and principal survey addressed school climate and parent

involvement. A Likert-type scale with 5 points, ranging from "strongly disagree" to "strongly agree" was administered. Data were collected during the 1997-1998 school year from 33 schools in nine urban and four rural districts. Surveys were collected from 597 teachers, 22 principals, and 692 parents. Classroom observations accounted for 149 teachers and 882 students. Interviews were conducted with 30 principals, 183 teachers, 11 parent focus groups, and 17 Title 1 coordinators.

The following tests were administered to students in their respective regions throughout the study: Iowa Test of Basic Skills, California Achievement Test in Cleveland, Michigan Assessment Test, Texas Assessment of Basic Skills, New Jersey Early Warning Test, Philadelphia Comprehensive Test of Basic Skills, and Virginia School Assessment Program. Seventeen schools were reported to be effective while 16 were found to be ineffective.

Johnson and Asera (1999) released a report, *"Hope for Urban Education: Study of Nine High-Performing, High-Poverty Urban Elementary Schools,"* commissioned by the U.S. Department of Education. Researchers attempted to explain how nine urban elementary schools nation-wide servicing children of low socio-economic backgrounds, achieved high levels of academic performance. Each of the schools selected for this study were recipients of Title 1 funding. These federal dollars were utilized to create Title 1 school-wide programs within each school. The majority of the students of participating schools qualified for subsidized lunch. Schools ranged throughout several regions of the United States and serviced varied populations.

Researchers reported that none of the schools were high-performing five years prior to the study based on criteria imposed by *No Child Left Behind*. The status of high-

performing was accomplished in a three-to four-year period for some schools while others took five or more. Researchers reported that data were obtained through the Council of Chief State School Officers and state department education data made available via internet. Achievement data were gathered from three years of the study. Schools that were excluded from the study were those which either had already been nationally recognized or because their achievement levels were high but had decreased in recent years. The final sample of schools was located in the following cities: Boston, Massachusetts; Atlanta, Georgia; Detroit, Michigan; San Antonio, Texas; East St. Louis, Illinois; Milwaukee, Wisconsin; Houston, Texas; Cheverly, Maryland; and Chicago, Illinois.

Variations amongst the schools manifested in student enrollment, grade spans, as well as ethnic composition. Six of the schools had less than 500 students while the remainder enrolled more than 500. Enrollment range from as small as 283 students to 1,171. Four schools had kindergarten through fifth grade. Two schools had pre-kindergarten through fifth grade. Two schools were reported as serving children in kindergarten through sixth grade and one school serving pre-kindergarten through eighth grade. Seven of the participating schools identified at least 80% of their students as low-income through the federal subsidized lunch program. One of the schools identified 71% and the remaining school identified 63% of their students by free and reduced lunch. Six of the schools comprised for a majority African-American population. Two schools comprised for an Asian-American majority and one evinced a Hispanic majority population.

After utilizing quantitative data to identify schools, qualitative data were gathered to generate a case study for individual schools. Teams of two-three researchers conducted two day visits with each participating school. During the visits researchers conducted interviews with building principals, a minimum of one teacher per grade, other campus administrators, and parents. Focused groups were also employed to gain teacher and parent perspectives. Interviews transpired with district personnel as well as the superintendent of building principals.

Researchers reported that all nine schools had engaged in comprehensive reform models for the sake of salvaging student achievement. Only two popular models were employed: Success For All and the Accelerated Schools Program. Moreover, researchers reported evidence of the nine components of the comprehensive school reform explicated in the federal 1998 Comprehensive School Reform Demonstration Program. Components were reported as follows: use of research-based practices, intense professional development, teacher buy-in, and district support. One of the findings indicated that schools with the greatest district support achieved gains rapidly.

Ten improvement strategies were reported to generate a "deeper understanding" of how these particular schools produced high levels of student achievement: (a) targeting an important visible attainable first goal, (b) refocusing energies on service to children, (c) building students' sense of responsibility for appropriate behavior and creating an environment in which students are likely to behave, (d) creating a collective sense of responsibility for improvement, (e) increasing instructional leadership, (f) aligning instruction to standards and assessments, (g) getting teachers the resources and training perceived necessary to teach, (h) creating opportunities for teachers to work, plan, and

learn together, (i) winning the confidence and respect of parents and building partnerships with them, (j) creating additional time for instruction, and persisting through difficulties, setbacks, and failures. This study is significant in the manner that it employed both quantitative and qualitative data to evince similar results in the area of high-performing, high-poverty schools. Nevertheless, the identification of specific leadership traits of principals was not specified; nor how specific leadership traits could be employed to affect school climate in a manner to positively impact student achievement at the middle school level.

Borman et al. (2000) conducted a study, *"Four Models of School Improvement: Success and Challenges in Reforming Low-Performing, High-Poverty Title I Schools."* This study sought to understand the processes, and determine some of the effects of various school-wide improvement efforts in high-poverty environments. The schools throughout various regions of the United States: West Coast, East Coast, Midwest, and Southern region were recognized by pseudonyms. Each district implemented a different reform model.

A mixed method consisting of qualitative and quantitative research design was utilized for this study. The qualitative measures consisted of comparative case studies of the nine improvement schools. Southern schools were interviewed once while principals in the remaining districts were interviewed twice. Teachers at each school underwent interviews as part of a focus group or individually. Detailed observations were also reported. Triangulation of classroom observations and teacher focus group, along with principal interviews were reported to have been repeated throughout the study. Quantitative measures were based on a five-item scale of the level of authentic

instruction observed in the school, average percent of students on task, and annual school-level achievement data for reading and math.

Achievement data were obtained for the year prior to the school's implementation of its improvement process, which served as the baseline, up until the most recent testing cycle (Spring 1998 or 1999). Third through fifth grade data were gathered in a yearly cross sectional manner. The Comprehensive Test of Basic Skills, Fourth Edition (CTBS/4) the Stanford Achievement Test, Ninth Edition (SAT 9), the Iowa Test of Basic Skills served as measurements of achievement among the districts. Researchers reported about the necessity of adaptability to understanding student outcomes. Adaptability or the ability to foster improvements in practice is an attribute associated with the success of a school reform. Borman et al. stated:

> An adaptable reform allows for inventiveness and active problem solving among teachers as they use the reform to improve their practices and to change the values, attitudes, and behavior of students on both academic and nonacademic tasks. (p.5)

The standard that was applied for judgment of successful school improvement was outcomes of standardized testing. Observation along with school-level mathematics and reading achievement scores were gathered at the beginning of each school's improvement efforts to the spring of 1998-1999. With the belief that adaptability of a reform by teachers is linked to both the short-term and long-term implementation and effectiveness of the change effort, researchers reported on the reform's potential to foster professional growth amongst teachers.

Three West Coast schools involved in the reconstitution process were identified by the district office. Two Southern schools were selected for the study for their implementation of the Roots & Wings program. The East Coast schools in the study implemented the Curriculum Project (CP) with a local partnership. The Midwestern schools instituted grassroots site-based reform efforts. Researchers reported that the grassroots site-based reform schools and the nationally recognized whole–school reform schools experienced the greatest achievement gains.

Five distinguishing characteristics were identified with effective schools: (a) how the model was implemented, (b) teacher beliefs (before and during implementation), (c) fiscal resources, (d) community outreach, and (e) implementation of a nationally proven school reform model. The researchers contended that in cases in which schools utilized nationally proven models, there was growth in measures of student academic achievement and the school professional climate only when teacher buy-in was present. Unlike Stringfield and Herman (1997), this study employed qualitative as well as quantitative techniques in support of programs nationally acclaimed for school reform as opposed to those of local recognition. Furthermore, like Johnson and Asera (1999) the use of a mixed method provided for generalizability but lacked insight regarding urban middle schools with a dense African-American student population.

Wang and Manning (2000) reported on a successful approach to restoring failing urban schools. This project involved six low-performing elementary schools located in the District of Columbia Public Schools. The initial goal was to turn the schools around by implementation of the "Community for Learning" (CFL) comprehensive school reform model. This collaborative demonstration project was implemented initially in five

elementary schools during the 1996-1997, school-year. A sixth school was added during the 1997-1998, school-year. Identified as some of the lowest performing schools in the district, these schools were mandated by the superintendent to implement a whole-school reform developed by the Laboratory for Student Success (LSS), the Mid-Atlantic Regional Educational Laboratory at the Temple University Center of Research in Human Development and Education. CFL is an implementation delivery framework designed to assist schools in implementing a comprehensive approach to school reform that is systemic and sustainable in achieving student success (Wang & Manning, 2000).

During the second year of the CFL program, classroom observations were conducted in all six demonstration schools during the fall and spring to obtain information on teacher and student classroom behaviors and to examine the pattern of classroom process changes resulting from program implementation. Findings on program implementation and outcomes for the first 2 years were positive. All of the six schools implementing CFL exceeded the district-mandated improvement standard. Wang also reported that the overall climate of the school was changed.

Findings suggested an overall pattern of active and task-oriented classroom behavior from the students. Both teacher and student behaviors were reported as consistent during observations in the spring and fall. As opposed to the management of children, teachers were reported as spending more time on instruction. The extent to which positive changes in the patterns of classroom processes and behaviors could be attributed to changes in the degree of program implementation, a multiple correlation analysis was performed. Researchers reported a high turnover rate for both teachers as well as students and in some cases administrators during the second year of the program.

The findings are similar to studies aforementioned regarding high-performing, high-poverty schools. The study did not account for principal leadership behaviors that impact school climate and student achievement on urban middle schools servicing primarily African-American students.

Bell (2001) issued a report, *"High-Performing Schools,"* at the High-Performing, High-Poverty Symposium in California. The purpose of the symposium was to further the understanding of why some schools were effective in educating students who historically had low academic achievement. Furthermore, the aim of the symposium was to contribute to the body of existing knowledge what helps students from diverse backgrounds learn.

Twelve schools were identified in the State of California, ten elementary and two high schools. The criteria for each were a state-wide ranking of seven on the Academic Performance Index (API) for two years. The Academic Performance Index measures school performance in comparison to all schools statewide. The scale ranks from 1-10. Additional criteria consisted of the following: 50% or more students qualified for free and reduced lunch at the high school level and 60% or more at the elementary level; and inclusion of a high percentage of students' test scores in the schools' API over a two-year period.

Bell reported on 14 common themes discussed at the symposium The themes identified were as follows: (a) rigorous standards for all students, (b) high-quality teaching, (c) high-expectations, (d) safe and orderly environment, (e) district support, (f) strong instructional leadership, (g) school resources, (h) shared leadership, (i) collaborative planning, (j) regularly assess and utilize student data, (k) early intervention,

(l) promoting a policy of inclusiveness, (m) actively work with parents, and (n) articulation of the academic program across grade levels.

These themes were deemed feasible at schools through three overarching principles: the strength of site and district leadership, commitment toward a learning community, and an understanding of research-based principles reflecting how children learn. Middle schools were not included in this symposium and literature was not documented indicating what principal behaviors can be implemented to produce similar results.

Education Trust (2001) conducted a study, *"Dispelling the Myth Revisited: High-Poverty Schools Exceeding Expectations,"* which reported on the evaluation of over 1 million test scores. With the exception of Idaho, New Mexico, and North Dakota, all states including Washington, D.C. participated in the study.

Schools were in their respective state's top third percentage for reading and mathematics achievement. Three categories were utilized to determine high-performing, high-poverty schools. Those schools which ranked in their state's top third for either of the following: high-poverty, high-performing, and those included in both categories. This study conducted surveys and phone interviews with 3,592 high-performing, high-poverty schools, 2,305 high-poverty schools, and 1,320 high-performing, high-minority, high-poverty schools. An undisclosed number of principal interviews allowed researchers to revisit common factors found in the 1999 survey.

The report suggested that interstate comparisons are not appropriate as states identify diverse standards of student achievement and use varying methods to assess student progress. Bell noted in the California study that the staffs of participating schools

portrayed moral leadership. This implied that staff along with students visualized themselves as part of the system as a whole. No emphasis on middle schools was reported regarding specific principal leadership behaviors that affect school climate and its impact on student achievement.

Towns, Cole-Henderson, and Serpell (2001) sought to identify what enables some urban schools serving low-income, minority students to succeed while most do not. The researchers employed both quantitative and qualitative methodologies to locate schools that met the success criteria and to determine factors that contributed to the schools' success. All schools served primarily low-income, African-American students, and at least 50% of the students scored at or above grade level on a state or locally mandated test for the past two years. The number of completed surveys (29) represented a 47% response rate. A total of 62 schools across the nation were identified for the sample. The sample consisted of 51 elementary schools, one elementary/middle school, 3 middle schools, and seven high schools.

The researchers combined, self-reports from a principal questionnaire, along with interviews and observations to obtain a comprehensive understanding of the schools. The interviews were conducted with principals, teachers, students, and parents. Researchers observed classes with lessons using model reading and math programs in four of the identified elementary schools.

All schools possessed the common correlates of effective schools. Commonalities were strong administrative leadership, high expectations for achievement, monitoring student progress, discipline and order, emphasis on skills and homework, teamwork, and

parental involvement. The number of middle schools (three) in the study accounted for limited generalizability as it relates to the current study.

Ragland, Clubine, Constable, and Smith (2002) examined the practices that supported achievement of high-performing, high-poverty schools. Researchers chose five elementary schools in Texas because the state had developed a standards-based accountability system that provided a great deal of data on schools. Furthermore, researchers reported that Texas had a significant number of high-performing, high-poverty elementary schools. Texas' accountability system rated elementary schools according to attendance and student performance on the Texas Assessment of Academic Skills.

During the selection process, researchers used school demographics and performance ratings from the 1997-1998 school-year, in addition to, the percentage of low-income students. Schools had to evince a 60% population rate for subsidized lunch to qualify for the study. Three of the schools were reported to have 88% of students qualified for free and reduced lunch. Ragland et al. (2002) utilized qualitative research methods to comprehend the practices shown in the selected schools. The following procedures were conducted: interviews, focus groups, observed classes, and a review of student records.

The case studies indicated several strategies according to researchers that supported the achievement of students enrolled in five high-performing, high-poverty elementary schools. They are as follows: (a) schools embraced the belief that all students can be academically successfully, (b) administrators put the talents and experience of teachers to their best use, (c) staff members regularly communicated across teaching

areas, (d) staff positively utilized student assessment data, (e) staff nurtured a student-centered culture, (f) staff identified and addressed academic barriers, (g) parents were viewed as critical partners, and (h) special education programs were valued and supported.

Loeb (2003) produced a synthesis of one symposium and five studies including Education Trust and other research teams. The study highlighted attributes of high-performing, high-poverty schools with specific attention given to the manner in which such schools allot money, time, and human resources. Initially, Loeb summarized the methodologies in the studies and then addressed questions pertaining to each study.

The five studies included: (a) *"Hope for Urban Education: A Study of Nine High-Performing, High-Poverty Schools,"* (b) *"Dispelling the Myth: High-Poverty Schools Exceeding Expectation,"* (c) *"Hope for Urban Education: Study of Nine High-Performing, High-Poverty Urban Elementary Schools,"* (d) *"Rethinking the Allocation of Teaching Resources: Some Lessons from High-Performing Schools," and* (e) *"A National Study of Title I School-Wide Programs: A Synopsis of Interim Findings."*

Loeb reported the claims about resource allocation in high-performing, high-poverty schools. Resources were explicated in three categories: financial, time, and human resources. The report contended that a principal's leadership could be conceptualized in terms of all of the types of resources.

The report referred to time as a "precious tool" to school communities. Time was analyzed in terms of the duration of school change processes, leadership choices regarding time, and the arrangement of teacher's time. Principals of such schools devoted more time in classrooms. Schools extended instructional time and allotted more time for

instructional personnel to work, plan, and learn together. An orderly environment on behalf of the principal contributed to time as well. This was believed to compensate more time for instruction.

Human resources or the allocation thereof, accounted for instructional arrangement and parent involvement efforts as well as the ethos or reform efforts. Loeb noted that successful schools required flexibility in staffing as well as student grouping. Furthermore, teacher beliefs were cited as attributes to successful schools. The beliefs of teachers before and during implementation in the reform process promoted their willingness to be committed. In the studies synthesized by Loeb with the exception of Miles and Darling-Hammond's, *"Rethinking the Allocation of Teaching Resources: Some Lessons from High-Performing Schools,"* all noted the significance of parental involvement. The findings are consistent with other findings of high-performing, high-poverty schools.

Taylor, Pearson, Clark, and Walpole (2000) as part of CIERA's scope of work, conducted a study to examine school factors and teacher factors contributing to primary grades, students' growth, and reading achievement. Researchers not only studied school and classroom variables in effective schools as compared to moderately effective and less effective schools, but also at the classroom practices of accomplished teachers and less accomplished teachers as well.

Fourteen schools in Virginia, Minnesota, Colorado, and California with 28 to 92% of students qualifying for subsidized lunch participated. Two teachers in each of grades K-3 from every participating school as well as two low and two average readers per teacher served as subjects. Principal participation consisted of merely asking teachers

who they judged to be average or better to participate, in addition to completing a questionnaire, and enduring an interview. From December through April teachers were observed a total of five times. Two weekly time logs of instructional activities in reading language arts were completed by teachers. Furthermore, a subset of teachers was interviewed. Student gains in the manner of a composite in the area of reading along with a school's third grade reading achievement was used to establish school effectiveness. A case study was reported for each school.

The observations, questionnaires, interviews, and case studies accounted for the following school related variables: (strong/weak) link to parents, building communication, systematic evaluation of pupil progress, and possession of research-based early reading interventions. Findings provided significant implications in the area of school factors. For instance, school effectiveness was significantly related to strong links to parents and building communication. All schools used a collaborative model in which regular teachers, Title 1, reading resource, and special education teachers were cohesive in providing small group instruction.

The study illustrated the need for not only teacher beliefs, but it signified the idea of milieu within a school. These findings are consistent with aforementioned studies.

Researcher Reeves (2003), president of the Center for Performance Assessment, conducted sight visits and analyses of accountability data in high-performing, high-poverty schools. His investigation included associations between instructional strategies and academic achievement results. Consequently, a categorical analysis of instructional practices in these schools was performed. Reeves sought to identify the extent to which

there was a common set of behaviors exhibited by the principals and teachers in schools with high achievement, high minority enrollment, and high poverty levels.

The research expanded from 1995 through 1998. Data was gathered from 228 schools and 130, 000 students. The researcher investigated schools on the elementary, middle, and high school levels. Schools' locations ranged from urban, suburban, and rural settings. Variety in student populations was also documented. Students populations were identified as "overwhelmingly poor and/or minority to schools that were largely Anglo and/or economically advantaged" (Reeves, 2003).

The researcher referenced the schools in the study as "90/90/90 Schools." The schools were termed this due to the following characteristics: 90% of the populations received free and reduced meals, was of 90% ethnic minority, and 90% met or achieved high academic standards according to independently conducted tests of student achievement.

The study noted five common characteristics of the schools educational practices as follows: (a) focus on academic achievement, (b) clear curriculum choices, (c) frequent assessment of student progress and multiple opportunities for improvement, (d) emphasis on nonfiction writing, and (e) collaborative scoring of student work. The researcher contended that the practices were inexpensive, mundane, and replicable and held promise for improving student achievement and closing the equity gap in schools of any demographic description.

The study failed to mention the number of middle schools accounted for in the study in addition to the specific behaviors that a principal could perform to positively impact school climate.

Mosenthal, Lipson, Torncello, Russ, and Mekkelsen (2004) examined the contexts and practices of 6 Vermont elementary schools in a study, *"Contexts and Practices of Six Schools Successful in Obtaining Reading Achievement."* Students in attendance of these schools met or exceeded state-wide reading standards administered at the second and fourth grade level. A cluster analysis was performed from demographic data of all elementary schools in Vermont. Clusters were identified by high, low, and mid economic status communities. Two high-performing and one low-performing schools were selected from each cluster. Researchers conducted interviews and observations.

Findings indicated that all SES clusters had high-performing schools and that, among these schools, instructional approaches varied. Four factors common to successful schools yet unnoticeable in less effective schools were identified. They are as follows: (a) stability in administrative leadership and literacy instruction implied commitment, (b) school community focused toward student achievement, (c) teachers were knowledgeable and articulate, and (d) opportunities and ample time for reading and discussing books were provided unto students. Despite using qualitative measures as opposed to quantitative, the study lacked an urban school district in which middle schools with dense African-American populations were examined.

Table 1
School Improvement Strategies

Commonalities of High-Performing High-Poverty Schools	Strong Leadership	Teacher Resources	Teacher Beliefs	Professional Dev.	Teacher Quality	Student Expectations	Building Comm.	Basic Skill Focus	School-wide Program	Extended Instr. Time	School Climate	Periodic Assessment	Parental Involvement
Bell 2001	X		X			X					X		
Borman et al. 2000			X								X		
Brookover et al. 1979	X		X			X				X			
Brookover & Lezotte 1979	X	X	X							X			
Designs for Change 1998	X			X					X		X		X
Education Trust 1999													
Ellis 1975	X	X			X		X	X					
Hoffman 1994	X					X					X		X
Johnson & Asera 1999	X	X		X						X	X		X
Loeb 2003	X	X	X										X
Miles & Darling- Hammond 1998	X	X	X	X					X				X
Mosenthal et al. 2004	X				X						X		
New York State 1974	X						X				X		
Phi Delta Kappa 1980	X										X		
Ragland et al. 2002	X		X				X				X		X
Reeves 2003						X		X	X			X	
Stringfield & Herman 1997	X	X							X				
Taylor et al. 2000			X				X				X		X
Towns et al. 2001	X							X			X	X	X
Venezky & Winfield 1979	X						X						
Wang & Manning 2000									X		X		X
Wang, Wong, &Kim 1999									X		X		X
Weber 1971	X												
Wilder 1974	X	X					X	X					

Several studies have demonstrated that proper schooling can impact impoverished African-American students' achievement levels in a manner that is consonant with non-poor Caucasian students. The outlier studies provided for a good start for examining and determining the constituents and correlates of student achievement in urban schools. Nevertheless, the studies typically analyzed elementary schools utilizing qualitative measures.

High-performing, high-poverty schools, tend to provide for low-income and other historically marginalized groups of students learning opportunities tantamount to their counterparts in more affluent communities. High-performing schools surfaced in the research because their students made big gains on standardized achievement tests. Studies of high-performing, high-poverty schools have provided valuable information about best practices in school leadership, organization and instruction.

These effective schools were typically characterized as learning, collaborative communities in which staff assumed a shared responsibility for all students' learning, monitored progress as a way of planning instruction for groups and individuals, help one another learn more about the art and science of teaching, in addition to family outreach.

Table 1 allowed for an illustration of school improvement strategies. The school improvement strategies were related to high student achievement in schools associated with impoverished areas serving a dense population of African-Americans. School improvement strategies were the techniques or attributes gathered of the 25 identified previous studies of high-performing, high-poverty schools agglomerated and reviewed for the present study. These schools were not limited to elementary schools and hereby included a scant number of pre-K thru eighth grade schools, middle schools, and/or high

schools. All 25 studies primarily examined the characteristics of high-performing elementary schools with the exception of following four studies: (a) Education Trust (1999), (b) Asera & Johnson (1999), (c) Bell (2001), and (d) Towns et al. (2001).

A conglomeration of the thirteen most prominent attributes of school improvement is manifested in the table. Each previous study accounted for a mixture of the following school improvement attributes: (a) strong leadership, (b) teacher resources, (c) teacher beliefs, (d) professional development, (e) teacher quality, (f) high student expectations, (g) building communication, (h) basic skill focus, (i) school-wide program, (j) extended instructional time, (k) school climate, (l) periodic assessment, and (m) parental involvement.

The most prevailing attribute in Table 1 was strong leadership. However, a closer look at the studies listed in Table 1 allowed for the researcher to examine the types of leadership indicated as strong leadership. For instance, 18 of the 25 studies (72%) highlighted strong leadership as a factor for high-poverty, high-performing schools. However, instructional leadership was specifically highlighted by six of the studies (Brookover & Lezotte, 1979; Hoffman, 1994; Johnson & Asera, 1999; Phi Delta Kappa, 1980; Ragland et al., 2002; Stringfield & Herman, 1997). Three studies emphasized strong shared leadership in particular (Education Trust, 1999; Miles & Darling, 1998; Wilder, 1974). Asera and Johnson (1999); Designs for Change (1998); Ellis (1975); Loeb (2003); Mosenthal et al. (2004); New York State (1974); Towns et al. (2001); and Venezky & Winfield (1979) all indicated that strong principal leadership was significant; however, they did not state which specific aspects of principal leadership in particular. Weber (1971) contended that strong leadership in a reading program was a necessity.

Finally, Brookover et al. (1979) indicated that the principals in his study were rated as strong administrators, however not as strong instructional leaders.

School climate was the second most attributing factor in Table 1; while parental involvement was the third most.

Uncommon attributes of school improvement that were not identified with the aforementioned schools and were not listed are as follows: (a) strong family/community partnerships, (b) common planning time (c) reduction of specialized programs (d) more flexible student grouping (e) and financial resources.

In conclusion, Table 2 provides an array of prototypes regarding effective urban schools. These previous studies provided a guide to scrutinize the attributes of high-performing, high poverty school for the current study.

School Climate

Research indicative of school climate dates back to the late 1950s. Researchers in the realm of education were seeking to define the "feel," or sense, that varies in schools. The first person attributed with the usage of the term organizational climate is Cornell in 1955 (Fisher, 2003). He described organizational climate as "a delicate blending of interpretations" by individuals of the self-same organization. The review of literature briefly identified the similarities of culture and climate as well as recognizable differences. Next the literature identified common elements of the various definitions of climate and how they influence existing environments.

Despite the terms climate and culture having been found to be synonymous in the literature, descriptors for the characteristics of organizations are plentiful. For instance, social system, milieu, culture, along with ecology are some of the more common labels

(Anderson, 1982; Tagiuri, 1968). Some descriptors appear to be more restricted to the realm of education such as school environment, school learning climate, school organizational climate, and school social climate. Research associates the aforementioned terms with school climate (Fisher, 2003).

A culture is actually dynamic and ever changing. It absorbs influences from outside; it accommodates changes imposed upon it, and it creates opportunities for change in itself (Finnan & Hopenberg, 1994). A school culture provides a web of meaning to all members of the school community (Finnan & Hopfenberg, 1994). It shapes how members of a school community use resources, structure experiences, and relate to the wider world. School culture includes the values, traditions, attitudes, and interpretations that are understood by members of the school community (Finnan & Hopfenberg, 1994).

Climate can be described as a set of internal characteristics which is comprised of four dimensions: ecology, milieu, social system, and culture (Anderson, 1982; Fisher, 2003; Hoy & Miskel, 1996). Ecology, involves physical aspects of climate, such as the building of an organization. Milieu applies to the presence of individuals who all share commonalities, such as social class. Social system is congruent to a pattern of relationships that exist between individuals or groups or both.

School climate also involves a "composite of norms, expectations, and beliefs which characterize the school social system as perceived by members of the social system" (Brookover et al., 1979). Therefore, school climate is organizational climate with a specified context. It embraces (Fisher, 2003) the milieu of personalities, the principal and teachers, interacting within the sociological and psychological framework present in

all schools. The climate sets the tone for the school's approach to resolving problems, trust and mutual respect, attitudes, and generating new ideas.

Common elements found throughout the literature pertaining to climate involve enduring characteristics that distinguish one school from another. Furthermore, climate is a set of measurable, shared perceptions by the members of the organization that influence their behavior (Hoy & Miskel, 1996). Thus, it is an independent variable that is examined regarding its influence on organizational outcomes.

The environment has long been recognized as a powerful influence on the perceptions and, therefore, behaviors of individuals (Anderson, 1982). In organizations, the quality of the internal environment as experienced by organizational members is generally referred to as organizational climate (Hoy & Miskel, 1996). A school's climate plays a direct and critical role in determining what the school is and what it might become (Fisher, 2003). Many principals are looking toward shaping school climate as a way of enhancing school improvement.

Professional Community

Professional community within schools has been a minor theme in many educational reform efforts since the 1960s (Wahlstrom & Louis, 2009). Professional community is also frequently associated with shared leadership. The review of literature emphasizes specific elements of organization and behaviors for educators in a school building for becoming a cohesive learning unit.

The essence of professional community is that all adults in a school have the opportunity to work with others to grow and change. Meaningful and sustained connections with colleagues are necessary for that to occur (Kruse & Louis, 2009).

Networks are highly effective at facilitating culture change, moving schools in the direction of becoming learning organizations, and creating more effective collaborative leadership in which the principal is seen as a transformational intellectual leader (Kruse & Louis, 2009).

Networking can support the culture change process and how to engage others in networks (Kruse & Louis, 2009). Specific efforts and supportive leadership can create cohesive patterns of interaction among faculty members in large schools. Networks allow school leaders to create connections among people with similar interests (Kruse & Louis, 2009). Research on both individual and group learning suggests that powerful learning environments require "weak ties" (Kruse & Louis, 2009). Inventions in practice and other new ideas usually enter a person or school's consciousness because another person with whom they are only loosely connected introduces them.

A professional learning community is made up of team members who regularly collaborate toward continued improvement in meeting learner needs through a shared curricular-focused vision (Kruse, Louis, & Bryk, 1994). This effort is facilitated through the following: (a) supportive leadership (b) structural conditions, (c) collective challenging, (d) questioning, (e) reflection on team-designed lessons and instructional practices, and (f) team decisions on essential learning outcomes and intervention activities based on results of common formative student assessments.

A school-based professional community can offer support and motivation to teachers as they work to overcome the tight resources, isolation, time constraints and other obstacles they commonly encounter in school environments (Kruse, Louis, & Bryk, 1994). Within a strong professional community, teachers can work collectively to set and

enforce standards of instruction and learning. As opposed to obeying bureaucratic rules, faculty members act according to teachers' norms of professional behavior and duty, which have been shown to be far stronger social control mechanisms (Kruse, Louis, & Bryk, 1994). This also creates room within the school structure of principled disagreement and discussion on different issues, which can add to teachers' professional growth.

In schools where professional community is strong, teachers work together more effectively, and put more effort into creating and sustaining opportunities for student learning. Professional communities are strong when teachers in a school demonstrate five critical elements: (a) reflective dialogue, (b) de-privatization of practice, (c) collective focus on student learning, (d) collaboration, and (e) shared norms and values (Kruse, Louis, & Bryk, 1994).

One of the most significant factors whether professional community will exist in a school is strong principal leadership (Wahlstrom & Louis, 2009). Principals play an important role in allocating time for teachers to meet and for providing increased opportunities for job-embedded professional development. Professional community is closely associated with organizational learning, and the term, professional learning communities, has become common shorthand among practitioners.

Principal's Role in Developing School Climate

Within each building, the principal plays a primary role, providing leadership, articulating goals and behavioral expectations of teachers, and supporting staff in developing an effective school. When teachers are supported, students are supported. Site-based management and the organization of principals, teachers, and staff into a

learning community are routes to participatory decision making. The review of literature delineates studies in which the manner of the building principal affects a school's climate as it relates to teacher efficacy.

Students in low-income schools often deal with obstacles in the school environment that stem from dynamics from a cultural and power standpoint (Hamovitch, 1999; Noguera, 2010). Studies of effective schools, particularly, high-performing, high-poverty schools linked principal functions directly to student achievement (Asera & Johnson, 1999; Bell, 2001; Brookover & Lezotte, 1979; Hoffman, 1994; Mosenthal et al., 2004; Ragland et al., 2002; Waters et al., 2004). In school research, a good climate has been considered a significant element in effective schools (Bell, 2001; Borman et al., 2000; Designs for Change, 1998; Edmonds, 1982; Hoffman, 1994; Phi Delta Kappa, 1980; Ragland et al., 2002; Taylor et al., 2000; Towns et al. 2001; Weber, 1971). The principal is the key figure in setting the tone for the school while assuming responsibility for instruction (DiaPaola & Tschannen-Moran, 2003). Climate has been linked to employee satisfaction (Bogler, 2001; Hoy et al., 2003) morale, loyalty to the organization, a sense of belonging trust, innovation, and productivity. Leaders who are attuned to what teachers find valuable, will be able to influence the organizational culture. In the case of schools, if there is a strong professional orientation among teachers, it is likely that the school culture will reflect and serve professional values and that the transactions among teachers will be consistent with an improvement in the school's performance (Friedkin & Slater, 1994; Kruse, Louis, & Bryk, 1994).

Friedkin & Slater (1994) conducted a study in which they attempted to augment the body of literature related to the relationships among the performance of schools, the

leadership of principals, and the collegial interactions of teachers. Researchers implied that superiors are capable of evolving as a central position in informal networks more readily than subordinates through activities that may expand their boundaries or access to resources.

Centrality in an organization's informal communication network allows superiors to develop, maintain, and exercise their interpersonal influence (Friedkin & Slater, 1994). The informal foundations of leadership are especially important in school organizations. Cohesion of interpersonal communication networks is an important foundation of informal social control, consensus formation, efficient access to material resources, and social support processes (Friedkin & Slater, 1994; Kruse & Louis, 2009). A cohesive communication network among the teachers in a school indicates that the school is a workplace in which a variety of interpersonal transactions and collective achievements occur frequently. Teachers in such networks may operate not only as the staff of a formal organization, but as members of a small society with detailed and enduring traditions (Friedkin & Slater, 1994; Kruse & Louis, 2009). Researchers suggested that independent of principals' leadership activities social cohesion among teachers may have a substantial impact on teachers' socio-emotional conditions and consequently, their performance as well.

The researchers employed data from teachers and principals about their social relationships with all other licensed staff at their schools. In addition to attitudinal data from teachers about their schools, and principals, school-performance data were reported by the California State Department of Education. The data were collected during the spring of 1990 from a sample of 20 elementary schools in California. The schools varied

in such characteristics as enrollment and community background. The four year average enrollment sizes of the schools ranged from 316 to 901 students. In terms of the 1-3 scales of economic status used by the California Assessment Program (CAP), the school rankings ranged from 1.44 to 2.83. One hundred percent of principals returned questionnaires, and a 91% response rate was reported from the 364 teachers included in the final sample of 17 schools. The set of schools was a convenience sample. A questionnaire pertaining to a range of "effective schools" and social-networking was administered to principals and teachers.

Principals responded to a supplemental questionnaire designed to collect data concerning school enrollment and test scores. The independent variable was school performance, based on four-year averages of CAP. It was measured by the density of network ties. Network density is computed by dividing the number of interpersonal ties in a network by the maximum possible number of such ties. Findings indicated an association between teachers' network cohesion and school performance existed as a byproduct of principal influence. Competent leadership may be manifested by activities that affect the performance of teachers and students. Principals' centrality is positively associated with collegial relationships that are based on respect, trust, and collaborative decision making. Accessibility, attentiveness to teacher matters along with collaborative problem solving and decision making on instructional issues were attributed with leadership. Qualitative and quantitative data provided for confidence in the findings. This study did not provide suggestions for what principal leadership behaviors are appropriate in an urban middle school with a dense population of African-American students that impact school culture.

Heck (1999) conducted an exploratory study of cross-cultural leadership. He sought to investigate organizational culture and national culture. Heck was concerned with the relationship among school leadership processes and effectiveness in addition to governance processes. Subjects included principals and teachers in 118 elementary and highs schools in California. Schools were reported to have scored above or below the "comparison band" in terms of test scores for three consecutive years.

Data from the California Assessment Program (CAP) were used to formulate groups at both the elementary and high school levels. To qualify for selection, the minimal number of questionnaires from each school was four, three teacher and one principal questionnaire. This sample was finalized at 56 schools and 328 teachers which were comprised of 148 elementary and 180 high schools with 27 elementary and 27 high school principals. The comparative sample derived from a country in the South Pacific, the Marshall Islands. Participants consisted of six elementary schools and one high school. The response rate for questionnaires disseminated in the seven schools ranged from 40% at the high school to 100% at four of the elementary schools.

The questionnaire was reported to have been designed to be consistent with previous research on principal leadership. Thirty-six questions of a five point, Likert-type, comprised the instrument. Three dimensions of leadership were examined: school governance, school climate and culture, and instructional organization. School governance consisted of teacher involvement, parent involvement, and principal limitations of external distractions.

Several factors provided for the constituents of school climate. For instance, the degree of communication concerning instructional goals, academic expectations,

discussion of instructional problems amongst teachers, and the dissemination of information to parents all compiled aspects of climate in the study. Faculty morale and the order of the environment were also considered.

Instructional organization considered the following aspects: (a) coordination of school goals and curriculum, (b) time allotted for instructional planning, (c) instruction as driven by frequent test scores, (d) availability of resources and professional development, and (e) principal viewed as an instructional leader. An assessment of model invariance was conducted with LISREL computer program developed by Joreskog and Sorbom (1989).

Findings indicated that there was substantial conceptual equivalence across the settings, yet the relationship between principal actions and their indirect influence on school effectiveness was much stronger in the U.S. sample.

Marks and Printy (2003) conducted a study that focused on school leadership relations between principals and teachers. The study examined the potential of teacher collaboration around instructional matters to enhance the quality of teaching and student performance. A total of 24 restructured schools were nationally selected. The final sample consisted of eight schools from each level: elementary, middle, and high school. The schools' average populations were 777 students.

The study employed both quantitative and qualitative instruments. Nine hundred ten teachers accounted for 80% response rate to a survey about their instructional practices, professional activities, and perceptions of their school and its organization. Furthermore, researchers conducted interviews with 25-30 staff members at each school as well as with school and district administrators. They observed the daily activities along

with the professional meetings at each school. They scrutinized the instruction and assessment practices of 144 core-class teachers (three mathematics and three social studies teachers from each school).

Findings of this particular study concluded that when transformational leadership is intertwined with shared instructional leadership, the combination provided for high quality pedagogy and high level student performance on standardized measures of achievement. The researchers concluded that strong transformational leadership by the principal was essential in supporting the commitment of teachers. Findings were consistent with previous studies. This study lacked the emphasis of urbanization as it relates to middle school-aged, African-American children.

Rafferty (2003) conducted a study that attempted to describe the relationship between school climate and communication. He sought to describe teachers' willingness to upwardly communicate about school-related issues and concerns in relation to school culture. The selected schools were comprehensive and comprised of 22-40 certified teachers. Twenty-six schools participated in the investigation.

The researcher indicated that participating schools represented a systematic sampling of a specific stratum of county schools in the state of Ohio. Five hundred three teachers, counselors, and library-media specialists represented a 62.3% response rate for completed and returned questionnaires. The findings of this study demonstrated a positive relationship between school climate and upward communication patterns. Furthermore, school climate can be improved by increasing upward communication opportunities to affect daily aspects of school life. Findings were consistent with other studies whereas the leaders of individual schools, principals, impact the schools' culture.

Kelley et al. (2006) conducted a study in which they compared relationships between selected dimensions of leadership and measures of school climate in 31 elementary schools. Furthermore, the perceptions of principals' leadership styles were compared among both principals and teachers. Participants included 31 building principals and five teachers per school (155 teachers). Each principal and one teacher from each school responded to the Leader Behavior Analysis II (LBAII) survey, while the remaining four teachers per school responded to the School Climate Assessment Questionnaire.

The LBAII provided two primary scores: Leader Effectiveness and Flexibility. The Leader Effectiveness Scale (EFF) represented the degree to which the leader uses the most appropriate response for each situation. The Flexibility Scale (FLX) represented the degree to which a leader will select varying styles over a range of situation. The LBAII provided 20 scenarios in which the principal must respond and thus, the effectiveness and flexibility scores were computed. Using two forms of the LBAII, principals self-rated their leadership style and teachers rated their perception of their principal's style. Researchers examined the relationships between the principals' preferred leadership style (Effectiveness Score and Flexibility Score), the corresponding scores for teachers' perceptions of their principal's leadership style, and teachers' perceptions of school climate.

School climate was measured by the Staff Development and School Climate Assessment Questionnaire (SDSCAQ). The SDSCAQ is a Likert-type instrument that provided six scale scores: (a) Communication, (b) Innovativeness, (c) Advocacy, (d) Decision-Making, (e) Evaluation, and (f) Attitudes toward Staff Development. The

Communication Scale measures teachers' perceptions of information sharing, listening to concerns, and ease of sharing ideas.

The Innovationess Scale score measured teachers' perceptions of the extent that leadership supports new ideas. The Advocacy Scale assessed the teachers' perceptions related to rapport and professionalism among staff members and support of leadership. The Decision-Making Scale measured the teachers' perceptions of opportunities for input into decisions. The Attitudes Toward Staff Development Scale assessed the teachers' perceptions of administrative support for staff development, in-services, individual growth, and effectiveness of in-services activities.

Pearson product-moment correlations were calculated to determine the relationships between variables for the study. Statistically significant positive relationships were established between teachers' perceptions of their principals' Effectiveness Scores and all six climate scores: Communication, Decision-Making, Innovation, Advocacy, Evaluation, and Staff Development. These correlations suggested that school climate is directly linked to teachers' perceptions of a principal's effectiveness.

The small number of principals and teachers in this study was a limitation. The schools in the study were small schools from rural settings as opposed to an urban school district with a dense African-American population.

An empirical record suggested the conceptualization of the principal's role has evolved over the past twenty years. Studies employing instructional leadership and transformational leadership styles have detected positive indirect effects of principal leadership on school outcomes and school improvements efforts. School principals tend

to affect school outcomes and improvement processes through the following areas: mission building, influence of organizational structure and social networks, and working through individuals. Therefore, the role of the principal is an integral part of an organizational milieu (Heck, 1996) emphasizing the importance of the school's social and cultural context and its personnel in shaping organizational processes.

Relationship between Climate and Student Achievement

Systematic evidence has purported that school climate can be related to student achievement (Brookover et al., 1979; Bossert et al., 1982; Hoffman, 1994; Hoy & Hannum, 1997; Hoy & Miskel, 1996; Purkey & Smith, 1983). Purkey and Smith (1983) contend:

> A school-level culture press in the direction of academic achievement helps shape the environment (and climate) in which the student learns. An academically effective school would be likely to have clear goals related to student achievement, teachers and parents with high expectations, and a structure designed to maximize opportunities for students to learn. A press for academic success is more likely to realize that goal than would a climate that emphasizes affective growth or social development. (p. 440)

The review of literature examined studies that highlight the continued debate especially as it relates to urban schools.

Bulach (1994) examined the influence of the principal's leadership style on school climate and student achievement. Findings of this study were presented in a report, *"The Influence of the Principal's Leadership Style on School Climate and Student Achievement."* The non-random sample consisted of 20 elementary schools in Kentucky.

Third and fifth graders comprised for 2,834 students. Twenty principals and 506 teachers participated as well. Students were reported to have been diverse not only in grade levels but racial composition, gender, and economic status as well.

The Leadership Behavioral Matrix was used to measure the leadership style of principals. This instrument is a Likert-type in structure (26 items) that measures behavior patterns operational on a vertical and horizontal continuum. The vertical continuum measures "informal" and "formal," while the horizontal continuum measures dimensions of "dominant" and "easy going." The four quadrants formed at the intersection represent categories of behavior style: promoter, supporter, controller, and analyzer.

Promoters get involved with people in active rapidly changing situations. The supporter leadership style implies strong interpersonal relations. Controllers are focused on results while analyzers are deemed as problem solvers. The Tennessee School Climate Inventory was employed for the measure of nine dimensions of school climate. Student achievement was reported from the California Test of Basic Skills. Results indicated that no significant differences were found in school climate due to leadership style. No significant differences were found in student achievement as a result of principal leadership style. The instrument employed in this study was utilized for the purposes of elementary schools which does not provide for validity at the middle school level let alone an urban school district with a dense African-American population.

Niebuhr (1995) investigated relationships between antecedent variables: student ability, family environment, and school climate and academic achievement in a study, *"The Effect of Motivation on the Relationship of School Climate, Family Environment, and Student Characteristics."* The study was located in a small southeastern town with a

"bi-modal population." A total of 241 high school freshmen participated in the study. Characteristics of the participants are as follows: 76 African-American, 158 Caucasian, seven reported as "other." Females comprised for 128 of the participants while males accounted for 113.

Students were administered a survey. Names were provided by the students to later match with grade point averages. Confidentiality was emphasized by the researcher. The survey instrument employed 163 items. Instrumentation administered to the principal involved the Comprehensive Assessment of School Environment (CASE).

This instrument was developed by the National Association of Secondary School Principal's Task Force on School Climate in 1982 (Keefe & Kelly, 1990; Niebuhr, 1995). The researcher further noted that a review of the CASE instrument by Leong (1992) reported that the instrument was flawed due to the inability to measure climate for cultural diversity. Subsequently, Niebuhr added three subscales: racial discrimination, gender discrimination, and sexual harassment.

School climate areas such as gang activity, school safety climate, cheating, work ethic and competitiveness measured the facets of achievement motivation. The Harter motivation instrument was employed to measure independently whether a student's motivation was intrinsically or extrinsically oriented. Self efficacy was measured by the Brookover Self-Concept of Ability Scale. This scale measured students' perceptions of scholastic achievement. Students responded to the Differential Aptitude Test (DAT) during the fall semester of their freshman year. This instrument diagnosed student ability. Grade point averages from the semester the students responded to the survey were used

as a measure of academic achievement. Moderated regression technique was used to examine the influence of motivation on ability-achievement relationships.

Self-efficacy was found to be a mediating variable between one facet of school climate and academic achievement and one facet of family environment and academic achievement. Niebuhr also suggested that the lack of additional mediating relationships would suggest that the elements of both school climate and family environment have a stronger direct relationship to academic achievement, working through dynamics not measured in this study. The CASE survey employed in the study does not allot for teacher perceptions of leadership impact upon climate. Furthermore, this study did not reflect an urban middle school setting with a dense African-American population.

In 1997, researchers Hoy and Hannum examined relationships between school climate and student achievement at the middle school level. The researchers conducted a non-random sample of 86 middle schools in New Jersey. The researchers utilized the state's measure of economic status in which 28% of the schools represented the lowest levels, 37% at the middle levels, and 35% represented the highest levels.

The study employed The Organizational Health Inventory Revised for Middle schools (OHI-RM). This is a 45-item instrument that measures aspects of school climate. Student Achievement was measured using the State of New Jersey's Eighth Grade Early Warning Test (EWT). This assessment was mandated for all eighth grade students. Hoy and Hannum's study explicated that a healthy middle school is a place comprised of the following: (a) high teacher affiliation, (b) high academic emphasis, (c) strong collegial leadership, (d) high principal leadership, (e) high resource support, and (f) high institutional integrity.

Findings of the study indicated that climate variables such as teacher affiliation, resource support, as well as academic emphasis made independent contributions to the achievement of students. Collegial leadership that is friendly, supportive, egalitarian, and open is important in setting a healthy environment, but it is not sufficient for student achievement. This study did not take into account specific principal leadership behaviors.

Sweetland and Hoy (1997) sought to define and measure teacher empowerment in terms of teachers' power to control critical decisions about teaching and learning conditions. Furthermore, researchers sought to examine the relationship between a measure of school climate and a measure of teacher empowerment as well as determine the relationship between a measure of teacher empowerment and a measure of school effectiveness, including student achievement.

The study utilized a sample of 86 New Jersey middle schools, which included responses from 2,741 teachers. Researchers selected urban, suburban, and rural schools from diverse geographic areas of the state as well as from all socioeconomic levels. Middle schools in the study were comprised of the following grade configurations: 5-9, 6-8, and 7-8. The state's measure of SES was also taken into account. Student achievement was measured using the state of New Jersey's Eighth Grade Early Warning Test. The test was mandated for all eighth grade students. The test measured achievement in reading and mathematics.

Socio-economic status of schools was measured by use of the state district factor groups (DFGs). A DFG is a composite index of SES based on the following variables: (a) educational level of adults in the district, (b) occupations of adults in the district, (c) percentage of people who have lived in the district for the past 10 years, (d) number of

people per housing unit, (e) percentage of urban population in the district, (f) average family income, and (g) the rate of unemployment. Districts are arrayed along a continuum from 0 to 9; the higher the number, the higher the SES. Socio-economic status accounted for 28% of schools from the lowest levels, 37% from the middle levels, and 35% from the highest levels.

Assessment of the organizational climate of schools involved the implementation of two instruments. The Organizational Climate Description Questionnaire, Revised Middle (OCDQ-RM) measured aspects of the openness of middle school climate, and the Organizational Health Inventory (OHI-RM) examined dimensions of the health of middle school climate. The OCDQ-RM is a 50-item, Likert-type descriptive questionnaire that measures six dimensions of the openness of the climate of middle schools. The OHI-RM is a 45-item, Likert-type descriptive questionnaire that measures six dimensions of the health of middle schools.

Teacher empowerment was assessed through an index comprised of sixteen classroom decision areas agglomerated from literature pertaining to teacher participation. Teachers were required to respond to a 4-point Likert-type scale ranging from *none* to *substantial*. The index level of empowerment was correlated with the level of extent to which teachers participated in decisions they desired. Teacher empowerment indices for each school were determined by aggregating and averaging all the teacher empowerment scores.

School effectiveness was also assessed. Teachers' perceptions of the quantity and quality of teaching and learning as well as the school's efficient internal operation and ability to adapt to external forces measured general organizational effectiveness.

Teachers responded to an 8-item Likert scale index originally developed by Mott (1972) to study effectiveness of hospitals; however, it was later adapted (Sweetland & Hoy, 1997).

Climate data were collected from all teachers at regularly scheduled faculty meetings. Teachers at the meeting were divided into random groups, with one group responding to the OHI-RM and another to the OCDQ-RM. The effectiveness and teacher empowerment indices were administered to another independent, random group of teachers at each school. The New Jersey State Department of Education supplied school achievement scores.

Correlational methods were implemented to test the researchers' hypotheses. Results found SES and teacher empowerment made significant and independent contributions to the reading and mathematics achievement of students. This study provided for climate instrumentation on the middle school level; however, it did not specify schools with a dense population of African-American students.

In a study of student achievement in select Idaho schools, Fisher (2003) employed an ex post facto design that combined both correlational and causal comparative approaches. Fisher sought a relationship between teachers' perceptions of their principal's leadership style, teachers' perceptions of their school's climate and student academic achievement as reported by the State of Idaho reading indicator and the Idaho Direct Assessments for mathematics and writing.

The researcher randomly selected 6 elementary schools from each of Idaho's six educational regions. Teachers in each school were divided into two groups. One group responded to the MLQ survey on leadership style and the other responded to OCDQ-RE

survey on school climate. Measurement of principal leadership was accomplished using Multifactor Leadership Questionnaire (MLQ-Form 5X), a 45 item survey. Findings indicated no statistical relationship found between leadership style and student achievement which are inconsistent with those reported by Hoy and Hannum (1997).

Transformational leadership was the dominant principal leadership behavior found in 85% of the schools. Fifteen percent had principals who displayed no dominant leadership style based on the three types explored (transformational, transactional, and laissez-faire). Ninety-two percent of schools that had open climates also had transformational principals.

Onoye (2004) conducted a qualitative case study on an urban elementary school in Southern California that exceeded expectations over a three-year period. The study employed observations, interviews, surveys and documentation to examine programs, leadership practices, and the school's climate and culture for factors that impact academic achievement.

Onoye utilized four frames identified by Bowman and Deal (1997) to substantiate that urban schools require the same structure and practices as effective schools. The four frames (structural, human resource, political, and symbolic) were utilized to examine organizations, relationships, and leadership. The structural frame relates to goals, rules, roles, polices, and environment. The human resource frame portrays needs, skills, relationships and the fit between the people and the organization. The political frame focuses on competition, power, and conflict. Nevertheless, the fourth frame, symbolism, emphasizes rituals, ceremonies, stories, and heroes and heroines.

Results included successful schools have strong academic focus, teachers work collaboratively with shared decision making and teamwork. Moreover, principals were leaders, high expectations were held by all stakeholders, and the school was a community or village with caring and commitment. Although, no survey instrument was utilized, findings are consistent with Hoy and Hannum (1997). This study furthered previous findings at the elementary school level. This study did indicate specific leadership behaviors to be employed by principals within middle schools with a dense population of African-American students.

Brown (2005) conducted a study during the period of 1999-2002 that examined the relationship between school culture and student achievement in Ohio public schools. This was a mixed method study that included both urban and rural schools. The sample was a stratified convenience sample that included 35 schools and 749 participants. The Ohio Sixth-Grade Proficiency Test was the measure for student achievement. School culture was measured by the Organizational Culture Questionnaire (OCQ).

The OCQ assessed nine school culture factors: (a) teamwork and cooperation, (b) decision-making, (c) trust and confidence, (d) responsibility and commitment, (e) communication of general organizational practices, (f) vision and goals, (g) risk-taking, and (h) change and innovation.

Twenty principals and 19 sixth grade teachers were interviewed via telephone to supplement data regarding school culture and teaching strategies. Findings indicated that school culture scores are higher in suburban schools as opposed to those of urban settings. The findings, resulting from one grade level, sixth, cannot be generalized throughout the middle school level.

Vislocky (2005) studied the relationship between school culture and student achievement in middle schools in Florida. The researcher utilized a modified version of Wagner and Masden Copas' School Culture Triage Survey. Student achievement was measured by the 2004-2005 Florida Comprehensive Assessment Test (FCAT). The population consisted of teachers at one of six participating middle schools. Findings stated that sixth, seventh, and eighth grade students that attended schools with higher culture scores produced higher FCAT reading scores. Moreover, schools with lower culture scores produced lower test scores. This study indicated that a relationship existed between the three key areas of school culture (collaboration, collegiality, and self-determination or efficacy) and students' reading achievement. Findings were consistent with other studies relating student achievement to school climate, yet lacked any insight for what significant principal leadership behaviors are deem most appropriate for positively impacting student achievement.

Mickelson & Greene (2006) conducted a study in which they sought the gender variations in African-American middle school students' academic performance. The researchers examined the contributions of family, school and individual factors to academic outcomes. Using mixed-methods design (survey and interview), researchers gathered data from a sample of middle school students in the Charlotte-Mecklenburg School (CMS) system. The survey instrument contained 60 questions that investigated students' perceptions of school-to-work readiness. Researchers investigated how the various factors contributed to academic outcomes as measured by students' North Carolina End-of-Grade standardized test scores, fourth quarter grade point averages.

Furthermore, students' second grade California Achievement Test scores were scrutinized.

Participants were randomly selected from eighth grade English classes in every CMS middle school. Researchers reported 2,730 usable questionnaires, yet only accounted for the African-American student sample of 463 males and 551 females. Findings indicated that although there were no gender differences in achievement in 2nd grade, differences, became evident by middle school, with females obtaining higher test scores and grades opposed to males. The researchers also reported that African-American male middle-school students perform better in mathematics if they attended a school with a rigorous academic climate, but the climate does not have a significant effect on their reading performance. The findings for reading achievement at the middle school level were inconsistent with those of Brown (2005). Also, this study did not account for specific principal leadership behaviors that are generalizable to middle schools servicing similar middle schools populations.

Cultural Measures

Many measures of school climate have been developed throughout the study of the phenomena. The examination of these measures as well as the attributes they specifically assess provided further detail into the nature of school climate. These assessments consider multiple factors and individuals within the school system using direct measures, such as surveys and interviews, and indirect measures, such as disciplinary and attendance records (Freiberg, 1998; Marshall, 2003). Further scales have been created assessing issues such as security maintenance, administration, guidance, student activities, and teacher-principal interactions (Marshall, 2003). Additional

measures include the Organizational Climate Index (Hoy, Smith, & Sweetland, 2002), and the Organizational Climate Description Questionnaire (Halpin & Croft, 1963). The measure of school climate used in this study was based on a review of the extant literature on climate measures and was selected based on its particular relevancy to conceptual framework and questions of this study.

The organizational health of a school is another framework for conceptualizing the general atmosphere of a school. A healthy organization (Halpin, 1966) is one that not only survives in its environment, but continues to cope adequately over the long haul, and continues to develop and extend its surviving and coping abilities. It is deemed that the long term prognosis is favorable in healthy organizations.

Climate is generally assessed through organizational members' perceptions and descriptions of situational practices and procedures. Halpin and Croft (1962) developed the Organizational Climate Description Questionnaire (OCDQ) which was used to measure the feel of individual elementary schools. This instrument assessed numerous combinations of faculty and leader characteristics. Combinations of characteristics were considered to rate the schools' climates on a continuum from open to closed. Halpin and Croft found six different types of organizational climate in their study of 71 elementary schools.

Several climate instruments evolved during the 1960s and early 1970s, and represent most of the climate research to date (Nichols, 1991; Fisher, 2003). Instrumentation for climate research involves the Organizational Climate Index by Stern and Steinhoff (1965), the Learning Environment Inventory by Walberg and Anderson (1971), the Charles F. Kettering Limited School Climate Profile by Kettering (1973), the

Profile of a School (Likert, 1967), and the Organizational Climate Description Questionnaire (Halpin & Croft, 1962). The OCDQ is utilized extensively with elementary school research (Nichols, 1991; Hoy & Miskel, 1996).

In 1962, Halpin and Croft examined 71 elementary schools in search of a more definitive description of the feeling that permeates learning institutions. The schools selected accounted for six regions across the United States. Their study reported 1,151 respondents who submitted descriptions of these schools. Thus, the researchers developed a 64-item questionnaire, the Organizational Climate Description Questionnaire (OCDQ), with eight subtests, as delineated by factor-analytic methods. The names of the subtests connote the behavior that each represents. Four of which pertain to the characteristics of the group and the remainders attribute the characteristics of the principal as leader.

Several criticisms of the OCDQ have been documented including verbiage from Halpin and Croft indicating that ranking in the instrument was an approximation which oversimplified the facts (Fisher, 2003). Weaknesses as indicated in the literature include the lack of student conceptualization, limitation to elementary, and non-urban schools (Fisher, 2003). Due to societal changes as well as the changes in dynamics of public schools, some of the items are no longer considered relevant indicators of the dimensions of climate.

Hoy and Clover (1986) conducted a study of 70 elementary schools in New Jersey. Participating schools represented urban, suburban, and rural areas. The study utilized a revision of Halpin and Croft's (1962) OCDQ. The researchers named the revised instrument the Organizational Climate Description Questionnaire - Revised Elementary. Differences included redefinition of the original middle four climate

categories into two new ones as well as elimination of approximately half of the questions. An additional difference included revision of the construct to represent two general factors: one measuring the openness of teacher interactions, and one measuring the openness of teacher-principal relations. The OCDQ-RE is a 42 item Likert-type instrument that has six sub-test relative to elementary school teachers and principals. The instrument provided validity to be utilized at the middle school level.

Sutherland (1994) attempted to examine teachers' perceptions of the characteristics of a good school climate. This report was entitled, *"Teachers' Perceptions of School Climate."* The questionnaire, "Teacher Perception Scale" was used to measure teachers' perceptions of the school climates of teachers' individual schools. The questionnaire was administered to all teachers of School District 147 in the south suburban area of Chicago. The district was a conglomerate of four elementary schools and one junior high school which was comprised of 150 teachers. The researcher reported that teachers agree to favorable school climate as it has been described in previous research in relation to effective schools. The findings are limited to suburban elementary schools.

Butler (1995) described the Tennessee School Climate Inventory in a report, *"Sample School Climate Profile."* During the 1989-1990 school-year, the state of Tennessee, sanctioned its development as part of a learning environment information system to be used in school restructuring efforts. This effort is referred to as Positive Attitudes in Tennessee Schools (PATS). Butler reported that empirical indicators of school climate dimensions generated through the Tennessee School Climate Inventory

are logically and empirically linked with factors associated with effective school organizational climates.

A total of 49 statements accounted for the Tennessee School Climate Inventory. Each statement is comprised of seven scales of seven items apiece. The scales provided for quantitative measures of school climate dimensions. A Likert-type ranking, 5 point, (strongly disagreement to strongly agreement) was applied for scoring. The seven scales are listed as follows: (a) order, (b) leadership, (c) environment, (d) involvement, (e) instruction, (f) expectations, and (g) collaboration. Face validity of the school climate items and logical ordering of the items by scales were established by the research team during the development of the inventory. The researcher did not provide evidence for the usage of this instrument with urban middle schools with a dense African-American population.

Mendel, Watson, and MacGregor (2002) conducted a study, *"A Study of Leadership Behaviors of Elementary Principals with School Climate,"* in which they sought to examine elementary teachers' perceptions of the leadership behavior of their elementary school principal as compared to elementary teachers' perceptions of school climate. Elementary school teachers responded to a questionnaire based on the Sand Diego County Office of Education. Teachers were selected by a random sample. Respondents accounted for 169 surveys of 390 disseminated within 39 schools in a school district located in southwest Missouri. Teachers who perceived their principal climate as utilizing a collaborative leadership style rated their schools as having more positive school climate than did the teachers who perceived their principals as employing a directive or non-directive style of leadership. Findings were consistent with those of

Sutherland (1994). Nevertheless, this study did not indicate usage of this instrument within an urban middle school with a dense population of African-American students.

Borkan, Capa, Fiqueiredo and Loadman (2003) conducted a study to evaluate the Organizational Climate Index (OCI). Findings were presented in a report, *"Using Rasch Measurement to Evaluate the Organizational Climate Index."* The OCI was developed by Hoy (2001) and accounts for four dimensions: collegial leadership, professional teacher behavior, achievement press, and institutional vulnerability. The report indicated the significance of the Rasch measurement was that it takes into account the ability level of the respondent as well as the difficulty of the item (Borkan et al., 2003). Traditionally, the instrument reflects the perspectives of the respondents independently from the difficulty of the item.

The researchers employed a modified version of the OCI to measure the overall climate in four schools within an urban and rural district in Ohio. Only 22 of the original 30 items of the instrument were put into effect by this study. A panel of experts reviewed the completed questionnaires of 110 teachers. Teachers responded to them during a staff meeting which was deemed to guarantee 66.7% to 87.7% response rate (Borkan et al., 2003). A computer program, WINSTEPS, was used for data analysis. Findings indicated that the items on the OCI function properly and it is a reliable instrument in relation to the Rasch measurements analysis. Validity for usage in a middle school reflecting a dense African-American population in an urban school district was unaccounted for.

The literature pertaining to organizational climate as it relates to schools was examined to determine the most effective instrument for collecting data for school climate. Although the aforementioned studies varied in purpose of their respective

investigations, all but one utilized quantitative means. The literature revealed several survey instruments employed for gathering school climate data. The instruments are as follows: The Tennessee School Climate Inventory, Organizational Culture, Teacher Perception Scale, Organizational Climate Descriptor Questionnaire-Revised for Elementary Schools, as well as the Organizational Climate Index.

The instrument deemed most appropriate for this research study is the Organizational Climate Descriptor Questionnaire Revised for Middle Schools utilized by Sweetland and Hoy (1997). This is a version of the OCDQ revised by Hoy et al. (1996). Early climate research on both the elementary and secondary level primarily derived from the development of Halpin and Croft's OCDQ (1963). Its influence is renowned and widely recognized by both researchers. Over 100 studies on the OCDQ were completed between 1963 and 1967 (Anderson, 1982).

Summary of the Literature Review

In this chapter, literature germane to the areas of (a) principal leadership, (b) effective schools, (c) high-performing, high-poverty schools, (d) school climate, (e) professional community, (f) the principal's role in school climate, and (g) the relationship between school climate and student achievement were discussed. The purpose of this study was to explore the relationship between principal leadership and school climate in high-performing, high-poverty, middle schools whose student population is primarily African-American. Consequently, the researcher has reviewed the results of qualitative and quantitative studies pertaining to the relationships between student achievement and principal leadership, school climate and student achievement, as well as principal

leadership's impact on school climate. Furthermore, the literature review provided details about the variations in which school climate can be measured.

Research indicates that organizational climate and leadership are both key to successful organizations (Heck, 1999; Kelley et al., 2005; Marks & Printy, 2003; and Rafferty, 2003). Furthermore, research indicated that there are factors of leadership, culture and climate, and programs that can impact student achievement (Brookover et al., 1979; Bossert et al., 1982; Hoffman, 1994; Hoy & Miskel, 1996; Purkey & Smith, 1983).

Most of the studies in this literature review utilized the following qualitative methods: interviews, observations, and case studies (Brown, 2005; Education Trust 2001; Miles and Darling-Hammond 1998; Mosenthal et al., 2004; Ragland et al., 2002; Wang and Manning 2002; Wang, Wong, & Kim, 1999). Some studies utilized quantitative methods such as surveys, and regression analyses (Fisher, 2003; Hoy and Clover, 1986; Hoy & Miskel, 1997; Niebuhr, 1995; Purkey & Smith, 1982; Vislocky, 2005). Other studies employed mixed methods, both quantitative and qualitative (Borman et al., 2000; Johnson & Asera, 1999; Mickelson & Greene 2006; Taylor et al., 2000; Towns et al., 2001). A paucity of authors presented a synthesis of studies (Loeb, 2003; Phi Delta Kappa, 1980).

Transformational leadership has been found in educational settings using the MLQ. School climate has an extensive history including the measurements thereof; however, the OCDQ has been proven successful in measuring school climate, particularly in a middle school setting. There has been mixed results on the influence that principal leadership has on climate as well as student achievement throughout the literature (Designs for Change, 1998; Johnson & Asera, 1999; Mosenthal et al., 2004; Ragland et

al., 2002; Towns et al., 2001). Limited research was found comparing the relationships between transformational principal leadership, school climate, and student achievement using both instruments MLQ and the OCDQ-RM (Fisher, 2003).

Given the positive impact of school climate on academic achievement, the positive relationship between principal leadership and academic achievement, this study sought to determine the relationship between principal leadership, school climate, and student achievement.

The next chapter provides detailed descriptions of the research methods used in this study. Information includes such areas as (a) study design, (b) instrumentation, (c) sampling and data collection methods, (d) hypotheses that will be tested, and (e) the analyses used.

Chapter III: Design of Study

Overview of Methodology

This chapter describes the method utilized to conduct a study to evaluate the potential relationship that leadership style has on school climate and student achievement in predominately African-American middle schools.

The methodology for this study was quantitative in nature. This study was conducted to seek whether a relationship existed between teachers' perceptions of the building principal's leadership style, school climate, and student achievement. A correlation research design was chosen because of the desire to explore the possible relationships between variables. The researcher chose to measure the situation as it currently existed in a school district. The correlation research design was used in an attempt to generalize findings from a sample of teachers to a population. The population consisted of 200 teachers in a total of 12 middle schools. The researcher limited this field research to one school district due to its urban characteristics and number of African-American children enrolled in its public schools.

A correlational research design is utilized to explore naturally occurring phenomena within school settings. Correlational studies serve two broadly conceived purposes (Smith & Glass, 1987). The first goal of correlational studies is to understand the patterns of relationships among variables. The second is to build theory about phenomena by better understanding the constructs, what they consist of, and how they relate to other constructs.

The variance of a particular variable can be understood by utilizing correlational studies. When two variables are related, one carries information about the other. Thus this

research sought to combine relations between perception of the principal's leadership style and school climate and examined the correlations within select middle schools while accounting for student achievement.

A descriptive survey technique was employed in this study. Fundamentally, the purpose of survey research is to describe the characteristics of variables in populations by directly examining samples. Upon identifying the desired population as well as a sample of the population, the researcher can then provide participants with a questionnaire and use an analysis method that provides a valid assessment of the variables specified in the research problem (Garret-Booker, 2003). The researcher can make inferences about the population based upon data analysis from the sample.

The design of this study was to explore the relationship between principal leadership and school climate in high-performing, high-poverty, middle schools whose student population is primarily African-American. This study is of a correlation research design. It is concerned with discovering the perceptions of teachers, leadership behaviors on the part of principals that build cultures that are strong in the areas of mission, learning, common values, and leader modeling. The study will describe the perceptions of classroom teachers about principals' leadership style and school climate. Classroom teachers, regular- and special- were chosen because they can reflect upon the principal's leadership style as well as the schools' climate. Furthermore, classroom teachers directly influence student achievement (Bell, 2001; Borman et al., 2000; Miles and Darling-Hammond 1998; Mosenthal et al., 2004; Ragland et al., 2002; Taylor et al., 2000).

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This chapter encompasses the following sections: (a) research questions and hypotheses, (b) study design, (c) sampling and sampling methods, (d) instrumentation, (e) data collection, (f) data analysis, (g) delimitations and limitations, (h) threats to internal validity, and (i) summary.

Research Questions

1. What is the relationship between principal leadership and school climate in predominately African-American middle schools, as perceived by teachers?
2. What is the relationship between leadership style as perceived by teachers and student achievement in predominately African-American middle schools?
3. What is the relationship between leadership and student achievement, controlling for school climate in predominately African American middle schools?

Research Hypotheses

Three hypotheses were developed to explore these study questions.

Hypothesis 1

There is a positive relationship between teachers' perceptions of principal leadership and school climate, as perceived by teachers in predominately African-American middle schools as leadership measured by the MLQ, and the school climate as measured by the OCDQ.

Hypothesis 2

There is a positive relationship between principals' leadership style as perceived by teachers in predominately African-American middle schools as measured by the MLQ, and student academic achievement as reported by the state of Georgia reading indicator results.

Hypothesis 3

There is no relationship between teachers' perceptions of their principal's leadership style and the school climate as measured by the OCDQ-RM and student academic achievement as reported by the Georgia reading indicator results in predominately African-American middle schools.

Research Procedures

Population and sample

The schools utilized in this study were a purposeful sample of middle schools in a large urban school district in the southeastern region of the United States during the 2009-2010 school-year. The school district is extremely large and urban in nature due to its location in a major city. At the time of this study, the school district served over 51,000 students and included 16 middle schools. Initially, the sample was selected such that only those middle schools whose student body was over 50% African-American were studied. Due to the low number of schools in this study this criterion was eliminated from the study in order to include an additional school to this study. One school in the study has an African-American student population below 50%. Furthermore, those middle schools that attained (AYP) in the area of Reading as indicated on the state standardized assessment the year prior to the study were selected for participation. Every school in the study met this particular criterion. Only those schools that were middle schools were selected for the sample; schools whose grade configurations included grades 6-8, but were not exclusive of grades 6-8 were excluded.

The population and sample of each respondent group was unique and is described separately. Teachers within selected middle schools throughout the selected school

district served as the sample for this study. The sample frame was comprised of the teachers employed at public middle schools that the met standards of AYP in Reading and whose student population is at least 50% African-American. All but one school met the criterion for having a population of at least 50% African-American.

The unit of analysis is the principal/school. Schools where the response rate was below 50% were eliminated from the study. Three schools had a response rate below 50%. The size of the sample is a total of 12 middle schools. Within the schools selected, 20 full time teachers were selected at random and asked to complete the MLQ-5X and the OCDQ-RM. Specific directions were given about the selection of teachers for the survey. Full time teachers were considered to be individuals who teach children at the school five full days a week. They were both classroom teachers and resource specialists.

A random selection procedure in Statistical Package for Social Sciences (SPSS) was used to identify a random sample from the list of teachers available on each school's website. Principals were informed that participation is voluntary and data collected would be used for research purposes only. Through a district-approved survey cover letter (Appendix A) participants were told that their choice to participate was strictly voluntary and the names of individuals, schools, and the school division would not be revealed. Completion of the survey was considered informed consent as signing a consent form was the only way to identify specific teacher respondents.

Instrumentation

After reviewing a number of published questionnaires that assessed teachers' perception of the building principal and their attitudes toward school culture, two instruments suitable to the purpose of the research were found. Therefore, two

instruments were employed to gather data for this study. A single instrument relating to the construct of leadership style was utilized as well as a single instrument to relate to school climate.

The MLQ-5X

The questionnaire used to measure the transformational and transactional leadership in this study was the Multifactor Leadership Questionnaire (MLQ, Form 5X-Short) developed by Bass and Avolio (1990) (Avolio & Bass 2004). The Multifactor Leadership Questionnaire (MLQ) is a structured, verbal, omnibus measure of leadership styles (Bass & Avolio, 2007). The MLQ 5X-Short is a 45-item 4-point Likert-scale instrument that measures a full range of leadership behaviors as perceived by both leaders and subordinates.

The full range model of leadership was developed to broaden the range of leadership styles typically investigated in the field (Bass & Avolio, 2007). The terminology "full range" derived in attempt to challenge the field of leadership's mode of thinking as it relates to the well established paradigms of initiation of structure and consideration. The full range model of leadership assumes the existence of differences in the effectiveness of leadership styles, based on the active/passive distinction; the categories of leadership range thus from passive/avoidant leadership (Laissez-Faire), through the classical model of Transactional up to Transformational (Bass & Avolio, 2007).

Transformational, transactional, and passive/avoidant leadership are the major constructs that form a paradigm for understanding both the lower and higher order effects of leadership style. This paradigm builds on earlier leadership paradigms such as those of

autocratic versus democratic leadership, directive versus participative leadership, and task- versus relationship oriented leadership which have dominated selection, training, development, and research in this field for the past half century (Bass & Avolio, 2007).

The leadership styles measured using the MLQ 5X-Short are transformational, transactional, and laissez-faire. When examining the components of transformational and transactional leadership Bass and Avolio started with a target six-factor model proposed by Bass (1985). The six factor model merged attributed charisma, charismatic behavior and inspirational leadership into a single factor named charisma/inspirational. The six-factors and their operational definitions are provided as the following:

1. **Charisma/Inspirational** – Provides followers with a clear sense of purpose that is energizing; a role model for ethical conduct which builds identification with the leader and his/her articulated vision (Fisher, 2003).
2. **Intellectual stimulation** – Gets followers to question the tried and true ways of solving problems; encourages them to question the methods they use to improve upon them (Fisher, 2003).
3. **Individual Consideration** – Focuses on understanding the needs of each follower and works continuously to get them to develop to their full potential (Fisher, 2003).
4. **Contingent Reward** – Clarifies what is expected from followers and what they will receive if they meet expected levels of performance (Fisher, 2003).
5. **Active Management-by-Exception** – Focuses on monitoring task execution for any problems that might arise and correcting those problems to maintain current performance levels (Fisher, 2003).

6. **Passive Avoidant** – Tends to react only after problems have become serious to take corrective action and may avoid making any decisions at all (Fisher, 2003).

Items were added based on leadership literature distinguishing charismatic from transformational leadership (Bass & Avolio, 1995). Recommendations from six scholars in the leadership field were included in the development of the MLQ 5X-Short.

Currently, transformational leadership involves the following subscales: (a) charisma/idealized influence (attributed), (b) idealized influence (behavior), (c) individualized consideration, (d) inspirational leadership, (e) and intellectual stimulation (Tejeda, Scanbura, and Pillai, 2001). Charisma or idealized influence refers to subordinate attributions that the leader projects self-confidence and success, articulates goals, and arouses followers' emotions (Tejeda et al., 2001). Inspirational leadership refers to behaviors where "leaders articulate in simple ways, shared goals and mutual understanding of what is right and important" (Bass & Avolio, 1993a, p. 15). Intellectual stimulation involves the support and encouragement of subordinates' ideas, showing innovative ways of handling problems (Tejeda et al., 2001). Individualized consideration encompasses the special attention from the leader that focuses on attending to the developmental needs of subordinates.

Transactional leader behavior describes attempts to obtain follower agreement to perform tasks required to achieve work unit outcomes based on social exchange (Tejeda et al., 2001). Bass (1985) suggested that transactional leadership is composed of leader behaviors that he labeled as contingent reward and management-by-exception. Contingent reward refers to leader behaviors that reinforce subordinates for task accomplishment and meeting task goals (Tejeda et al., 2001). Rewards are provided in

exchange for compliance with leader demands. Management-by-exception refers to a leadership style where performance is actively monitored for errors (Tejeda et al., 2001). Passive management-by-exception describes the leader as waiting to learn of subordinates' errors. In either case, the subordinate is punished for his failure to reach an expected level of performance.

Laissez-faire which is the avoidance of leadership is essentially a style of management (Tejeda et al., 2001). This style of nonleadership educes neither transactions nor agreements with followers.

As aforementioned the leadership dimensions measured in this survey are: transformational leadership, transactional leadership, and laissez-faire leadership. The subscales that related to the three dimensions of leadership entailed a select number of items. Transformational leadership, comprised the following subscales and number of items per scale: charisma/idealized influence-attributed (4 items), idealized influence-behavior (4 items), inspirational motivation (4 items), intellectual stimulation (4 items), and individualized consideration (4 items). Transactional leadership, comprised contingent reward (4 items) and management by exception-active (4 items), and passive (4 items). Laissez-faire Leadership, which is a non leadership dimension comprised 4 items.

Transformational and Transactional leadership are both related to the success of the group (Bass & Avolio, 2007). The MLQ measures success through the frequency in which raters perceive their leader to be motivating, and how effective their leader is perceived at different levels of the organization, in addition to the level of satisfaction raters are with the leader's techniques for working with others. The outcomes of

leadership were measured through the subscales of extra effort, effectiveness, and satisfaction.

The *extra effort* scale identifies leaders who are able to generate extra effort in their followers. Extra effort, as one of the direct effects of an efficient leadership style, is defined as the wish of followers to strive for superior performance by deploying supplementary efforts, positively exceeding legitimate behavioral expectations of their leaders, their group or their organization (Bass & Avolio, 2007). The effectiveness scale identifies leaders who are able to efficient. These leaders efficiently represent the group in front of the higher organizational authority, are efficient in meeting organizational objectives and generally generate a higher efficiency in all the structures they are involved with (Bass & Avolio, 2007). The scale is comprised of three items.

The *effectiveness* scale identifies leaders who are able to efficient. These leaders efficiently represent the group in front of the higher organizational authority, are efficient in meeting organizational objectives and generally generate a higher efficiency in all the structures they are involved with (Bass & Avolio, 2007). This scale is comprised of four items.

The *satisfaction* scale identifies leaders who are able to generate satisfaction in their followers. Satisfaction with leadership is measured in the MLQ with only two items and identifies with leaders who generate interpersonal satisfaction in their followers and colleagues; these leaders are warm, nurturing, open, authentic, honest persons, with good interpersonal and social skills, capable of developing feelings of satisfaction in their followers (Bass & Avolio, 2007).

The questionnaire consisted of 45 questions using a five point (1-5) Likert-scale of "not at all," "once in a while," "sometimes," "fairly often," and " frequently if not always." No point was assigned to items rated as "not at all." One point was assigned to items rated as "once in a while." Two points were assigned to items rated as "sometimes." Three points were assigned to items rated as "fairly often." Four points were assigned to items rated as "frequently, if not always." The questionnaire was a forced-choice survey with respondents unable to mark any items as "non-applicable." Thus, the total possible score on the MLQ-5X is 45 x 4 or 180. A scale score was calculated for each of six aspects adding up the points from the questions that correspond with each aspect. The total possible scale score for each aspect was four.

The MLQ scale scores are the actual mean scores of respondents for the items on the scale. The score can be derived by summing the items and dividing the number of items that make up the scale. If an item is left blank, the total for that scale was divided by the number of items answered. For example, scale n has a total of 15 items. Only 14 items were actually answered. If each item accounted for a maximum total of four, the total of the 14 items was 40. Then 14 would be divided into 40 to get the score as opposed to dividing 15 into 40.

A full range five-point Likert-scale in that the MLQ 5X-Short instrument elicits perceptions of leadership style as perceived by subordinates. Items in the instrument focus on leader (i.e., principal) behavior and effectiveness as perceived by subordinates (teachers). There are four items for each leadership behavior construct, three items for extra effort, four items for effectiveness, and two items for satisfaction.

As a commercially available survey, the researcher purchased a bulk permission set of 200 forms.

The following provides item numbers of the Multifactor Leadership Questionnaire-5X Short that contributed to the scaled aspect scores.

Principal Leadership Attributes Items

Idealized Influence (Attributed)

1. Instills pride in me for being associated with him/her.
2. Goes beyond self-interest for the good of the group.
3. Acts in ways that build my respect.
4. Displays a sense of power and confidence.

Idealized Influence (Behavior)

5. Talks about his/her most important values and beliefs.
6. Specifies the importance of having a strong sense of purpose.
7. Considers the moral and ethical consequences of decisions.
8. Emphasizes the importance of having a collective sense of mission.

Inspirational Motivation

9. Talks optimistically about the future.
10. Talks enthusiastically about what needs to be accomplished.
11. Articulates a compelling vision of the future.
12. Expresses confidence that goals will be achieved.

Intellectual Stimulation

13. Re-examines critical assumptions to question whether they are appropriate.
14. Seeks differing perspectives when solving problems.
15. Gets me to look at problems from many different angles.
16. Suggests new ways of looking at how to complete assignments.

Individual Consideration

17. Spends time teaching and coaching.
18. Treats me as an individual rather than just as a member of a group.
19. Considers me as having different needs, abilities, and aspirations from others.
20. Helps me to develop my strength.

Contingent Reward

21. Provides me with assistance in exchange for my efforts.
22. Discusses in specific terms who is responsible for achieving performance targets.
23. Makes clear what one can expect to receive when performance goals are achieved.
24. Expresses satisfaction when I meet expectations.

Management-by-Exception (Active)

25. Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.

26. Concentrates his/her full attention on dealing with mistakes, complaints, and failures.
27. Keeps track of all mistakes.
28. Directs my attention toward failures to meet standards.

Management-by-Exception (Passive)

29. Fails to interfere until problems become serious.
30. Waits for things to go wrong before taking action.
31. Shows that he/she is a firm believer in if it ain't broke, don't fix it.
32. Demonstrates that problems must become chronic before taking action.

Laissez-faire Leadership

33. Avoids getting involved when important issues arise.
34. Is absent when needed.
35. Avoids making decisions.
36. Delays responding to urgent questions.

Extra Effort

37. Gets me to do more than I expected to do.
38. Heightens my desire to succeed.
39. Increases my willingness to try harder.

Effectiveness

40. Is effective in meeting my job related needs.
41. Is effective in representing me to higher authority.

42. Is effective meeting organizational requirements.

43. Leads a group that is effective.

Satisfaction

44. Uses methods of leadership that are satisfying.

45. Works with me in a satisfactory way.

Table 2

Principal Leadership Attributes and Number of Questions

SCALE	NUMBER OF QUESTIONS
Transformational Leadership	
Idealized Influence (Attributed)	4
Idealized Influence (Behavior)	4
Inspirational Motivation	4
Intellectual Stimulation	4
Individualized Consideration	4
Transactional Leadership	
Contingent Reward	4
Management-by-Exception (Active)	4
Management-by-Exception (Passive)	4
Nonleadership	
Laissez-faire	4
Outcome Factors	
Extra Effort	3
Effectiveness of Leader	4
Satisfaction with Leader	2

Validity and Reliability

The components of the MLQ Form 5X-Short have undergone investigation and subsequently substantial amounts of empirical research supported the validity of the MLQ Form 5X-Short for transformational and transactional leadership constructs. There

was evidence of content and construct validity. Content Validity is based on the extent to which a measurement reflects the specific intended domain of content (Carmines & Zeller, 1991). Construct validity was based on prior researchers who have tested the instrument's constructs to be sure they measure what they are designed to measure.

This instrument met conventional standards for both content and construct, validity. According to a comprehensive analysis of the MLQ Form 5X-Short by Avoilo, Bass, and Jung (1999), evidence validated a 6-factor structure of instrument (individualized/inspiring, intellectually stimulating, individualized consideration, contingent reward, management-by-exception active, and passive/corrective leadership) in the first 9-14 samples and was further confirmed when samples were collected for the second time (Avoilo, 1999).

Avolio and Bass's test manual shows strong evidence for validity; the MLQ has been used in over 300 research programs, doctoral dissertations, and master's theses, along with several constructive outcomes for transformational leadership.

Avolio and Bass' test manual shows strong evidence for validity. The MLQ 5X-Short (Bass & Avolio, 1995) has been used in over 300 research studies including doctoral dissertations and master theses along with several constructive outcomes for transformational leadership. It has been used not only in the United States but also worldwide through translation into Hebrew, Spanish, Chinese, Arabic, Korean, German, and French. The MLQ 5X-Short instrument was developed from several sources, such as the Multifactor Leadership Questionnaire Form 5R (MLQ 5R), and the 1993 version of Multifactor Leadership Questionnaire Form 5X (MLQ Form 10) developed by Howell and Avolio, through the use of partial least squares analysis.

Bass and Avolio (1995) examined the construct validity of a broader and/or fuller range of leadership styles using the most commonly employed measure of transformational transactional leadership – the Multifactor Leadership Questionnaire in its most recent experimental version. Construct validity is also thoroughly explained with factor analyses which resulted in a six-factor model for the MLQ. In addition, a study conducted by Antonakis (2003), supported the nine-factor leadership model and its stability in homogeneous situations. Reliability scores for the MLQ subscales ranged from moderate to good. Bass and Avolio's leadership scale factor reliability coefficient alpha scores (Chronbach alphas) ranged from .74 to .94, which is generally high and exceeds standard recommendations (Avoilo and Bass, 1995).

The Multifactor Leadership Questionnaire (MLQ) form 5X of Bass and Avolio (1991) was used in this study to measure transformational leadership. The questionnaire has 37 items to measure the four factors of transformational leadership. Eight items were designed to assess for charismatic leadership and ten items each for inspirational leadership and intellectual stimulation, and nine items for individualized consideration.

Table 3

Descriptive Statistics and Reliability Scores for MLQ-5X

SCALE	MEAN	SD	RELIABILITY
Idealized Influence (attributed)	2.56	.84	.86
Idealized Influence (Behavior)	2.64	.85	.87
Inspirational Motivation	2.64	.87	.01
Intellectual Stimulation	2.51	.86	.90
Individualized Consideration	2.66	.93	.90
Contingent Reward	2.20	.89	.87
Management-by Exception (Active)	1.75	.77	.74
Management-by-Exception (Passive)	1.11	.82	.82
Laissez-faire	0.89	.74	.83
Extra Effort	2.60	1.16	.91
Effectiveness	2.62	.72	.91
Satisfaction	2.57	1.28	.94

Note. From Bass, B.M., & Avolio, B.J. (2000). Multifactor Leadership Questionnaire (2nd ed.). Reproduced by special permission of the Distributor, Mind Garden, Inc., 1690 Woodside Rd #202, Redwood City, CA 94061 USA **www.mindgarden.com** from the Multifactor Leadership Questionnaire by B.M. Bass & B.J. Avolio, Copyright 1995, 2000 by B.M. Bass & B.J. Avolio All rights reserved. Further reproduction is prohibited without the Distributor's written consent.

The OCDQ-RM

Halpin and Croft (1962) created the Organizational Climate Description Questionnaire (OCDQ) to evaluate elementary school climates. Validity measures taken by Halpin and Croft utilized split-half reliability coefficients corrected by the Spearman-Brown Formula. It is the most widely used elementary school climate assessment tool in the literature (Hoy & Clover, 1986).

Hoy and Sabo (1998) developed the OCDQ-RM to create an effective instrument designed for middle schools instead of using the one generally designed for high schools because results by researchers indicated that elementary and secondary schools are

respectively different from middle schools both philosophically and structurally (Hoy & Sabo, 1998). The OCDQ-RM examines six organizational climate dimensions. Principals' behaviors measured include: (a) supportive behavior, (b) directive behavior, and (c) restrictive behavior. There were three teachers' behaviors measured as well: (a) collegial behavior, (b) committed behavior, and (c) disengaged behavior.

Hoy and Miskel (1996) defined supportive, directive, and restrictive principal behaviors as follows:

1. **Supportive principal behavior** is directed toward both the social needs and task achievement of faculty. The principal is helpful, genuinely concerned with teachers, and attempts to motivate using constructive criticism and by setting an example through hard work.
2. **Directive principal behavior** is rigid domineering behavior. The principal maintains close and constant monitoring over virtually all aspects of teachers behavior in the school.
3. **Restrictive principal behavior** is behavior that hinders rather than facilitates teacher work. The principal burdens teachers with paperwork, committee requirements, and other demands that interfere with their teaching responsibilities. (p. 193)

Additionally, the OCDQ-RM measures dimensions of teacher behaviors that are: (a) collegial, (b) committed, and (c) disengaged. Hoy and Sabo (1998) defined these dimensions as follows:

1. **Collegial teacher behavior** supports open and professional interactions among teachers. Teachers like, respect, and help one another both professionally and personally.
2. **Committed teacher behavior** is directed toward helping students to develop both socially and intellectually. Teachers work extra hard to insure student success in school.
3. **Disengaged teacher behavior** signifies a lack of meaning and focus to professional activities. Teachers simply are putting in their time; in fact, they are critical and un-accepting of their colleagues. (p. 193)

School Climate Attributes Items

School climate is a general concept that captures the atmosphere of a school. School climate is experienced by teachers and administrators; furthermore, it describes their collective perceptions of routine behavior, and affects their attitudes and behavior in the school (Hoy & Miskel, 2001).

Supportive Behavior

1. The principal compliments teachers.
2. The principal encourages teacher autonomy.
3. The principal goes out of his/her way to help teachers when assistance is needed.
4. The principal is available after school to help teachers when assistance is needed.
5. The principal uses constructive criticism.
6. The principal looks out for the personal welfare of the faculty.
7. The principal listens to and accepts teachers' suggestions.
8. The principal treats teachers as equals.
9. The principal goes out of his/her way to show appreciation to teachers.
10. The principal accepts and implements ideas suggested by faculty members.
11. The principal sets an example by working hard himself/herself.

Committed Behavior

12. Teachers "go the extra mile" with their students.

13. Teachers are committed to helping their students.
14. Teachers help students on their own time.
15. Teachers stay after school to tutor students who need help.
16. Teachers accept additional duties if students will benefit.
17. Teachers leave school immediately after school is over.
18. Extra help is available to students who need help.
19. Teachers volunteer to sponsor after school activities.
20. Teachers spend time after school with students who have individual problems.

Directive Behavior

21. The principal rules with an iron fist.
22. The principal supervises teachers closely.
23. The principal corrects teachers' mistakes.
24. The principal keeps a close check on sign-in times.
25. The principal monitors everything teachers do.
26. The principal closely checks teacher activities.

Collegial Behavior

27. Teachers have parties for each other.
28. Teachers invite other faculty members to visit them at home.
29. Teachers socialize with each other on a regular basis.
30. Teachers who have personal problems receive support from other staff members.
31. Most of the teachers here accept the faults of their colleagues.

32. Teachers have fun socializing together during school time.
33. Teachers provide strong social support for colleagues.
34. Teachers respect the professional competence of their colleagues.
35. Teachers help and support each other.
36. The interactions between team/unit members are cooperative.
37. Members of teams/units consider other members to be their friends.

Disengaged Behavior

38. Teachers interrupt other teachers who are talking in staff meetings.
39. Teachers exert group pressure on non-conforming faculty members.
40. Teachers ramble when they talk at faculty meetings.
41. Teachers are rude to other staff members.
42. Teachers make wise cracks to each other during meetings.
43. Teachers mock teachers who are different.
44. Teachers don't listen to other teachers.
45. Teachers like to hear gossip about other staff members.
46. Teachers are polite to one another.

Restrictive Behavior

47. Teachers are burdened with busywork.
48. Routine duties interfere with the job of teaching.
49. Administrative paperwork is burdensome at this school.
50. Assigned non-teaching duties are excessive.

The questionnaire is comprised of 50 questions using a four point (1-4) Likert-type scale. The items are scored as follows: 1 "rarely occurs," 2 "sometimes occurs," 3 "often occurs," and 4 "very frequently occurs." The total possible score is 200. The average school scores for the items defining each subtest were added to yield school subtest scores. The six subtest scores represent the climate profile for the school. Items for each respondent were scored with the appropriate number (1,2,3, or 4) with the exceptions of items number 21 and 50. These two items responses are the inverse of the other 48 items. The responses are as follows: 1 "very frequently occurs," 2 "often occurs," 3 "sometimes occurs," and 4 "rarely occurs." The OCDQ scale scores were average scores for the items on the scale. The score was derived by summing the items and dividing by the number of items that make up the scale.

Validity

The OCDQ-RM has been a validated instrument that measures principals' and teachers' behaviors as perceived by teachers for over 20 years. Halpin developed the OCDQ for elementary school in 1963 and Hoy and Sabo revised it in 1998 for middle schools. Hoy granted permission to use the OCDQ-RM to this researcher (See Appendix for permission). The OCDQ-RM has been used in numerous studies by researchers such as Halpin (1963); Hoy & Clover (1986); Hoy, Tarter, & Kottkamp (1991); and Kottkamp, Mulhern, & Hoy (1987).

Reliability

Table 3 has been extrapolated from Avolio and Bass's Multifactor Leadership Questionnaire manual. The table illustrates how the researchers developed reliability for

the instrument. The data were based on nine samples (n= 1254) from a variety of organizations including American and Taiwanese undergraduate students, U.S. military, U.S. nursing school, Scottish utility company and three U.S. businesses. Reliability factors have been calculated for each of the aspects of the MLQ-5X (Bass &Avolio, 2000).

Scoring

Scoring for the OCDQ-RM began with tabulating each respondent's questionnaire (Hoy, 1998). Each item for each respondent was scored with the appropriate number (1,2,3, or 4). Items 21 and 50 were scored in reverse order (Hoy, 1998). Combining individual scores on each item and dividing by the number of teachers at a school, created an average score for the school on each item. The average school scores for the items defining each subtest were added to yield school subtest scores. A sum of the average school item scores (Hoy, 1998) was gathered as follows:

Supportive Behavior (Sup)= items 1+10+11+12+15+19+24+32+36+44+49

Committed Behavior (Com)= items 5+6+7+17+18+21+46+47+48

Directive Behavior (Dir)= items 9+20+33+37+38+41

Collegial Behavior (Col)= items 2+13+14+16+22+25+34+35+40+43+45

Disengaged Behavior (Dis)= items 8+23+26+27+28+29+30+31+50

Restrictive Behavior (Res)= items 3+4+39+42

The six subtest scores represent the climate profile for the school. In order to compare the profile of one school to another, Hoy and Sabo (1998) recommend converting the school scores to standardized scores.

Computing standardize score of the OCDQ-RM was done by converting the school subtest scores with a mean of 500 and a standard deviation of 100, which Hoy (1998) refers to as SdS scores. The following formula was utilized for this computation:

SdS for Sup=100 X (Sup-29.39)/4.61+500

Where Sup is the score of a participating school; (Hoy, 1998) 29.39 is a normative sample supportive behavior score; and 4.61 is the standard deviation of the normative sample. This process was utilized for each dimension (Hoy, 1998).

SdS for Dir=100 X (Dir-12.09)/2.40+500

SdS for Res=100 X (Res-9.11)/1.52+500

SdS for Col=100 X (Col-29.30)/3.01+500

SdS for Com=100 X (Com-26.76)/2.74+500

SdS for Dis=100 X (Dis-15.56)/2.18+500

School scores have become standardized against the normative data provided by Hoy (1998). Thus, a school score indicating 600 on supportive behavior is one standard deviation above the average score on supportive behavior of all schools in the sample; that is, the principal is more supportive than 84% of the other principals (Hoy, 1998). Hoy (1998) further deliberated the following:

If the score is 200, it is lower than 99% of the schools.

If the score is 300, it is lower than 97% of the schools.

If the score is 400, it is lower than 84% of the schools.

If the score is 500, it is average.

If the score is 600, it is higher than 84% of the schools.

If the score is 700, it is higher than 97% of the schools.

If the score is 800, it is higher than 99% of the schools.

Two other scores can also be computed which are of interest to both teachers and principals (Hoy, 1998). Two openness dimensions were determined in the second-order factor analysis of the OCDQ-RM. The two openness measures can be computed as follows:

Principal Openness=(SdS for S)+(1000-SdS for D)+(1000-SdS for R)/3

Teacher Openness=(SdS for C)+(SdS for Com)+(1000-SdS for Dis)/3

These openness indices are interpreted the same way as the subtest scores, that is, the mean of the "average" school is 500 (Hoy, 1998). Thus, a score of 650 on teacher openness represents a highly open faculty (Hoy, 1998). Categories have been arranged in numerical value ranging from high to low by (Hoy, 1998) using the following conversion table:

Table 4

Climate Score Ranking

SCORE RANGE	RANKING
Above 600	Very High
551-600	Above Average
511-524	Slightly Above Average
490-510	Average
476-489	Slightly Below Average
450-475	Below Average
400-449	Low
Below 400	Very low

Utilizing an initial classification scheme defined by Hoy (1998), OCDQ-RM scores were converted to four categories

Measurement of Research Variables

This study examined two independent variables, one dependent variable, and one contextual variable.

Independent Variable

Leadership as measured by Bass and Avolio's (2000) Multifactor Leadership Questionnaire (MLQ) – independent, categorical data.

This study contained two independent variables, principal leadership and school climate. Leadership style was divided into three categories: laissez-faire, transactional and transformational leadership, as measured by the MLQ (Form 5X) by Bass (1985). The data underwent initial classification following procedures defined by Bass and Avolio (2000). The second independent variable for this study was school climate, as

measured by the OCDQ-RM (Hoy & Clover, 1986). Climate was divided into four categories: open, engaged, disengaged and closed. The data underwent initial classification following procedures defined by Hoy (2002).

School Climate: as measured by Hoy's (2000) Organizational Climate Descriptive Questionnaire (OCDQ) – independent, categorical.

Contextual Variable

Student Academic Achievement: a three year average of each school's performance on reading – contextual, continuous.

Student academic achievement was the dependent variable in this study. Student achievement was based on school scores reported by the Criterion-Referenced Competency Test (CRCT) for Reading in grades six, seven, and eight. Special attention was given to eighth grade assessment scores due to the implicit nature of the idea that middle schools prepare students for success in high school. This study utilized one type of standardized testing information as an indicator of student achievement.

The achievement test indicated is part of a larger comprehensive testing program that the state administers. Competency Test (CRCT) is designed to measure how well students acquire the skills and knowledge described in the Georgia Performance Standards (GPS). Students are required to take the assessment in the content areas of reading, English/language arts, and mathematics. Students in grades three through eight are also assessed in science and social studies. The data gathered from the CRCT are used to diagnose individual student strengths and weaknesses as related to the instruction of the GS, and gauge the quality of education throughout state. Furthermore, CRCT data yields information as it relates to class, school, system, and state levels. The data utilized

for the purpose of this study were gathered from the state Department of Education. The data reflects the results of the CRCT administered in the 2009-2010 school-year.

The scale score values for meeting and exceeding standards (800 and 850, respectively) are the same for all content areas. The scale score reported for each content area is derived by converting the number of correct responses on the test (the raw score) to the CRCT scale. Since the scale scores are equivalent across test forms within the same content area and grade, students obtaining the same score have demonstrated the same level of performance with respect to the GPS.

Scores at or above 850 indicate a level of performance that *Exceeds the Standard* set for the test. Scores from 800–849 indicate a level of performance that *Meets the Standard* set for the test. Scores below 800 indicate a level of performance that *Does Not Meet the Standard* set for the test (i.e., the state's minimum level of proficiency). However, scores above 900 generally indicate exceptional performance. Table summarizes the average ratings for each school as it relates to reading achievement.

Data Collection

All collection procedures followed approval obtained from the Institutional Review Board of The George Washington University. According to Green and Hutchinson (1996), Dillman (2000), and King, Pealer & Bernard (2001), maximum return rates of survey information can be achieved when limiting questionnaire length to three to four pages. Two surveys were selected for this study, each approximately one page in length. Each survey required less than 10 minutes to complete (Bass & Avolio, 2000; Hoy, 2002).

When considering implementation practices for this study, a decision was made whether the principals of the sample schools would be directly involved in any way with this study. According to Bass and Avolio (1990c, p.6), consistently inflated supervisory ratings occurred when the raters were contacted by the leader of the organization who was the focus of the leadership survey rather than by an independent individual. To avoid this possible confounding effect, the principals of the schools in this sample were not involved in the distribution or collection of the questionnaires. The researcher was solely responsible for the dissemination and collection of questionnaires.

The Multifactor Leadership Questionnaire was used to determine leadership attributes of the principal while the Organizational Climate Description Questionnaire identified the climate of all participating middle schools. The researcher first made contact with each school's principal seeking permission to include his/her school in the study. A formal letter was written to each principal explaining the purpose of the study and requesting his or her assistance (Appendix A). When permission was received, the principal received twenty teacher packets which were made up of the MLQ-5X and OCDQ-RM, a white envelope, and the cover letter (Appendix B). The teacher packets were designated for 20 randomly selected teachers in the middle schools. The cover letter described the purpose of the study, requested participation, and guaranteed anonymity.

Teachers were asked to complete, seal the surveys in the white envelope, and place their response envelope within ten days of receiving the survey packet in a larger envelope left with the head school secretary in each school. After ten days, phone or e-mail contact was made to each of the school's principal to ask his/her assistance with sending out a general reminder to teachers to encourage them to complete the survey or

obtain another copy of the survey if it was necessary (See Appendix C). A total of 200 teachers were asked to participate in the study.

After fourteen days, the available surveys were collected from all schools. Response rates can be increased by sending a complete replacement survey package to all non-respondents three weeks after the initial survey mailing (Dillman, 2000). Following this procedure a reminder letter (Appendix C) was sent directly to all teachers in early October, 2009. An early date in October was chosen to compensate for the initial three weeks indicated by Dillman's (2000) procedure. Furthermore, the researcher allowed another three weeks of response time for replacement packages sent to all non-respondents. This response time was followed by a visit by the researcher to identified schools in which a third replacement package was delivered. The overall response rate was 74%.

Dolsen & Machlis (1991) indicate that researchers show it is justifiable to reject study results if response rates are lower than 50%. The survey implementation method used in this study has been shown to have response rates of 75-85% (Dillman, 2000).

Data Security

The data obtained in this research study were kept private and were used for research purposes only. Completed MLQ-5X and OCDQ-RM were placed in sealed white envelopes and placed in the larger collection envelopes in school, which were collected by the main office secretary and then submitted to the researcher. The instruments were coded by school. Findings of the study were only reported by school and each school was assigned a number code to protect the anonymity of the school. The names of individual schools were not revealed; instead schools were coded to maintain

anonymity. The researcher converted the survey responses to data files. The data files were placed on a memory key and were stored in a locked file cabinet. At the end of the study the individual teacher surveys will be destroyed and the data files will continue to be kept in a locked file cabinet.

Analyses Procedures

This study concentrated on explaining the variance in leadership, climate, and student achievement between schools rather than the variance among individual students, classrooms or school districts. Using the school as the unit of analysis was appropriate in this study and is consistent with Hoy and Clover's (1986) recommendation that "the climate of a school is considered fundamentally intrinsic to the group" (p.98). Furthermore, in order to compare results of the MLQ between schools in this study, a single score was calculated for each school principal. Data from research question # 1 will be analyzed through one-way analysis of variance in which *leadership* is the independent variable and *school climate* is the dependent variable, in addition to a linear regression. Data from research question 2 will undergo a linear correlation in which *leadership* is the independent variable and *student achievement* as measured by the Georgia Criterion-Referenced Competency Test is the dependent variable. Data from research question # 3 will analyze *leadership* and *climate* both as independent variables and *student achievement* as measured by the Georgia Criterion-Referenced Competency Test as the dependent variable through two-way analysis of variance.

Human Subjects and Ethics Precautions

Potential risks involved in the participation in this study were extremely limited. Prior to the start of the study, approval from The George Washington University Office of Human Research Internal Review Board was obtained. The teacher and principal cover letters were also developed and approved by the university. These letters identified the purpose, procedures, possible risks, and benefits of the study. They also informed participants about confidentiality and assured them of anonymity in the use and reporting of data collected. They explained that the participants had the right to withdraw from the study at any time.

Summary of Methodology

In summary, this chapter described the steps that were taken to conduct this study. It included a detailed description of the null hypotheses, variables to be measured, sampling methods, and statistical analysis procedures to be used. Chapter 3 was organized into ten sections: (a) overview of methodology, (b) research questions and hypotheses, (c) research procedures, (d) instrumentation, (e) measurement of research variables, (f) data collection, (g) data security, (h) analyses procedures, (i) human subjects and ethics precautions, and (j) summary.

The following chapter presents results of data analysis for this study. Topics include descriptive statistics of the selected schools, descriptive statistics of the leadership, climate, and student achievement data, and results of detailed statistical procedures performed on the hypotheses in this study.

CHAPTER IV: Analysis of Study

The purpose of this chapter is to present this study's results concerning the relationship between principal leadership and school climate in high-performing, high-poverty, middle schools whose student population is primarily African-American. This chapter is divided into two parts. The first section describes the sampling method used and the data obtained. The second section describes the statistical analysis for each of the study questions and related hypotheses. Tables and figures are provided throughout this chapter to illustrate the statistical patterns found in the data. The chapter concludes with a summary of results.

Data Collection

The population for this study was the middle schools from an urban southeastern school district. An aggregate of sixteen schools was selected for the purpose of this study. Each school was evaluated against the study's four screening criteria: (1) schools must be exclusively comprised of either grades sixth thru eighth, or both grades seven and eight (2) schools' student population had to be comprised of at least 50% African-American students (3) each school must have met adequate yearly progress (AYP) in the area of Reading the year prior to the study, and (4) the principal must have had a minimum of two years experience within the existing school. Due to the level of participation, criteria two and four were omitted for the allowance of two schools. A total of 12 middle schools comprised the school population of the study. The population of teachers (versus the sample) that participated in the study was 165.

School Descriptive Statistics

Table 5 provides a description of each school in this study. Ten (83%) of the schools serviced students in grades 6 thru 8, while two (17%) serviced students only in grades seventh and eighth. Forty-two percent of participating schools had female principals. Thirty-three percent of the principals possessed a doctoral degree, noted as EdD in Table 5 the column entitled EDU.

Variation in school composition and dynamics were quite pronounced among the 12 identified schools. Two schools consisted of populations comprised of single gender (one male and one female). Eleven schools were identified as public schools within the school district. One school was identified as a charter school operating within the school district.

Student population among the 12 middle schools ranged from 129-931 students. One school or 8% of the participating schools had a student population under 200 students. Thirty-three percent or four schools had a population ranging from at least 200 yet under 400 students. An additional 33% of schools had a population ranging from 400-600 students. Twenty-five percent of participating schools had a population over 600 students.

Socio-economic status (SES) of the population that the schools serviced was estimated by the percentage of students enrolled in the free and reduced price meals (FARMS). The range was 38 to 100% participation by school; higher percentages relate to poorer communities. A high percentage of low SES students was defined as 50% or greater qualifying for free or reduced-price meals. Two schools or 17% of the

participating schools had lower percentages of low SES students, 46% and 47%. The ten remaining 83% of schools had a high percentage ranging from 83 to 100% SES.

Table 5 displays data as it relates to each identified school's grade levels (SCHOOLS), principals' gender (PRINCIPAL), principal's educational credentials (EDU), and the principal's tenure at the school site. Moreover, Table 5 identifies the number of surveys accounted for each school site (SURVEYS), each school's population (POP.), as well as the percentage of students qualifying for the free and reduced meals programs (FARMS).

Table 5

Summary School Descriptive Statistics

SCHOOL		PRINCIPAL	EDU.	YRS	SURVEYS	POP.	FARMS
1	6-8*	A	MEd	2	13	129	46.51
2	6-7**	B	MEd	2	7	213	94.84
3	6-8	C+	MEd	1	20	889	81.55
4	6-8	D+	EdD	1	5	350	99.39
5	6-7**	E+	MEd	3	18	319	89.66
6	6-8	G	EdD	4	17	373	98.66
7	6-8	H+	EdD	1	17	660	91.36
8	6-8	J	MEd	4	6	422	92.42
9	6-8	K	MEd	8	6	555	94.77
10	6-8	L+	MEd	1	19	931	47.91
11	6-8	M	MEd	15	20	415	93.25
12	6-8	N	MEd	12	14	725	83.86

Note. * = charter school ** = single gender + = female gender

Mail Survey Process and Response Rates

Prior to survey distribution, district officials and principals of all schools in the study were contacted and briefed about the study's purpose. Certified teachers with a minimum of one year experience at the respective school site were eligible to participate in the study.

Dillman's (2000) mail survey procedure was implemented for this study. A packet of surveys with individually addressed correspondence to each teacher was delivered to the on-site representative for distribution during the first week of August 2009. This week was the first week of school for teachers prior to the return of students. Each packet consisted of a pre-notification letter and two surveys, the MLQ-5X and the OCDQ-RM. The pre-notification letter emphasized that all responses were confidential. Using a random selection process, twenty teachers at each school received both a climate survey and a leadership questionnaire. Within the first week 10% of teachers returned completed surveys.

According to Dillman's (2000) procedure, response rates can be improved by mailing a reminder postcard to all study participants one week after the initial survey package has been sent. Response rates can also be increased by sending a complete replacement survey package to all non-respondents three weeks after the initial survey mailing. Following this procedure, a reminder letter (Appendix C) was sent directly to all teachers in early September, 2009. This increased survey responses to 47%. Afterwards, towards the latter part of September, 2009 a personal visit was made to schools with low response rates. Upon the researcher's second visit to identified schools, a number of third replacement packets were delivered to the contact person. By mid October, 2009 the

overall response rate increased to 74%. This response rate was consistent for both the MLQ-5X and the OCDQ-RM; in no instance did a teacher complete only one survey.

A local number was available for teachers to call the researcher if they had any questions. One call was received in which a teacher inquired if the survey existed on-line due to the fact the teacher misplaced both surveys. The researcher responded "no" along with the explanation that due to copyright issues, the survey could not be provided on-line; therefore, a replacement survey was delivered to the front desk of the school and consequently placed in the teacher's mailbox.

Table 6 illustrates the number of teachers who actively participated at each identified school. The table also indicates the number of both surveys accounted for each school in addition to the percentage rate.

Table 6

Summary Response Rates by School

School	Teachers	MLQ	OCDQ	Rate (%)
1	13	13	13	65
2	10	10	10	50
3	20	20	20	100
4	5	5	5	25
5	18	18	18	90
6	17	17	17	85
7	17	17	17	85
8	6	6	6	30
9	6	6	6	30
10	19	19	19	95
11	20	20	20	100
12	14	14	14	70

Response rates by school ranged from 25 to 100%. Fifty percent of the schools had a response rate ranging from 85 to 100%. Twenty-five percent of the schools accounted for a response rate ranging from 50 to 70%. The remaining 25% of the schools (Schools 4, 8, and 9) were of concern due to low response rates. Due to the possibility of inadequate assessment of school leadership and climate, Schools 4, 8, 9 were removed from the study. The final number of schools in the study was nine.

Table 7

Total Response Rates by School

School	Teachers	MLQ	OCDQ	Rate (%)
12	165	165	165	68.75

Table 8

Final Sample Summary Response Rates by School

School	Teachers	MLQ	OCDQ	Rate (%)
9	148	148	148	82.22

Preliminary Analysis

Leadership

The Multifactor Leadership Questionnaire (MLQ) measures leadership behaviors and outcome measures. The three leadership categories are transformational, transactional and laissez-faire leadership. The three outcome factors are effectiveness of the leader, satisfaction with the leader, and willingness to put forth extra effort.

For each school, a single transformational leadership score was computed by first averaging all teachers' responses for each survey statement associated with each transformational component: Idealized Influence, Inspirational Motivation, Intellectual

Stimulation, and Individualized Consideration. The mean transformational component scores were then averaged to arrive at a single composite transformational leadership score. A similar procedure was conducted to determine scores for transactional and laissez-faire leadership scores per the MLQ procedure outlined in Bass and Avolio (2000). The MLQ outcome factors were determined in the same manner.

Table 6 highlights a summary of the data in both the leadership categories and outcome factors. The highest possible score in leadership categories and outcome factors was 4.0 with 2.0 being the midpoint. The range of transformational scores ranged from 1.97 to 2.59. Transactional scores ranged from 1.98 to 2.76. Laissez-faire scores ranged from 2.15 to 3.25. Extra effort scores ranged from 1.54 to 3.6, and Effectiveness scores ranged from a low of 1.8 to 3.5. Lastly, Satisfaction scores ranged from 1.55 to 3.54.

Table 9

Leadership and Outcome Factors Summary

School Number	Trans formational	Trans actional	Laissez-Faire	Extra Effort	Effectiveness	Satisfaction
1	2.14	2.13	2.37	2.56	2.83	2.81
2	2.40	2.76	3.03	3.29	3.47	3.25
3	2.44	2.46	2.64	2.75	2.73	2.75
5	2.26	2.26	2.15	2.43	2.57	2.69
6	2.29	2.25	2.72	2.92	3.18	3.18
7	2.59	2.83	3.25	3.60	3.5	3.54
10	1.97	1.98	2.16	1.54	1.80	1.55
11	2.12	2.08	2.46	1.93	2.08	2.03
12	2.31	2.45	2.68	2.92	2.86	2.93
Mean Score	2.28	2.36	2.61	2.66	2.78	2.75

Note. Score range 1 to 4.

Table 9 illustrates the summation of leadership and outcome factors. Bass (1990) has clarified that with augmentation of transactional with transformational leadership that a greater amount of Extra Effort, Effectiveness and Satisfaction is possible from employees. Positive correlations have been associated with Transformational factors and the outcomes in effectiveness and satisfaction of colleagues (Bass, 1990). Extra effort is an outcome factor associated with the extent to which followers exert extra effort as a result of the leader's performance. Vision building has the largest effect on extra effort (Geijsel et al., 2003). Satisfaction is an outcome factor that evinces the perception in

which followers are satisfied with the performance of their leader or in this case principal (Bass, 1990).

Three schools managed to score mildly higher in either one of the leadership styles or one of the outcome factors. On a scale of one to four, Schools 2, 6, and 7 all scored above three in at least one of the aforementioned categories. School 2 scored 3.25, and School 6 scored 3.18; while School 7 scored 3.54. All three schools scored higher in the category of laissez-faire leadership style than transformational or transactional. All three schools evinced the highest mean as it relates to the outcome factors of extra effort, effectiveness, and satisfaction. The mean of School 7 was the highest with 3.54; while the mean for school 2 was 3.34. School 6 had the lowest of the three with 3.09.

Climate

The Organizational Climate Description Questionnaire-Revised Middle (OCDQ-RM) measures three principal behaviors (Supportive, Directive, and Restrictive) and three teacher behaviors (Collegial, Committed, and Disengaged). These six scores represent the climate profile of the school. The principal behaviors establish a measure of Principal Openness which, when converted to standardized scores, range from zero to 700. Following procedures described by Hoy (1996), a single Principal Openness and Teacher Openness score was calculated for each school in the study. Tables 10, 11, 12, and 13 illustrate the aggregate of scores determined to calculate the Principal Openness and Teacher Openness scores conveyed in Tables 14 and 15.

Table 10 reflects the behaviors of the principals of schools in the study. The behaviors are identified as supportive, directive, and restrictive. Scores for each of the behaviors were calculated by summing the average school item scores for identified

questions as indicated by Hoy (1996). The following indicates which survey questions were summed and averaged for identified principal behaviors:

Supportive Behavior =1+10+11+12+15+19+24+32+36+44+49

Directive Behavior =9+20+33+37+38+41

Restrictive Behavior =3+4+39+42

Table 10

OCDQ-RM Principal Behaviors Subtest Scores

School	Principal	Supportive	Directive	Restrictive
1	A	28.92	9.23	7.62
2	B	30.29	19.71	8.86
3	C	24.13	17.69	10.38
5	E	21.94	14.11	8.89
6	F	29.43	15.14	8.29
7	G	28.71	15.36	8.50
10	J	17.16	15.26	12.74
11	K	18.25	18.10	13.70
12	L	26.14	12.36	9.79

Table 11 reflects the behaviors of the teachers of schools in the study. The behaviors are identified as collegial, committed, and disengaged. Scores for each of the behaviors were calculated by summing the average school item scores for identified questions as indicated by Hoy (1996). The following indicates which survey questions were summed and averaged for identified teacher behaviors:

Collegial Behavior =2+13+14+16+22+25+34+35+40+43+45

Committed Behavior =5+6+7+17+18+21+46+47+48

Disengaged Behavior =8+23+26+27+28+29+30+31+50

Table 11

OCDQ-RM Teacher Behaviors Subtest Scores

School	Collegial	Committed	Disengaged
1	29.77	28.54	15.15
2	28.86	29.57	14.14
3	26.81	27.81	17.44
5	26.61	24.83	14.50
6	29.29	29.57	14.29
7	26.14	28.50	16.10
10	30.63	28.42	17.84
11	26.80	27.10	16.20
12	26.93	28.00	15.00

In order to compare school profiles each school score was converted to a standardized score as indicated by Hoy (1996). Hoy (1996) referred to converted school subtest scores to standardized scores as SdS scores. These scores were converted with a mean of 500 and a standard deviation of 100. The following formula was utilized to compute the standardized score for supportive behavior (Sup) illustrated by principals:

SdS for Supportive = 100 X (Sup-29.39)/4.61+500

Hoy (1996) indicated that the difference must be determined between an identified school score on Supportive and the mean of 29.39 for the normative sample (Supportive-29.39). Afterwards, the difference was multiplied by 100 [100 X (S-29.39)]. Next, the product is divided by the standard deviation of the normative sample (4.61). Then 500 is added to the result.

The process was repeated for the remaining dimensions of directive, restrictive, collegial, committed, and disengaged. The formulas as indicated by Hoy (1996) are as follows:

SdS for Directive=100 X (Dir-12.09)/2.40+500

SdS for Restrictive=100 X (Res-9.11)/1.52+500

SdS for Collegiate=100 X (Col-29.30)/3.01+500

SdS for Committed=100 X (Com-26.76)/2.74+500

SdS for Disengaged=100 X (Dis-15.56)/2.18+500

Table 12

OCDQ-RM Principal Behaviors Standardized Scores

School	Principal	Supportive	Directive	Restrictive
1	A	489.80	380.83	401.97
2	B	519.52	817.50	483.55
3	C	385.90	733.33	583.55
5	E	338.90	584.17	485.53
6	F	500.87	627.10	446.10
7	G	485.25	636.25	459.87
10	J	234.71	632.10	738.82
11	K	258.35	750.42	801.97
12	L	429.50	511.25	544.74

Note. Standard score computed on a basis of 1000.

Table 13

OCDQ-RM Teacher Behaviors Standardized Scores

School	Collegial	Committed	Disengaged
1	515.61	564.96	481.19
2	485.38	602.55	434.86
3	417.28	538.32	586.24
5	410.63	429.56	451.38
6	499.67	602.55	441.74
7	395.02	563.50	524.77
10	544.19	560.58	604.59
11	416.94	512.41	529.36
12	421.26	545.26	474.31

Note. Standard score computed on a basis of 1000.

Table 14

OCDQ-RM Climate Openness Scores

School	Principal	Teacher
1	569	489.82
2	406.16	482.66
3	461.97	430.91
5	422.90	509.90
6	475.89	485.13
7	463.04	498.14
10	863.79	459.67
11	235.32	458.39
12	457.84	467.23

Note. Standard score computed on a basis of 1000.

Hoy and Clover (1986) developed the climate descriptors (Open, Engaged, Disengaged, or Closed) which result from possible combinations of Principal and Teacher Openness (Table 14). The two openness measures (Hoy, 1996) were computed utilizing the following formulas:

Principal Openness= ((SdS for Sup)+(1000-SdS for Dir)+(1000-SdS for Res)) / 3

Teacher Openness = ((SdS for Col)+(SdS for Com)+(1000-SdS for Dis)) / 3

The standardized score for principal supportive behavior was added to the difference of principal directive behavior standardized score subtracted from 1000. Consequently, this score was added to the difference of the principal's standardized score for restrictive behavior from 1000, and the sum was divided by numeral three.

The standardized score for teacher collegial behavior was added to the standardized score for teacher committed behavior. The sum of those scores was added to the difference of teacher disengaged behavior subtracted from 1000, and the sum was divided by three.

Principal behaviors' standardized test scores as well as teachers' behavior standardized test scores were interpreted according to Hoy (1996). For instance, if the score was 200, it is lower than 99% of the schools. A score at 400 was lower than 84% of the normative schools. A score of 500 was average (Hoy, 1996); a score at 600 was higher than 84% of the normative schools.

School climate openness indices were interpreted the same way as the subtest scores (Hoy, 1996); the mean of the "average" school ranges from 490-510. A score of 650 on teacher openness represented a highly open faculty (Hoy, 1996). A school's climate was considered "open" if the standardized score for principal openness was 500

or higher and the standardized score for teacher openness was 490 or higher. One of the nine schools, School 1, had been classified as having an "open" climate. Schools were considered to have "closed" climates when both principal openness and teacher openness scores were below average. Six schools had "closed" climates. Schools were considered to have "engaged" climates when the principal openness score was below average but the teacher openness score was above average. Two schools, Schools 5 and 7were classified as having an "engaged" climate. Schools were considered to have "disengaged" climates when the principal openness score was above average but the teacher openness score was below average. One of the schools had a "disengaged" climate.

Table 15

OCDQ-RM Climate Openness Scores

School	Principal	Teacher	Climate
1	569	489.82	Open
2	406.16	482.66	Closed
3	461.97	430.91	Closed
5	422.90	509.90	Engaged
6	475.89	485.13	Closed
7	463.04	498.14	Engaged
10	863.79	459.67	Disengaged
11	235.32	458.39	Closed
12	457.84	467.23	Closed

Table 16 illustrates the identified leadership style of the schools in the study as determined by scores in Table 9 along with identified climate. The highest possible score in leadership categories and outcome factors was 4.0 with 2.0 being the midpoint. The range of transformational scores ranged from 1.97 to 2.59. Transactional scores ranged

from 1.98 to 2.76. Laissez-faire scores ranged from 2.15 to 3.25. All schools with the exception of one evinced similar scores across the areas of transformational, transactional, and laissez-faire leadership styles. The exception School 10, ranked below the midpoint of two in the areas of transformational and transactional leadership, while ranking above the midpoint in the area of laissez-faire leadership. Despite the laissez-faire leadership style, School 10 manifested a disengaged climate indicating that the standardized score for principal openness was above average, yet standardized score for teacher openness was below average.

Table 16

Principal Leadership Style and School Climate

School	Leadership	Climate
1	Mixed	Open
2	Mixed	Closed
3	Mixed	Closed
5	Mixed	Engaged
6	Mixed	Closed
7	Mixed	Engaged
10	Laissez-Faire	Disengaged
11	Mixed	Closed
12	Mixed	Closed

Eight schools in the study did not evinced a clear leadership style but rather a mixture of transformational, transactional, and laissez-faire leadership. One school did evince one distinct leadership style as opposed to a mixture; laissez-faire was identified as the leadership style in school ten. Four categories of school climate were evinced in

the study. Five of the nine schools in the study illustrated a "closed" climate. A "closed" climate (Mercurius, 2006) is represented by a principal who exhibits low supportive, high directive, and high restrictive behaviors. Behaviors reflective of teachers in this climate are high disengagement, low intimacy, and low collegiality. Two of the other three schools in the study illustrated the same mixed leadership style; however, all three evinced three different climates separate from "closed." One school illustrated an "open" climate in which the behavior of both teachers and principal is authentic and mutual respect exists between the teachers and the principal. Two schools illustrated an "engaged" climate in which teachers work together to accomplish their goals. These teachers are committed to their students despite the lack of support received from the principal. The third school that evinced a school climate other than "closed" was the school that illustrated a laissez-faire leadership style. The climate associated with this school was "disengaged." A disengaged climate is one in which the principal is behaving in an open, concerned, and supportive ways yet the teachers ignore such overtures.

A one-way analysis of variance was used to test for the difference in principal leadership and school climate as perceived by teachers. The following tables, 17, 18, and 19 illustrate the significances of transformational, transactional, and laissez-faire leadership styles and both teacher openness and principal openness. The analyses employed leadership scores, principal openness scores, and teacher openness. The tables from the three one-way analyses comprise the *F* which is a ratio of the variance between groups to the variance within groups. It also evinces the degrees of freedom and the *p*-value. The final column of the three tables indicates the significance otherwise known as the *p*-value. All three leadership styles are positively significant in the case of satisfaction

and teachers. Nevertheless, none of the three leadership styles was clearly distinctive in the analysis.

Table 17

Transformational Leadership v. Principal Openness

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1044200	1	1044200	74.32874	0.00
Within Groups	224774.5	16	14048.41		
Total	1268975	17			

Table 18

Transactional Leadership v. Principal Openness

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1043873	1	1043873	74.30529	0.00
Within Groups	224774.9	16	14048.43		
Total	1268648	17			

Table 19

Laissez-Faire Leadership v. Principal Openness

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1042785	1	1042785	74.22769	0.00
Within Groups	224775.3	16	14048.46		
Total	1267560	17			

Student Achievement

This study utilized one type of standardized testing information as an indicator of student achievement. The achievement test indicated is part of a larger comprehensive testing program that the state administers to all students enrolled in grades one through eight. The Criterion Referenced Competency Test (CRCT) was designed to measure how

well students acquire the skills and knowledge described in the state performance standards.

The data utilized for the purpose of this study were gathered from the state department of education. The data reflected the results of the CRCT administered in the 2009-2010 school year. The scale score values for meeting and exceeding standards (800 and 850, respectively) are the same for all content areas. The scale score reported for each content area was derived by converting the number of correct responses on the test (the raw score) to the CRCT scale. As the scale scores are equivalent across test forms within the same content area and grade, students obtaining the same score have demonstrated the same level of performance with respect to the state performance standards.

Scores at or above 850 indicate a level of performance that *Exceeds the Standard* set for the test. Scores from 800–849 indicate a level of performance that *Meets the Standard* set for the test. Scores below 800 indicate a level of performance that *Does Not Meet the Standard* set for the test (i.e., the state's minimum level of proficiency). However, scores above 900 generally indicate exceptional performance. Tables 20 and 21 summarize the average ratings per grade level for each school as it relates to reading achievement.

Table 20 is a summary of standardized test scores by grade level of the identified schools one year prior to the study. Both schools two and five were in their first year during the 2008-2009 school year and therefore only serviced sixth grade students. Their scores reflected those of rising seventh grade students. Scores reflected that all schools in the study met standards, yet no one exceeded standards.

Table 21 is a summary of standardized test scores by grade level of the identified schools in the study for the 2009-2010 school-year. Scores reflect that all schools in the study met standards, yet still no one exceeded standards.

Table 20

Summary Student Achievement Scores by School 2008-2009

School	Grade 6	Grade 7	Grade 8	Average
1	830.49	832.49	836.55	833.18
2	810.04			810.04
3	822.08	820.85	822.45	821.79
5	821.20			821.20
6	820.81	811.71	811.32	814.62
7	817.06	809.23	813.22	813.17
10	837.77	828.30	833.06	833.04
11	818.63	812.10	814.63	815.12
12	825.74	818.98	822.27	822.33

Table 21

Summary Student Achievement Scores by School 2009-2010

School	Grade 6	Grade 7	Grade 8	Average
1	839.92	836.14	833.59	836.55
2	815.89	808.23	822.7	815.6
3	828.23	818.21	823.3	823.24
5	825.54	819.62	823.96	823.04
6	826.02	812.8	820.2	819.67
7	818.39	810.66	818.42	831.63
10	839.58	834.16	842.35	838.69
11	821.73	817.7	823.74	821.05
12	830.31	822.92	829.87	827.7
Average	827.29	820.049	826.4682	826.35

Table 22

Transformational Leadership Subscale v. OCDQ Subscales

School climate	Correlation	p-value
Supportive	0.64	0.06
Directive	0.27	0.48
Restrictive	-0.53	0.14
Collegial	-0.62	0.08
Committed	0.15	0.69
Disengaged	-0.23	0.55

Note. p-value less than 0.05 indicates a significant relationship.

Table 23

Transactional Leadership Subscale v. OCDQ Subscales

School climate	Correlation	p-value
Supportive	0.66	*0.05*
Directive	0.34	0.37
Restrictive	-0.48	0.19
Collegial	-0.47	0.21
Committed	0.28	0.46
Disengaged	-0.28	0.47

Note. p-value less than 0.05 indicates a significant relationship.

Table 24

Laissez-Faire Leadership Subscale v. OCDQ Subscales

School climate	Correlation	p-value
Supportive	0.69	*0.04*
Directive	0.36	0.35
Restrictive	-0.38	0.31
Collegial	-0.32	0.39
Committed	0.57	0.11
Disengaged	-0.23	0.55

Note. p-value less than 0.05 indicates a significant relationship.

Table 25

Extra Effort Leadership Subscale v. OCDQ Subscales

School climate	Correlation	p-value
Supportive	0.88	*0.002*
Directive	0.07	0.86
Restrictive	-0.74	*0.02*
Collegial	-0.38	0.32
Committed	0.37	0.33
Disengaged	-0.50	0.17

Note. p-value less than 0.05 indicates a significant relationship.

Table 26

Effectiveness Leadership Subscale v. OCDQ Subscales

School climate	Correlation	p-value
Supportive	0.94	*0.0001*
Directive	0.05	0.90
Restrictive	-0.81	*0.008*
Collegial	-0.21	0.58
Committed	0.45	0.22
Disengaged	-0.60	0.09

Note. p-value less than 0.05 indicates a significant relationship.

Table 27

Satisfaction Leadership Subscale v. OCDQ Subscales

School climate	Correlation	p-value
Supportive	0.92	*0.0005*
Directive	-0.04	0.92
Restrictive	-0.83	*0.005*
Collegial	-0.34	0.37
Committed	0.31	0.41
Disengaged	-0.61	0.08

Note. p-value less than 0.05 indicates a significant relationship.

Tables 22 through 27 present a correlation analysis performed to study the relationship between each of the six principal leadership attributes and each of the six school climate attributes, leading to 36 correlation coefficients.

Correlation coefficients can vary from -1 to +1, which help to determine both the magnitude and direction of pair wise variable relationships. Correlations less than 0.5 are considered weak, and correlations between 0.5 and 0.7 are considered moderate (Onwuegbuzie & Daniel, 1999). The same ranges apply to negative values. Any

relationship should be assessed for its significance as well as its strength (Onwuegbuzie & Daniel, 1999). The definition of the strength of correlation varies from researcher to researcher, however, generally, correlations greater than 0.7 are considered strong (Onwuegbuzie & Daniel, 1999). The significance of the relationship is expressed in probability levels (*p*). This tells how unlikely a given correlation coefficient will occur given no relation in the population. The closer the correlation coefficient is to 1 or -1, the greater the relationship between the variables. These significant *p*-values were italicized in the tables as well.

Table 28

School 1 Leadership Subscale v. Climate Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.13	0.26	0.06	0.09	-0.41	-0.10
Transactional	0.42	0.03	0.07	0.23	0.10	0.20
Laissez-Faire	0.39	0.47	0.11	0.12	0.15	-0.35
Extra Effort	0.49	0.42	-0.19	0.27	0.07	-0.02
Effectiveness	0.54	0.35	-0.20	0.49	0.01	-0.27
Satisfaction	0.23	0.41	-0.16	0.01	-0.20	-0.05

Table 29

School 2 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.50	0.64	0.06	0.64	0.08	-0.30
Transactional	0.44	0.66	0.37	0.50	0.12	-0.25
Laissez-Faire	0.03	-0.10	0.09	-0.37	0.09	0.51
Extra Effort	0.25	0.31	-0.12	0.15	0.62	0.21
Effectiveness	0.20	0.36	0.01	0.10	0.06	0.38
Satisfaction	0.31	-0.07	-0.51	0.20	0.59	0.09

Table 30

School 3 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.68*	0.23	-0.25	0.47	0.05	-0.38
Transactional	0.70*	0.30	-0.33	0.20	-0.16	-0.40
Laissez-Faire	0.64*	0.19	-0.18	0.38	-0.13	-0.27
Extra Effort	0.73*	0.28	-0.16	0.28	-0.21	-0.27
Effectiveness	0.77*	0.20	-0.25	0.16	-0.16	-0.18
Satisfaction	0.81*	0.40	-0.14	0.30	0.07	-0.35

Table 31

School 5 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.66*	-0.06	-0.25	0.24	0.24	0.03
Transactional	0.80*	-0.04	-0.33	0.49*	0.41	0.10
Laissez-Faire	0.72*	0.08	-0.31	0.17	0.24	-0.05
Extra Effort	0.88*	0.20	-0.16	0.61*	0.59*	-0.03
Effectiveness	0.77*	0.07	-0.29	0.41	0.43	-0.22
Satisfaction	0.77*	-0.13	-0.53*	0.41	0.34	-0.25

Table 32

School 6 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.41	0.53	-0.12	0.36	0.34	0.00
Transactional	-0.01	-0.26	-0.28	-0.09	-0.29	0.81*
Laissez-Faire	-0.03	-0.57	-0.26	-0.50	-0.42	0.55
Extra Effort	-0.18	-0.22	0.14	-0.13	-0.34	0.45
Effectiveness	0.10	-0.30	-0.29	-0.12	0.11	0.63
Satisfaction	-0.33	-0.05	0.23	-0.48	-0.39	0.54

Table 33

School 7 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.54	0.17	0.28	0.61*	0.09	-0.02
Transactional	0.28	-0.03	-0.22	0.39	0.32	0.19
Laissez-Faire	0.41	0.26	0.39	-0.35	-0.36	0.13
Extra Effort	0.08	-0.30	-0.01	0.08	-0.20	-0.15
Effectiveness	0.10	-0.29	-0.49	0.55	0.33	-0.39
Satisfaction	0.17	0.04	-0.60*	0.20	0.33	-0.62

Table 34

School 10 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.38	-0.46	-0.41	-0.52*	-0.64*	0.09
Transactional	0.35	-0.51*	-0.17	-0.60*	-0.51*	0.14
Laissez-Faire	0.04	-0.06	0.02	0.02	0.01	0.38
Extra Effort	0.57*	-0.46	-0.48*	-0.56*	-0.45	-0.04
Effectiveness	0.68*	-0.48*	-0.58*	-0.44	-0.63	0.05
Satisfaction	0.64*	-0.50*	-0.60*	-0.55*	-0.54*	-0.18

Table 35

School 11 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.60*	0.06	-0.40	-0.16	0.01	0.37
Transactional	0.73*	0.23	-0.43	-0.13	-0.32	0.61*
Laissez-Faire	0.39	0.07	-0.33	-0.05	-0.15	0.36
Extra Effort	0.73*	0.22	-0.48*	-0.27	0.08	0.51*
Effectiveness	0.78*	0.21	-0.53*	0.02	0.25	0.19
Satisfaction	0.87*	0.19	-0.43	0.12	0.38	0.30

Table 36

School 12 Leadership Subscale v. OCDQ Subscales

	Sup	**Dir**	**Res**	**Col**	**Com**	**Dis**
Transformational	0.55*	0.53	-0.35	0.51	0.53	0.16
Transactional	0.63*	0.35	-0.48	0.60*	0.58	-0.06
Laissez-Faire	0.47	0.52	-0.20	0.44	0.46	-0.23
Extra Effort	0.64*	0.57*	-0.40	0.61*	0.59	-0.24
Effectiveness	0.46	0.41	-0.41	0.45	0.41	-0.08
Satisfaction	0.46	0.42	-0.32	0.41	0.44	-0.22

Tables 28-36 present Pearson product moment correlations between each of the principal leadership subscales: transformational, transactional, laissez-faire, extra effort, effectiveness, and satisfaction, against each of the school climate subscales: supportive, directive, restrictive, collegial, committed, and disengaged, for each of the nine schools in the study. Those correlations indicating a significant relationship (p-value < 0.05) are identified with an asterisk. All p-values were greater than 0.001 except for the correlations between supportive climate and extra effort, effectiveness, and satisfaction in School 3 and between supportive climate and effectiveness and satisfaction in School 11. Due to the large number of tests (multiple comparisons) performed, it was possible to conclude that all significant relationships are in fact spurious or at least merely indicative of a trend, except for these five relationships. Nonetheless, most of the significant correlations appeared in relationships between Supportive climate and the principal leadership subscales.

School 3 illustrated a significant positive relationship between all three leadership styles and the OCDQ Supportive subscale. The three leadership outcomes, Extra Effort,

Effectiveness, and Satisfaction illustrated significant positive relationship with the Supportive subscale as well.

School 5 illustrated a significant positive relationship between all three leadership styles and the Supportive subscale of the OCDQ. The three leadership outcomes also illustrated a significant positive relationship with the Supportive subscale as well. Significant positive relationships were established between Extra Effort with the subscales of Collegial and Committed. Transactional leadership style evinced a moderately positive relationship with the Collegial subscale. The outcome subscale of Satisfaction evinced a statistically negative significance with the subscale of Restrictive.

School 10 evinced a significant positive relationship with the three outcomes of leadership and the Supportive subscale, and all three outcomes illustrated significant negative relationships with the Restrictive subscale. Statistically significant negative relationships evinced between both Transformational and Transactional leadership styles and Collegial and Committed subscales.

School 11 illustrated statistically significant relationships with Transformational and Transactional leadership styles and the Supportive subscale. All three leadership outcomes indicated highly significant relationships with the Supportive subscale as well. Nevertheless, significant negative relationships manifested between Transactional leadership and the Disengaged subscale. Subscales Extra Effort and Disengaged illustrated statistically significant negative relationships too.

Table 37 presents a second set of supplementary correlation analyses between MLQ items (45 items) and OCDQ items (50 items). Using a conservative Bonferroni correction, the alpha-level cutoff for rejection is 0.000022 (much lower than the usual 5%

level). Of the 2,250 items paired between the instruments only six tests achieve this significance level.

Table 37

MLQ Question Items v. OCDQ Question Items

MLQ Question	OCDQ Question	Correlation	P-value
8	49	0.93	0.0000
24	41	0.94	0.0000
40	19	0.92	0.0000
41	11	0.93	0.0000
43	15	0.92	0.0000
43	49	0.93	0.0000

In multiple testing scenarios, particularly of this kind where thousands of correlation analyses were performed, the type I error rate is severely inflated. In fact, using a conservative Bonferroni correction, the alpha-level cutoff for rejection is 0.000022; this is much lower than the usual 0.05 level. Significant results were scant. Only six tests achieve this significance level. Of the six items on the MLQ-5X, three items, 40, 41, and 43 were related to the leadership outcome subscale, Effectiveness. Item 40 corresponded to "is effective in meeting my job related needs." Item 41 corresponded to "is effective in representing me to higher authority." Item 43 corresponded to "leads a group that is effective." Item 43 appeared twice in the results. It was strongly correlated to item 15 on the OCDQ-RM which is a constituent of the subscale Committed as it relates to Teacher Openness. However, it is also strongly, negatively related to item 49 on the OCDQ as well which comprises the Restrictive subscale for Principal Openness. Item

40 on the MLQ was correlated to item 19 on the OCDQ which also comprises the subscale of Committed behavior.

One item on the MLQ, question 8, accounted for the subscale Idealized Influence which comprises the Transformational leadership style. It was strongly related to the OCDQ's item 49 which comprises the subscale Restrictiveness in relation to Principal Openness. Transactional leadership style was represented by item 8 on the MLQ in the subscale Contingent Reward. This item strongly correlated with item 41 on the OCDQ in the subscale Disengaged as it relates to Teacher Openness.

A regression analysis was performed to study the relationship between each of the four student achievement score summaries and each of the six principal leadership attributes, controlling for each of the six school climate attributes, leading to 24 regression models. The following tables 38-43 present the *p*-values for studying the relationship between principal leadership and student achievement and each of the school climate attributes. The school climate attributes have been abbreviated as follows: Supportive=Sup, Directive=Dir, Restrictive=Res, Collegial=Col, Committed=Com, and Disengaged, Dis). A *p*-value less than 0.05 indicated a significant relationship; these significant *p*-values were italicized on the table.

Interestingly, the correlations between each principal leadership attribute and the individual grade achievement scores (Grades 6, 7, and 8) were, if not significant, borderline significant (p-value <=0.13). In the literature, a *p*-value between 0.05 and 0.15 was interpreted as a marginally significant result. Thus, these negative relationships between achievement scores and principal leadership attributes are significant or

marginally significant across the board. None of the average student achievement scores were significantly related to principal leadership attributes.

Table 38

Transformational Leadership Subscale v. School Achievement

Grade Level	Correlation	p-value
Grade 6	-0.68	0.04
Grade 7	-0.75	0.02
Grade 8	-0.78	0.01
Average	-0.38	0.31

Note. p-value less than 0.05 indicates a significant relationship.

Table 39

Transactional Leadership Subscale v. School Achievement

Grade Level	Correlation	p-value
Grade 6	-0.71	*0.03*
Grade 7	-0.72	*0.03*
Grade 8	-0.63	0.07
Average	-0.35	0.36

Note. p-value less than 0.05 indicates a significant relationship.

Table 40

Laissez-Faire Leadership Subscale v. School Achievement

Grade Level	Correlation	p-value
Grade 6	-0.69	*0.04*
Grade 7	-0.73	*0.02*
Grade 8	-0.65	0.06
Average	-0.32	0.40

Note. p-value less than 0.05 indicates a significant relationship.

Table 41

Extra Effort Outcome Subscale v. School Achievement

Grade Level	Correlation	p-value
Grade 6	-0.59	0.09
Grade 7	-0.67	*0.05*
Grade 8	-0.70	*0.04*
Average	-0.34	0.37

Note. p-value less than 0.05 indicates a significant relationship.

Table 42

Effectiveness Outcome Subscale v. School Achievement

Grade Level	Correlation	p-value
Grade 6	-0.56	0.12
Grade 7	-0.64	0.06
Grade 8	-0.67	0.05
Average	-0.36	0.34

Note. p-value less than 0.05 indicates a significant relationship.

Table 43

Satisfaction Outcome Subscale v. School Achievement

Grade Level	Correlation	p-value
Grade 6	-0.54	0.13
Grade 7	-0.63	0.07
Grade 8	-0.72	*0.03*
Average	-0.36	0.34

Note. p-value less than 0.05 indicates a significant relationship.

A two factor analysis of variance was used to test the relationship between principal leadership and student achievement while controlling for school climate. The analyses employed scores from principal leadership, principal openness, teacher openness, and student achievement. The following tables 44 through 51 illustrate the data as it pertains to the data sheet utilized for the analysis. They comprise data related to the six leadership attributes and the six factors of school climate, as they relate to student achievement in grade levels sixth, seventh, and eighth. The leadership styles are transformational, transactional, and laissez-faire leadership, while the principal behaviors are supportive, directive, and restrictive. The teacher behaviors are collegial, committed, and disengaged. The tables display the count, sum, average, and variance as it pertains to each row of the data sheet utilized for the analysis. The count is the number of factors pertaining to the rows against the columns in the data sheet. The sum refers to the sum of the data of each row in the data sheet. The variance is the measure of how far each set of numbers are spread out from each other. It describes how far the numbers lie from the mean or the expected value.

Table 52 comprises the results of the two factor analysis. The table comprises the *F* which is a ratio of the variance between rows to the variance within columns. It also illustrates the degrees of freedom and the *p*-value. The final column of the table indicates the significance otherwise known as the *p*-value. All three leadership styles were positively significant in the case that they are related to student achievement in this study.

Table 44

Transformational v. Student Achievement Controlling for School Climate

Grade Level	Count	Sum	Average	Variance
6th	6	4.48	0.746667	0.010347
7th	6	0.6	0.1	0.00032
8th	6	0.45	0.075	0.109441

Table 45

Transactional v. Student Achievement Controlling for School Climate

Grade Level	Count	Sum	Average	Variance
6th	6	3.68	0.613333	0.034707
7th	6	0.8	0.133333	0.001227
8th	6	2.65	0.441667	0.038777

Table 46

Laissez-faire v. Student Achievement Controlling for School Climate

Grade Level	Count	Sum	Average	Variance
6th	6	4.08	0.68	0.096
7th	6	1.38	0.23	0.00352
8th	6	3.87	0.645	0.01283

Table 47

Extra Effort v. Student Achievement Controlling for School Climate

Grade Level	Count	Sum	Average	Variance
6th	6	4.39	0.731667	0.054977
7th	6	0.89	0.148333	0.001257
8th	6	2.04	0.34	0.01576

Table 48

Effectiveness v. Student Achievement Controlling for School Climate

Grade Level	Count	Sum	Average	Variance
6th	6	4.42	0.736667	0.017027
7th	6	1.46	0.248333	0.002027
8th	6	3.51	0.585	0.01351

Table 49

Satisfaction Outcome v. Student Achievement Controlling for School Climate

Grade Level	Count	Sum	Average	Variance
6th	6	1.34	0.223333	0.008387
7th	6	3.6	0.6	0.03844
8th	6	5.29	0.881667	0.002377

Table 50

Principal Openness v. Student Achievement Controlling For School Climate

Behaviors	Count	Sum	Average	Variance
Supportive	18	9.5	0.527778	0.092136
Directive	18	5.76	0.32	0.046271
Restrictive	18	9.19	0.510556	0.109441

Table 51

Teacher Openness v. Student Achievement Controlling For School Climate

Behaviors	Count	Sum	Average	Variance
Collegial	18	8,35	0.463889	0.1.5519
Committed	18	8.89	0.493889	0.091343
Disengaged	18	7.24	0.050936	0.050936

Table 52

Principal Leadership v. Student Achievement Controlling for School Climate

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Rows	7.218508	17	0.424618	29.8912	1.05E-28
Columns	0.557319	5	0.111464	7.846554	4.11E-06
Error	1.207464	85	0.014205		
Total	8.983292	107			

Research Questions

1. What is the relationship between principal leadership and school climate in predominately African-American middle schools, as perceived by teachers?
2. What is the relationship between leadership style as perceived by teachers and student achievement in predominately African-American middle schools?
3. What is the relationship between leadership and student achievement, controlling for school climate in predominately African American middle schools?

Hypotheses Test Results

Three hypotheses were developed to explore these study questions. Pearson's product moment coefficient may appropriately be considered for use when both variables represent either interval or ratio scales of measurement (Onwuegbuzie & Daniel, 1999). Pearson product-moment correlation analysis is directly analogous to simple linear regression (Onwuegbuzie & Daniel, 1999). The major assumptions for conducting a null hypothesis significance test (NHST) for the Pearson's product-moment correlation coefficient are the same as that for simple linear regression (Onwuegbuzie & Daniel, 1999).

There are four assumptions that are made with respect to Pearson's correlation as follows: (a) study variables must either be interval or ratio measurements, (b) variables must be approximately normally distributed, (c) outliers are either kept to a minimum or are removed entirely, and (d) the data reflects homoscedasticity. The following Figures 1 and 2 reflect normality of the data.

The first assumption, namely independence of observations can be assessed by carefully examining the research design (Onwuegbuzie & Daniel, 1999). Leadership as measured by the Multifactor Leadership Questionnaire is a categorical variable, which takes on numerical value. Interval scales are also termed as rating scales. An interval scale has an arbitrary zero point with further numbers placed at equal intervals. Interval variables allow us not only to rank order the items that are measured, but also to quantify and compare the sizes of differences between them. The Multifactor Leadership Questionnaire is a 5-point Likert-type scale which elicits the perception of leader behaviors in numerical form from subordinates. Survey participants may respond to questions ranging from zero signifying "not at all" to four signifying "frequently if not always."

Q-Q plots assessed normality of each variable: principal leadership attributes (6), school climate attribute (6), and student achievement scores (4) required for all correlation and analysis of variance analyses performed and presented in this study. The residual plots assessed the assumptions of independence and constant variations required by the regression analysis for research question three of student achievement scores on principal leadership attributes, controlling for school climate attributes.

The correlation and analysis of variance analyses performed and presented in this study required an assumption of normally distributed variables. This assumption was measured through a Shapiro-Wilks test of normality and a Q-Q (normal probability) plot. The variables under study were six principal leadership scores, six school climate scores, and three student achievement scores. The *p*-values from the Shapiro-Wilks test on these 16 variables are shown in tables 50, 51, and 52. A *p*-value > 0.10 indicates that no serious violations of the normality assumption are present. All *p*-values achieve this point.

The figures following the tables present Q-Q plots for each of the variables under consideration. Though the goal was to determine if the points deviate substantially from the line, with only 9 data points (schools) it was difficult to assess normality from these plots as typically a few data points will always deviate from the line. Nonetheless, the plots indicated no serious violations of the normality assumption. Given the results of the Shapiro-Wilks test and knowledge that correlation and analysis of variance analyses were robust to even moderate violations of the normality assumption, it was concluded that the normality assumption was satisfied for this data.

Table 53

Principal Leadership Normality

Transformational	Transactional	Laissez-Faire	Extra Effort	Effectiveness	Satisfaction
0.99	0.49	0.66	0.92	0.62	0.43

Table 54

School Climate Normality

Supportive	Directive	Restrictive	Collegial	Committed	Disengaged
0.20	0.81	0.12	0.12	0.11	0.29

Table 55

Student Achievement Normality

Supportive	Directive	Restrictive	Collegial	Committed	Disengaged
0.99	0.49	0.66	0.92	0.62	0.43

Figure 1

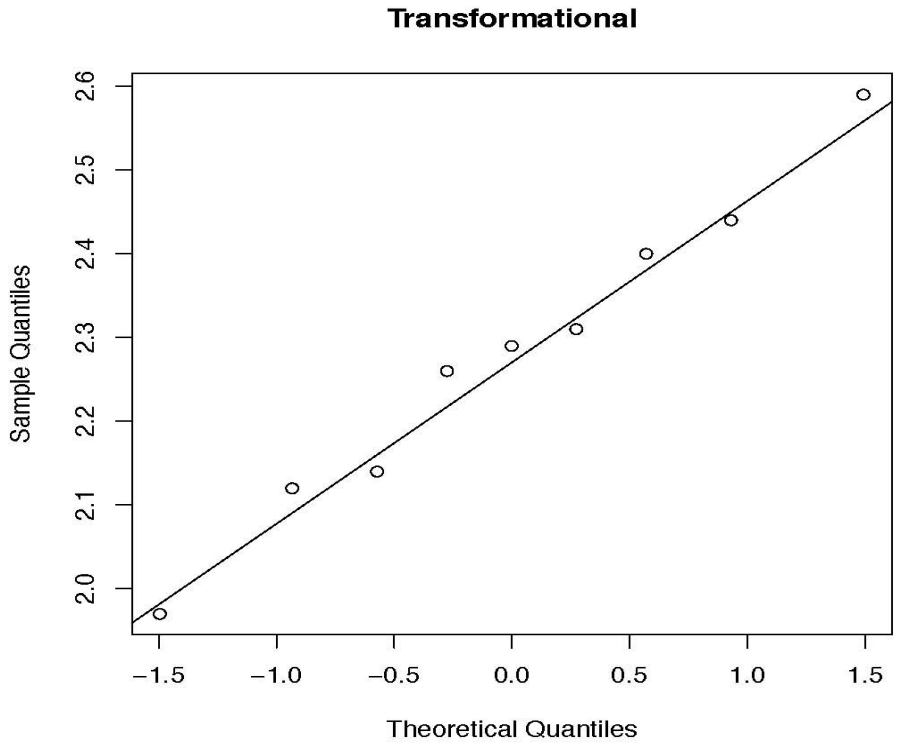


Figure 2

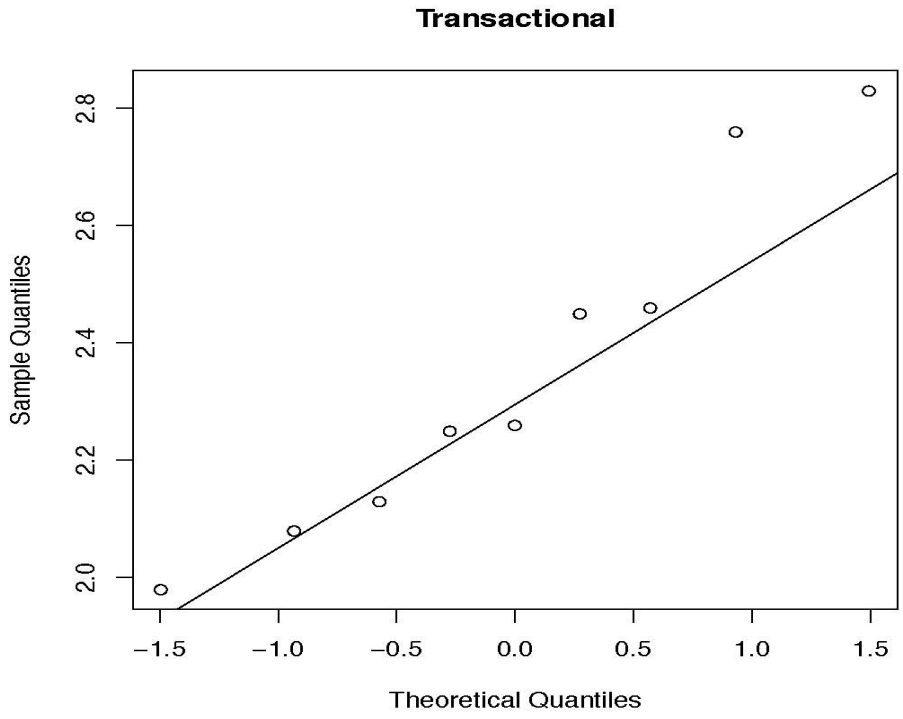
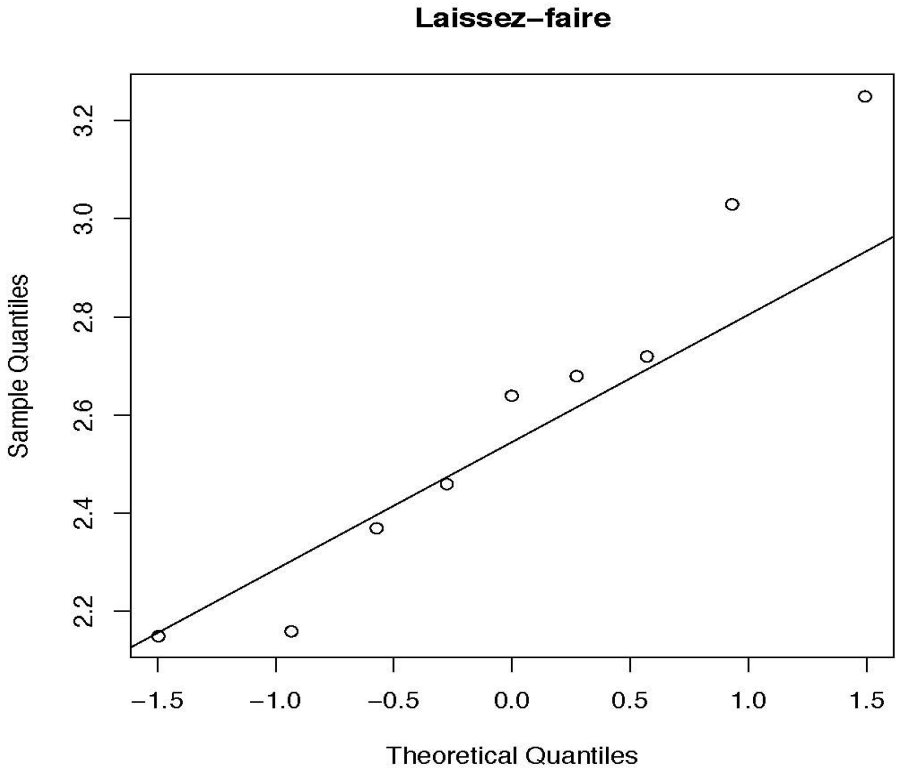


Figure 3



Research question 3 required an analysis of variance of student achievement scores against each of the principal leadership attributes, controlling for the school climate attributes. With three achievement score variables and six, principal leadership attributes this lead to 18 analysis of variance models. Twenty-four figures accounted for the residual plots from each of these analysis of variance fits.

The plots were used to diagnose any deviations from the assumptions of independent observations and constant variance (homoscedasticity). Violations would be seen through patterns in the lay out of the points. Again with nine data points (schools) it was difficult to assess patterns; however, all plots indicated a reasonable spread of the residuals without any obvious patterns for each model. Thus, the analysis of variance model assumptions of independence and constant variance were met.

Following is a discussion of the analyses of each hypothesis.

Hypothesis 1

The first hypothesis stated that there would be a positive relationship between principal leadership and school climate, as perceived by teachers in predominately African-American middle schools as measured by the MLQ, and the school climate as measured by the OCDQ. This hypothesis was accepted. Several analyses were used to investigate this hypothesis.

A one-way analysis of variance was used to test for significance between Transformational, Transactional, and Laissez-Faire leadership styles and two aspects of school climate, principal openness and teacher openness. The analyses utilized leadership scores, principal openness scores, and teacher openness. The report from the ANOVA

comprises the *F* which is a ratio of the variance between groups to the variance within groups. It also evinces the degrees of freedom and *p*-value.

Results evinced the following for Transformational leadership and principal openness as follows: F (1, 16) = 74.33, $p = .000$. Results for Transactional leadership and principal openness are as follows: F (1,16) = 74.31, $p = 0.00$. Laissez-Faire leadership style and principal openness evinced the following: F (1,16) = 74.23, $p = 0.00$. All leadership styles evinced a significantly positive relation with school climate. None of the three leadership styles was prevailing as it relates to school climate in this study.

The results evinced from Transformational leadership and teacher openness were as follows: F (1,16) = 3475.231, $p = 0.00$. Transactional leadership and teacher openness evinced the following results: F (1,16) = 3473.81, $p = 0.00$. Finally, Laissez leadership and teacher openness evinced the following results: F (1,16) = 3469.83 $p = 0.00$.

Pearson product-moment correlations were also calculated to determine the relationships between variables for the study. The unit of analysis was the school; therefore the number of observations was 9, the number of schools in the study. Correlations were conducted to determine if the leadership style of the principal was related to the school climate in the school in which they served. This was completed through a process in which the three leadership factors and the three outcomes of leadership from the MLQ-5X were compared to the six climate behaviors. This lead to 36 correlation coefficients presented in the tables 23-27 above.

In this study, Transactional leadership was moderately positively related to supportive school climate (correlation 0.66, $p = 0.05$). This means that principals rated as being stronger transactional leaders were related to more supportive school climates. As

expected given the leadership literature, all correlations with restrictive behavior were negative in this study, they were significantly, negatively related to the extra effort, effectiveness, and satisfaction attributes of leadership.

Hypothesis 2

The second hypothesis stated that there would be a positive relationship between principals' leadership style as perceived by teachers in predominately African-American middle schools as measured by the MLQ, and student academic achievement as reported by the state reading indicator results. This hypothesis was rejected. This study did not have enough variability in the student achievement data to completely address the hypothesis. All nine schools indicated that a relationship existed between a conglomerate of the three leadership styles and student achievement results from the state reading indicator.

A regression analysis was performed to study the relationship between each of the six student achievement score summaries and each of the four principal leadership attributes, leading to 24 correlation coefficients and corresponding significance tests. Correlations were found between -1 and 1. A value close to 1 indicated a strong positive relationship, a value close to -1 indicated a strong negative relationship, and a value close to 0 indicated no relationship. A test of whether the correlation is significantly strong (non-zero, either positive or negative) was performed; the *p*-values were presented.

Surprisingly, the results indicated that leadership style is negatively related to the student achievement scores. In this study, transformational principal leadership was negatively related to the Grade 6 student achievement scores in that better scores are related to principals that are less transformational (correlation -0.68, $p = 0.04$). Schools 1

and 2 had average achievement scores of 836.55 and 815.89, but the transformational principal leadership scores were 2.14 and 2.40 respectively. Again, this finding should be viewed cautiously as there was little variability in test scores across schools.

Hypothesis 3

The third hypotheses stated that there would be no relationship between teachers' perceptions of their principal's leadership style and the school climate as measured by the MLQ and student academic achievement as reported by the state reading indicator results in predominately African-American middle schools. This hypothesis was rejected.

A two factor analysis of variance was used to test the relationship between principal leadership and student achievement while controlling for school climate. The analysis employed scores from principal leadership, principal openness, teacher openness, and student achievement. The tables 44 through 52 illustrated the six leadership attributes and the six factors of school climate, as they related to student achievement in grade levels sixth, seventh, and eighth. The leadership styles are transformational, transactional, and laissez-faire leadership, while the principal behaviors are supportive, directive, and restrictive. The teacher behaviors are collegial, committed, and disengaged.

Table 52 comprised the results of the two factor analysis. The table illustrated the *F* which is a ratio of the variance between rows to the variance within columns. The principal and teacher behaviors of climate comprised the columns in the analysis, while the leadership attributes versus student achievement comprised the rows. Table 52 also illustrated the degrees of freedom and the *p*-value. The final column of the table indicated the significance otherwise known as the *p*-value. The rows as well as the columns

evinced a *p*-value less than 0.05. Rows evinced F = 29.8912 and a *p*-value of 1.05E-28, and columns evinced F = 7.846554 and a *p*-value of 4.11E-06, indicating all three leadership styles were positively significant in the case that they were related to student achievement in this study.

Summary of Data Analysis

A purposeful sample of 12 urban middle schools was selected to study relationships between principal leadership style and school climate, and between leadership and climate with respect to student achievement. Nine schools were included in the study due to the removal of three schools from the study based on insufficient data. Of the nine remaining schools 148 teachers of 180 accounted for an 82% response rate. The Multifactor Leadership Questionnaire (Bass & Avolio, 2000) measured three leadership styles (transformational, transactional, and laissez-faire) in addition to three outcome factors (effectiveness, satisfaction, and extra effort). The Organizational Climate description Questionnaire (Hoy, 1996) measured Principal Openness and Teacher Openness, the combination of which describes four school climate types: open, engaged, disengaged, and closed. School reading scores, socio-economic status (SES) as related to free and reduced meals (FARMS) data were obtained from the state's department of education.

Leadership data from the nine schools indicated that eight of the nine schools in this study had principals that demonstrated a mixture of transformational, transactional, and laissez-faire leadership styles. One school, School 10, evinced a principal with a laissez-faire leadership style. Student achievement did not appear to be related to one particular leadership style in this study, but rather to all three.

The majority of research regarding school climate indicated that the climate is based on the perceptions held by the teachers regarding the leadership behaviors of the principal (Halpin & Croft, 1962; Hoy et al., 1996). Hoy et al. (1991) indicated that a school with an open climate will be an effective school where teachers are collegial, intimate, engaged, and productivity is enhanced. Climate data revealed that one of the schools had an “open” climate. Two schools had an “engaged” climate, and one had a “disengaged” climate. The remaining five schools evinced closed climates.

The “open” school climate is one in which behavior of both teachers and principal is authentic; teachers and principal respect one another and are "straight" with each other (Hoy et al., 2003). Acts of leadership evolve rather easily and appropriately from both groups as needed. The open school is neither preoccupied with task achievement nor need gratification, but both emerge freely (Hoy et al., 2003).

The “engaged” climate is one where the teachers work together to accomplish their goals; they are committed to their students; and they co-operate with each other (Hoy, Hoffman, Sabo, & Bliss, 1996). The principal, on the other hand, does not support the teachers in their actions, closely supervises their performance, and does not shield the staff from the burdens of bureaucratic routine. Nevertheless, the faculty members work together as professionals, in spite of, not because of the principal. The faculty is engaged in the professional work of the school, dedicated to their students, and respectful of each other. Although teacher-principal relations are closed, the faculty has open teacher interactions with both their students and colleagues (Hoy et al., 1996).

A closed climate (Mercurius, 2006) is represented by a principal who exhibits low supportive, high directive, and high restrictive behaviors. The teacher behavior is high

disengagement, low intimacy, and low collegiality. Principals in schools where the climate is closed, manifest leadership behaviors that are restrictive and directive. The principals may be dictatorial and maintain a tight control over the staff.

Disengaged climates are those that are the reverse of the engaged climate in that the principal is behaving in open, concerned and supportive ways yet the teachers ignore these overtures by the principal (Fisher, 2003). Disengagement is viewed as the psychological and physical distancing of teachers from one another as well as the school as a whole as expressed in the degree to which teachers are involved in the goals of the school (Mercurius, 2006).

Forty-four percent of the schools in this study evinced closed climates. School 1 evinced an opened climate. Schools 5 and 7 revealed an engaged climate while School 10 accounted for a disengaged climate. It appears when teachers perceive that their principal varies his/her leadership style, then those teachers tend to rate the school climate lower. For example, flexibility with regard to student discipline or duty assignments could negatively relate to school climate, i.e. teachers feel that other teachers are treated differently. Conversely, if the teachers feel that their principal treats teachers consistently, then the teachers feel principals work to meet the individual needs of various teachers or the situation; however, teachers seem to indicate a desire for consistent treatment. This might suggest that teachers fail to understand that differential treatment is needed based on the developmental level of the teacher or the task in question.

Student achievement data indicated that 100 % of the nine schools evinced CRCT reading score averages that met state standards during the 2008-2009 and the 2009-2010 school-years. Overall there were no clear trends between student achievement and

leadership or climate except Laissez-Faire leadership is strongly related to a disengaged school climate.

Analysis of variance and correlation analyses were used to test the three original hypotheses. Principal leadership was found to have a very scant relationship with school climate. Exclusively, Transformational leadership was weakly related to Principal Openness. Transactional and laissez-faire leadership had weak relationships with both Principal Openness and Teacher Openness as well.

The following chapter finalizes this study. It provides a discussion of conclusions and recommendations of future research in addition to a summary.

CHAPTER V: Summary, Conclusions, and Recommendations

The purpose of this chapter is to discuss the conclusions and implications resulting from this study. The first section will delineate a concise overview of the methodology used subsequently followed by a detailed presentation of the findings. Conclusions and discussions are presented along with additional questions raised due to the findings. Finally, implications of educational policy, practice, and further research are presented in addition to a summary of the study.

The purpose of this study was to explore the relationship between principal leadership and school climate in high-performing, high-poverty, middle schools whose student population is primarily African-American.

Variations of the MLQ have been used in many published empirical studies of transformational leadership in education (Bass & Avolio, 2000; Fisher, 2003; Robinson, Lloyd, & Rowe, 2009) though few have investigated the impact of such leadership on

students' academic or social outcomes. Leithwood and Jantzi (2005) reviewed 33 studies in which half were judged to show that transformational leadership had a small indirect influence on academic or social student outcomes (Robinson et al., 2009).

This study explored three research questions germane to the leadership styles of middle school principals and the relationship of these styles to school climate and student achievement.

1. What is the relationship between principal leadership and school climate in predominately African-American middle schools, as perceived by teachers?
2. What is the relationship between leadership style as perceived by teachers and student achievement in predominately African-American middle schools?
3. What is the relationship between leadership and student achievement, controlling for school climate in predominately African American middle schools?

Overview of Methodology

This study utilized a correlational research design to examine relationships between principal leadership style, school climate and student achievement in a select number of middle schools in an urban school district located in the southeastern region. A purposeful sample of 12 middle schools was selected for this study. This sample represented 75% of the district's existing middle schools. This study incorporated two survey instruments: the Multifactor Leadership Questionnaire-5X (Bass & Avolio, 1995) and the Organizational Climate Description Questionnaire-Revised Middle (Hoy & Clover, 1986). The MLQ-5X was implemented to assess teachers' perceptions of their principal's leadership style while the OCDQ-RM was implemented to assess school climate of the self same teachers. Procedures designed by Dillman (2000) for

implementing a mail survey were followed to gather data during the fall of 2009. An insufficient response rate accounted for a total of three schools dropped from the study during the analysis process of the study. The remaining nine schools accounted for an 82% response rate and 56% of all middle schools in the district.

Overview of Findings

Three hypothesis were used to test relationships between principal leadership style, school climate and student achievement as perceived by teachers. Two hypotheses were rejected, and one was accepted. The following is a synopsis of the analytical results.

The first hypothesis, Hypothesis 1, explored potential relationships between three forms of leadership and two aspects of school climate. Moreover, the first hypothesis stated that there would be a positive relationship between principal leadership and school climate, as perceived by teachers in predominately African-American middle schools as measured by the MLQ, and the school climate as measured by the OCDQ. This hypothesis was accepted. The leadership styles were transformational, transactional, and laissez-faire and the climate aspects were Principal Openness and Teacher Openness. Support was found for a strong positive relationship between transformational, transactional, and laissez-faire leadership. Support was also found for a strong negative relationship between laissez-faire leadership and a disengaged climate.

Results found that all three leadership styles had significantly positive relationship with both Principal Openness and Teacher Openness.

The second hypothesis, Hypothesis 2, stated that there would be a positive relationship between principals' leadership style as perceived by teachers in predominately African-American middle schools as measured by the MLQ, and student

academic achievement as reported by the state's reading indicator results as recorded from the 2009-2010 school-year. This hypothesis was rejected. The lack of variability among student achievement scores did not allow for a complete investigation.

The third hypothesis, Hypothesis 3, stated that there would be no relationship between teachers' perceptions of their principal's leadership style and the school climate as measured by the MLQ and student academic achievement as reported by the state reading indicator results in predominately African-American middle schools. This hypothesis was rejected. Indeed, this was inconsistent with prior studies. "The size of the effects that principals indirectly contribute toward student learning, though statistically significant is also quite small" (Hallinger, 2005, p. 229).

Conclusions and Discussions

The following four conclusions have been drawn from the results of this study.

Conclusion 1

This study's results are not in alignment with Bass's (1985) theory of transformational leadership; consequently, it is not applicable for research on leadership in this particular southeastern school district. Although all schools in the study met AYP, all principals were rated as good administrators by teachers despite not being rated strong instructional leaders. This is a similar finding with that of Brookover et al. (1979) who also found that principals can impact student achievement despite the lack of focus on instructional leadership behaviors. This may support the argument of situational theorists who claim that the most effective combination of people and task-oriented behaviors vary (Blake & Mouton, 1964; Fiedler, 1967; Hersey & Blanchard, 1977; Kirby et al., 1992). 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.

Successful leaders (Geijsel et al., 2003) often subscribe to a mix of both transformational and transactional styles in order to influence staff by demonstrating behaviors that meet subordinates' needs through relationships that motivate them to achieve outcomes beyond what they would ordinarily.

Fiedler (1967) believed different combinations of leader-member relations, task structure, and power of the leader position accounted worked well with different leaders. Furthermore, style is difficult to adapt to different situations; however, with training in the appropriateness of different styles, leaders could learn to expand their range and become effective under varying conditions (Hersey and Blanchard, 1977).

Teacher-principal relations can affect performance outcomes (Fiedler, 1967). The principals of the schools with mixed leadership styles could have possibly developed strong personal relations with subordinates. Also, task structure may have been conducive to teachers' overall performance. That is, the time allotted for collaborative planning and professional development could have been heavily influenced by the principal. Lastly, style of the principal may have given way to the actual position itself. The power (Fiedler, 1967) of the principalship within a given school may have had a positive impact on the performance of teachers. Different leadership styles work better with different combinations of the three factors rather than seeing a leader as constant (Fiedler, 1967).

The applicability of the MLQ-5X to school settings was not substantiated in this particular study. Evans (1996) conducted a confirmatory study comprised of 18

elementary schools in Michigan in which he compared transformational leadership scores utilizing Bass's (1985) results. Similarity among subordinates' responses regarding leadership behaviors supported the appropriateness for the use of Bass's MLQ for elementary school usage. Evidence from this study suggests that the MLQ model does not work in this particular southeastern school district as it pertains to middle schools.

Transformational leadership appears to be more related to the style of elementary school principals as reviewed in this study. The study of high-performing, high-poverty schools is typically associated with those schools that have made huge gains on state achievement tests despite having factors that may suggest otherwise. The vast majority of these studies reflected elementary schools (Bell, 2001; Designs for Change, 1998; Fisher, 2003; Hoffman, 1994; Kelley et al., 2005; Towns et al., 2001; Wang, Wong, & Kim, 1999). One suggestion for this is that elementary schools tend to provide students with basic skill training from the same teacher as opposed to middle schools where the lack of fit between the middle school environment and early adolescent developmental needs is responsible for the shift toward more negative student self-evaluations and school achievement attitudes (Becker & Luthar, 2006).

In addition to the low number of schools included in this study, a strong accountability system based fundamentally on a transactional policy could account for the unsubstantiated results related to the MLQ. Furthermore, there were six schools which housed principals that had served less than four years prior to the 2009-2010 school year, three of whom had served only one year in their respective sites prior to this study. The conditions in this district were highly characteristic of urban schools that teach predominately poor children of color. Hence, while the findings were disappointingly

related to the theoretical foundation of the study, the findings may very accurately reflect the 'real world' of urban education.

American cities have undergone significant changes due to suburbanization. After World War II, the White middle class began moving to the suburbs (Howard Samuel, 2001). Cities were still considered relatively healthy until the 1960s when the repercussions of Brown v. Board of Education (1954) mandated school desegregation. This accelerated the White suburban exodus (Howard Samuel, 2001), and business and commerce followed suit. Suburbs have expanded to the extent that many suburban officials and residents believe they are autonomous entities, due to the disconnection to their central cities. The tax bases of cities have declined and as a result many schools have deteriorated. Impoverished African-Americans with limited employment opportunities are often the residents of inner-cities.

Urban schools are more likely to have low income students attending than other schools (Lankford, Loeb, & Wyckoff, 2002; Lippman et al., 1996). For example, 44 percent of urban public school students are eligible to receive free or reduced price school lunch, compared with 23 percent of suburban students and 30 percent of rural students (U.S. Department of Education 1994). Moreover, urban students are more likely to be disadvantaged by having only one parent; having less educated and/or unemployed parents; having handicapping conditions or learning, emotional, or health disabilities; having difficulty speaking English; or by being homeless (NCES, 2001b; Noguera, 2010). Finally, urban children are more likely to have more than one of these attributes, thereby compounding their disadvantage (Lippman et al., 1996).

Other characteristics of urban schools besides the SES of their students are often identified as related to urban school problems and poorer student outcomes. Urban schools are less likely to have comparable resources to suburban schools (McCraken & Barcinas, 1991). As a result school level achievement differences may reflect inequities in resources (Panel on High-Risk Youth 1993; Orland 1990). Urban schools, in particular, have lesser-qualified teachers; low-income, low-achieving and nonwhite students, particularly those in urban areas, find themselves in classes with many of the least skilled teachers (Lankford, Loeb, & Wyckoff, 2002)

Researchers also suggest that the larger size and often burdensome centralized bureaucracy of urban schools can restrict the independence and collegial support among school staff and create a more impersonal environment for students (Lippman et al, 1996). Finally, it is perceived that violence and disruptions are more prevalent in urban schools. All of these location specific school characteristics help to reinforce the view that a school's location can influence a student's likelihood of being undereducated (Lippman et al, 1996).

Principals and teachers of poor urban schools face the daily challenge of trying to provide an equivalent education to that of which is being provided to students in sometimes wealthier suburban schools. Urban educators also face the daily challenge of keeping their students from becoming victims of the communities in which they service (Golba, 1998). While students and educators alike are faced with these distractions, the students in suburban schools are enclosed in classrooms of security and comfort where learning is the only primary concern at hand (Golba, 1998).

Students of urban schools are often lacking in social skills in addition to academic handicaps that they carry with them because they do not have the resources to stay up-to-date with the latest in technology or someone to introduce them to the "hidden rules" (Golba, 1998). Hidden rules are about the salient unspoken understandings that cue the members of the group that an individual does or does not fit (Payne, 1995; Golba, 1998). This further implies that the strength and success of the suburban schools is in great part due to the support of the community around it whereas the downfall of urban schools is the lack of it. Many believe that suburban public schools provide children with safer, more orderly, and more wholesome environments than their urban counterparts (Greene & Forster, 2004).

The differences between suburban and inner city schools are not always so extreme. Using data from the National Longitudinal Study of Adolescent Health, Greene and Forster, (2004) reported about the behavior of American high school students. Researchers postulated that suburban and urban students share commonalities related to sex, alcohol usage, smoking, illegal drug use, and manifestations of delinquent behavior. Pregnancy rates are marginally higher in urban schools as opposed to suburban schools. Findings indicate that 14% of suburban twelfth graders and 20% of urban twelfth graders have been pregnant. Thirty-nine percent of urban twelfth graders and 43% of suburban twelfth graders admit to having sex with a person with whom they did not have a romantic relationship. Patterns are also identical as they relate to the usage of alcohol. Urban and suburban students are about equally likely to engage in other delinquent behaviors such as fighting and stealing (Greene & Forster, 2004).

Therefore urban schools have been traditionally characterized of being beset with their own issues; however, suburban school students have proven to manifest some traits of urban students which indicate that educators in suburbia may faces challenges of their own.

Conclusion 2

Transformational leadership was not the dominant leadership behavior of principals in this study. These relationships hold for elementary but not middle school (Fisher, 2003; Towns et al., 2001).

This study did not indicate specific leadership behaviors to be employed by principals within middle schools with a dense population of African-American students. Almost all schools conveyed a mixture of transformational, transactional, and laissez-faire leadership styles. However, on a scale of one to four, only three schools evinced a three or higher as it related to the outcome factor of satisfaction on the MLQ. The outcome factor of satisfaction is comprised of the following two questions: (a) Uses methods of leadership that are satisfying, and (b) Works with me in a satisfactory way.

All but one of the principals in this study illustrated a combination of the three inclusive leadership styles: (transformational, transactional, and laissez-faire). Both Transactional and Laissez-Faire leadership traits were positively related to Supportive climates in this study. Extra Effort, effectiveness, and satisfaction were positively related to Supportive climates as well.

This study indicated that a significantly positive correlation existed between item 40 on the MLQ when the principal "is effective in meeting my needs;" and item 19 on the OCDQ "teachers sponsored after school activities." Moreover, a significantly positive

relationship was manifested between MLQ item 41, the principal "is effective in representing me to higher authority," and OCDQ item 11, "the principal sets an example by working hard himself/herself." These two correlations give weight to the idea that teachers do not mind committing themselves to a principal as well as the students when they feel they are being supported.

Although outside of the scope of this study parental involvement could have possibly impacted student achievement. In Table 1, parental involvement was the third leading attribute for high-performing, high-poverty schools, after strong leadership and school climate. Teachers in this study could have received support more or less from the building principal in addition to the parents in their respective schools.

Lack of parental involvement is one of the biggest problems facing public schools (Epstein et al., 2002). In effective schools, parents understand and support the basic mission of the school and are given opportunities to play important roles in helping the school to achieve its mission. However, because so many ineffective schools are located in low socioeconomic areas, many of the parents of the children attending these schools may not be able to support their children fully in their academic activities (Goodman, 1997; Johnson, 1997). Some of the association between students' outcomes and parents' background is probably attributable to different levels of parental involvement in school-related activities (Ho Sui-Chu & Willms, 1996). Strategies that increase parental involvement may be an effective means of improving schooling outcomes and of reducing inequities in achievement among students with different social-class backgrounds. Teachers in this study may have been adept in gaining the support of parents which in turn aided in fostering their committed behavior to students.

In most circumstances, parental involvement is most accurately characterized as a powerful enabling and enhancing variable in children's educational success, rather than as either a necessary or sufficient condition in itself for that success (Ho Sui-Chu & Willms, 1996). Research has suggested that parents of higher SES are more involved in their children's education than are parents of lower SES and that greater involvement fosters more positive attitudes toward school, improves homework habits, reduces absenteeism and dropping out, in addition to the enhancement of academic achievement (Ho Sui-Chu & Willms, 1996).

The most consistent predictors of children's academic achievement and social adjustment are parent expectations of the child's academic attainment and satisfaction with their child's education at school (Michigan Department of Education, 2001). Parents of high achieving students tend to set higher standards for their children's educational activities than parents of low-achieving students.

The strongest and most consistent predictors of parent involvement at school as well as the home are school programs and the practices of teachers that incorporate such. Research has indicated that when parents are involved students tend to have: (a) higher grades, (b) higher graduation rates, (c) better school attendance, (d) increased motivation, (e) better self esteem, and (g) lower suspension rates (Michigan Department of Education, 2001).

Children who typically do well in school come from families who illustrate the following types of involvement: (a) daily family routine, (b) monitored out-of-school activities, (c) modeled value of learning, and self discipline, (d) expressed high but realistic expectations for achievement, (e) encouragement of children's development, and

(f) encouragement of reading, writing, in addition to family discussions (Michigan Department of Education, 2001).

Epstein et al. (2002) highlighted the following six types of involvement on part of parents: (a) parenting (b) communicating (c) volunteering, (d) learning (e) decision making, and (f) collaborating with community. The aspect of *parenting* incorporates the idea of assisting families in establishing home environments to support children as students. *Communicating* emphasizes the effective venues for school-to-home and home-to-school relations regarding school programs and student progress. *Volunteering* involves the recruitment and organization of parent support. *Learning* at home facilitates the idea to families to aid students with homework and curriculum related activities. *Decision making* includes the involvement of parents as it relates to school-wide decisions in addition to developing parent leaders. *Collaborating with community* on the part of parents emphasizes identifying and integrating resources and services from the community to strengthen school programs.

The various theories commonly surrounding transformational leadership have been challenged as focusing on the individual rather than the organization as a whole. Critics say they theories surrounding transformational leadership fail to explain distributed leadership (Gronn, 2002). Yukl (1999) and Gronn (2002) criticize contemporary leadership theories such as transformational and charismatic leadership for their assumption that one individual (the leader) leads all of the other people in a group or organization towards its goals. Leadership has increasingly become regarded as shared among two or more people in a group or organization. Transformational leadership as it

relates to the MLQ, does not explain the nature of effective visioning and organizational mission or the place of values, culture and strategy in leadership (Yukl, 1999).

Laissez faire leadership describes passive leaders who are reluctant to influence subordinates or give direction. They generally refrain from participating in group or individual decision making (Bass, 1981; Bradford & Lippitt, 1945; Patrick, 1995) and to a large extent, abdicate their leadership role. Subordinates are given considerable freedom of action and, therefore, seem likely to maximize their power and influence. Subordinates may compete for the power and influence abdicated by the laissez faire leader. As such, the next research step might explore how subordinates influence each other in response to the laissez faire leader.

Newer theories of shared and distributed leadership may explain the teacher openness and teacher satisfaction findings in this study and the lack of influence of the principal. That is, school success, as measured by standardize test results may be due to what the teachers do and their attitudes versus the principal in high poverty middle school districts (Spillane, 2005).

This study did not take into account the idea of teacher leadership. Teacher leadership may have been the entity filling in the gap for the lack of transformational leadership behaviors and the surprisingly influx of laissez-faire leadership behaviors. Hersey and Blanchard (1977) argued that no leadership was paramount to another in addition to contending that leaders must expand their range to be effective under varying conditions. Therefore, laissez-faire leadership behaviors may explain that various levels of leadership roles and accountability were allotted to teachers at their respective sites. Teachers may have been compliant for various reasons such as contingent rewards,

aspirations of becoming an administrator, or were simply committed to student achievement, or to the principal.

Conclusion 3

Hoy et al. (1996) model of middle school climate was applicable to this particular southeastern school district. It is plausible that teacher interactions in a school can be "open" while principal behaviors are "closed." Principal openness and Teacher openness occurred once in this study with School 1.

The impact of principal leadership on school climate will be presented as principal leadership relates to Principal Openness, Teacher Openness, Engaged Climate, and Disengaged Climate. A summary will conclude the relationship between principal leadership and school climate.

Studies on school climate showed a direct relationship between high student achievement and schools which create a positive learning environment (Bulach, Malone, & Castleman, 1995; Hoy et al, 1996; Hoy & Hannum, 1997; Hoyle, English, & Steffy, 1985; Sweetland & Hoy, 1997).

Principal Openness

A principal who displays open leadership behaviors may be able to create open behaviors in teachers, thereby creating an open climate (Hoy et al., 1996). A principal who is highly supportive, collegial, collaborative, and who is not directive or restrictive creates an open climate within his/her school (Villani, 1997). Teacher collegiality and productivity may be influenced by the climate established by the school principal. Two of the schools in this study manifested significant levels of principal openness in relation to

Hoy's scale. School 1 evinced a score of 569 which is deemed high, and School 10 evinced a score of 863 which is deemed as very high.

In the area of open climate both Schools 1 and 10 revealed an energetic organization that moved toward their goal. Leadership acts emerge easily and appropriately from both the group and the leader. The members are pre-occupied disproportionally with neither task/achievement nor social needs satisfaction; satisfaction on both counts seems to be obtained easily and almost effortlessly (Fisher, 2003). The main characteristic of this climate is the "authenticity" of the behavior that occurs among all the members (Hoy et al., 2003). Principal Openness and Teacher Openness are independent of each other (Fisher, 2003). Schools are capable of possessing a principal whose actions are "opened," yet have teacher interactions that are "closed."

In this study Laissez-faire leadership was negatively related to Principal Openness. This is consistent with laissez-faire behavior, non-leadership and abdication (Fisher, 2003). The more teachers perceive their principal to be a laissez-faire leader, the less likely they would consider the principal to be open and genuine, two important aspects of Principal Openness (Hoy & Clover, 1986). The higher the laissez-faire level of leadership exists, the lower the perception of leadership effectiveness.

Teacher Openness

Teacher Openness was identified as having a negative relationship with all three leadership styles: transformational, transactional, and laissez-faire. Schools 1, 5, and 7 all evinced average levels of teacher openness. In this study, transformational leadership was not a significant predictor of Teacher Openness.

The majority of the research on school climate indicated that the climate is based on the perceptions held by the teachers regarding the leadership behaviors of the principal (Halpin & Croft, 1962; Hoy et al., 1991). Hoy et al. (1991) indicated that a school with an "open" climate will be effective in the sense that teachers are collegial, intimate, engaged, and productivity is enhanced. These findings can illustrate resistance to change despite good leadership behaviors, which has been suggested by Fisher (2003) and Lindelow et al. (1989). A desirable climate is perceived by the teacher when the dimensions of individual personality and organizational characteristics are compatible. Subsequently, teachers would view the environment as open, healthy, and conducive to authentic interactions (Hoy et al., 2003).

The majority of the teachers in this study manifested low scores. It is possible that in a highly structured, bureaucratic organization, a dependent, submissive, rule-bound teacher would view the organization as open and supportive to the basic need dispositions of the individual's personality structure, generating low organizational anxiety (George & Bishop, 1971). Thus, the schools in this study predominately reflected a more bureaucratic organizational structure.

Opened Climate

One school, School 1 manifested a climate described as "opened." The open school climate is one in which behavior of both teachers and principal is authentic; teachers and principal respect one another and are "straight" with each other (Hoy et al., 2003). Acts of leadership evolve rather easily and appropriately from both groups as needed. The open school is neither preoccupied with task achievement nor need gratification, but both emerge freely (Hoy et al., 2003). School 1 was a charter school

with a small population. The population accounted for 163 students. School 1 evinced a percentage of 46.51 students receiving FARMS. This was the lowest percentage for FARMS in the study. In this study, the school with the smallest population and the lowest SES evinced an opened climate.

Closed Climate

Five schools in this study, Schools 2, 3, 6, 11, and 12, were identified as having a "closed" climate. A closed climate (Seidman, 1975; Mercurius, 2006) is represented by a principal who exhibits low supportive, high directive, and high restrictive behaviors. The teacher behavior is high disengagement, low intimacy, and low collegiality. Principals may be dictatorial and maintain a tight control over the staff. The principal may also burden the staff with unnecessary paperwork and is not supportive of the efforts of his faculty.

Generally, in a closed climate the teachers are apathetic isolated, and intolerant. Apathy of the teachers would result in their being isolated from one another (Mercurius, 2006). In this undesirable climate members may be unable to reconcile social needs with organizational role requirements (Seidman, 1975). If disengagement is high, teachers do not work well together, nor do they complete their work quickly and easily. The resultant discord and frustration could result in poor staff morale (Seidman, 1975). School 2 was a single gender school with a relatively small population 213 of students. The school revealed a percentage of FARMS at 94.84. School 3 had the second largest student population in the study at 889 which accounted for a FARMS percentage of 81.55. School 6 evinced a student of population of 373; however, it accounted for a FARMS percentage of 98.66. School 11 had a population of 415 students, and its FARMS

percentage was 93.25. School 12 had a population of 725 students, and its FARMS percentage was 83.86. Both Schools 11 and 12 had male principals who had been at their respective sites for several years prior to the study. The principal at School 11 had 15 years of experience, and the principal at School 12 had 12 years of experience. The principal at Schools 3 was female. The principals at Schools 6 possessed doctoral degrees. In this study, as factors such as school population and low socioeconomic status increased, the climate of the school was found to be "closed."

Engaged Climate

The "engaged" climate is one where the teachers work together to accomplish their goals; they are committed to their students; and they co-operate with each other (Hoy et al., 1996). Nevertheless, the principal does not support the teachers in their actions, closely supervises their performance, and does not shield the staff from the burdens of bureaucratic routine. Faculty members work together as professionals, in spite of, not because of the principal. The faculty is engaged in the professional work of the school, dedicated to their students, and respectful of each other. Although teacher-principal relations are closed, the faculty has open teacher interactions with both their students and colleagues (Hoy et al., 1996).

School 5 was one of two schools in the study that revealed an "engaged" climate. The school had a principal which indicated mixed leadership style. It is a single gender school which at the time was servicing girls in grades sixth and seven. During the time of the study, the school's student population was 319; however, the percentage of FARMS was 90 percent. The academy is relatively new; it opened in August 2007.

School 7 also indicated an "engaged" climate. The student population was twice as large as School 5 with 660 students. School 7 serviced grades 6-8. The percentage of FARMS was very similar for the two schools with School 7 evincing 91 percent. Principals at both schools were female; however, the tenure at their respective sites varied slightly. The principal at School 5 had been present for three years prior to the study; while the principal at School 7 had been present for only one year prior. The principal at School 5 possessed a doctorate degree as well. Principals at both schools were female.

Disengaged Climate

Disengaged climates are those that are the reverse of the "engaged" climate in that the principal is behaving in open, concerned and supportive ways yet the teachers ignore these overtures by the principal (Fisher, 2003). Disengagement is viewed as the psychological and physical distancing of teachers from one another as well as the school as a whole as expressed in the degree to which teachers are involved in the goals of the school (Knight, 1986). Teachers not only do not like the principal, but they also neither like nor respect each other as friends or as professionals.

One of the schools in this study had a "disengaged" climate, School 10. It also had a principal with mixed leadership styles. This school had fairly low percentage levels of students receiving free and reduced meals (FARMS) when compared to the remaining seven schools in the study. School 10 evinced a percentage of 47.91 receiving FARMS. The average percentage for FARMS in this study was 79.73 with School 1 having the lowest percentage and School 6 with the highest of 98.66. School 1's principal evinced a mixture of three leadership styles: transformational, transactional, and laissez-faire. School 10's principal was identified as having a laissez-faire leadership style. In addition,

School 10 was the largest school in the study. However, the principal was at the respective sight only one year prior to this study. This principal was female who started mid-year her first year at the school. She started upon the departure of a male principal who had been promoted due to the schools level of high academic achievement under his leadership.

Conclusion 4

Findings indicated a statistically significant relationship between leadership style and student achievement which are consistent with those reported by Bell (2001), Hoy et al. (1996), Hoy and Hannum (1997), Marks and Printy (2003), Kelley et al. (2005), Sweetland and Hoy (1997), and Waters et al. (2004). Principal leadership does impact school climate in this southeastern school district. Leithwood, Louis, Anderson, and Wahlstrom (2004) concluded that leadership accounts for about ¼ of total direct and indirect effects on student learning, second only to classroom instruction. These findings substantiate the notion that principal behaviors are ultimately related to student performance through their interactions with other people, most notably teachers.

The principal is both a dependent and independent variable (Edvantia, 2005). As a dependent variable, administrative behavior is subject to the influence of other variables within the school, such as teachers, students, organizational culture, and parents; however, as an independent variable, the principal influences the actions of teachers, the school, and student achievement (Edvantia, 2005). Leithwood et al. (2004) also contended that there is an association between increased student learning and leaders who develop and rely on leadership contributions from a diverse constituent base within their organizations.

Quantitative researchers systemically underestimate the impact of leadership through research designs and assessment tools that miss the ways in which particular practices of particular leaders are powerful (Robinson et al., 2009). Case studies of "turn around" schools and of interventions into teaching and learning invariably credit school and district leadership with considerable responsibility for school and teaching effectiveness (Edmonds, 1979; Robinson et al., 2009; Scheurich, 1998). Principal leadership itself is influenced by both personal and contextual variables such as socio-economical status and parental involvement (Hallinger, Bickman, & Davis, 1996).

The fact that all three leadership styles as measured by the MLQ were found to have a relationship with student achievement further supports the idea that quantitative researchers tend to systemically underestimate the impact of leadership through research designs and assessment tools that miss the ways in which particular practices of particular leaders are powerful (Robinson et al., 2009). Research on the construct validity of transformational leadership helps explain why transformational leadership may tell us more about leader-staff relations than about leaders' impact on student outcomes.

Subordinate ratings of transformational leadership are strongly influenced by the degree to which they "like' their leader. If the measures of transformational leadership are indeed evincing the liking of a school leader as opposed to actual leadership practices, then it is the "affective response" rather than specific leadership practices that actually relate leadership to student outcomes (Robinson et al., 2009).

Limitations

This study has several limitations that may limit its generalizability. The small number of principals and teachers in this study was a limitation. Also, this study

measured school climate using six measures on the OCDQ-RM. There may be many more variables such as parent involvement, student-teacher interactions, and principal interpersonal skills that are related to school climate.

The results of this study represent the teachers' perceptions of their principals' leadership behaviors. The actual practices of the principals have not been documented. The non-respondents might have differed from those teachers who actually completed the survey. Furthermore, the results do not consider all of the variables that have been established by earlier research to determine the effects of professional and personal behaviors of the principals.

Salient variables described in the literature (Hallinger, 2003) include the following antecedents of instructional leadership behavior: school level, school size, school SES. Nonetheless, there are additional effects of the school context on instructional leadership such as gender, training, experience, as well as the following effects of school leadership on the organization: school mission and goals, expectations, curriculum, teaching, and teacher engagement (Hallinger, 2003).

The southeastern school district in which this study was conducted might have unique factors that make the findings less generalizable to principals in other school districts. Finally, it is unknown if these results are generalizable to elementary or high school principals. Teachers at the elementary and high school levels may perceive their principals' leadership behaviors differently than those of middle school. Nevertheless the findings provide a picture of how some middle school teachers in one school district are reacting to the leadership behaviors of their educational leaders.

The OCDQ-RM and the MLQ-5X survey instruments were used to obtain data concerning teacher perceptions. Self-report instruments, such as these are subject to possible human error due to the perceptions of those completing the instrument. Therefore, the surveys 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).

Teacher behavior items on the OCDQ-RM, as determined by Hoy and Sabo (1998), as well as principal behavior items as determined by Bass & Avolio (1995) 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 may have been lacking (Fullan & Hargreaves, 1996; Marzano, 2003). The population for this study consisted of only those middle school teachers who chose to participate in the individual school administrations held at each site. Regardless of how schools scored on the OCDQ-RM and the MLQ-5X, it is possible that a field observation may manifest a different portrayal.

This southeastern school district in which this study was conducted was implicated in a cheating scandal where 80% of the district's elementary and middle schools were accused of cheating on the state-wide standardized assessment. Test scores may not portray the true knowledge of students. This was an unexpected limitation in the study. The participation as it relates to the response rates for survey data in addition to survey responses are possibly impacted by this limitation as well.

Implications of Limitations

Policy

With schools facing increased pressure to improve teaching and learning, the duties and responsibilities of principals expanded further to include the responsibility for leading school reform that would raise student achievement. Academic press as it relates to standardize testing is the result of No Child Left Behind the federal law that imposed consequential accountability on all states and schools. The impact NCLB has had on student achievement since its implementation in 2002 has always been difficult to gauge. This is especially true since the law applied to all public school students, and there has been no comparison group and therefore impossible to determine which of countless factors contributed to student achievement (Boghossian, Dee, & Jacob, 2010).

Citizens at the federal, state, and local levels of government expect a lot from its frequently maligned public schools, and with the adoption of the federal NCLB, the American public has demanded more (Noguera, 2010). In most cities, public schools are expected to educate the neediest children, and are blamed when students whose most basic needs for housing, nutrition, and healthcare are not met (Noguera, 2010). Such children do not do as well academically as more privileged children for these self same reasons.

Each state has been mandated to define AYP so that all students are expected to increase academic performance, and by the end of the 2013-2014 school-year all students will achieve at the state defined "proficient" level on assessments of reading and math (Commission on No Child Left Behind, 2006). At least 95% of each subgroup of children must participate in the assessments is also a qualifying factor to meet this status.

Upon the initiation of NCLB, states were required to set the starting point or the first achievement bar—toward reaching 100% proficiency by 2014 (Commission on No Child Left Behind, 2006). States were at liberty to choose where to set the initial bar. It was based on the greater of two factors, either on the lowest achieving subgroup of students or the lowest achieving schools in the state. After the initial bar or annual measurable objective (AMO) was established, NCLB then required states to gradually increase the threshold of the percentage of students who obtain proficiency in equal increments (Commission on No Child Left Behind, 2006). These thresholds are required to be raised at least once every three years.

Research shows that using a standards-based curriculum that is aligned with corresponding instructional guidelines can positively influence teaching practices (GAO, 2009). Teachers' practices do not always reflect the principles of standards-based instruction; moreover, current accountability policies help contribute to the difficulty in aligning practice with standards. According to GAO (2009), teachers may very well be changing their instructional practices in response to standards-based reform, though these changes may not be fully aligned with the principles of the reform. Reliability in implementing standards in the classroom is prone to vary in accordance with teachers' different beliefs in and support for standards-based reform as well as the limitations in their instructional capabilities.

In order to overcome such challenges, teachers need to have opportunities to learn, practice, and reflect on instructional practices that incorporate the standards, and then to observe their effects on student learning (GAO, 2009). Additionally, focus is needed in the area of assessment as it relates to standards-based accountability, especially

since this system's assessment helps to measure the extent to which schools can improve student learning against standards. Assessments are powerful tools for managing and improving the learning process by providing information for monitoring student progress, making instructional decisions, evaluating student achievement, and evaluating programs (GAO, 2009). They can also influence instructional content and help teachers use or adjust specific classroom practices.

Though unreliable, the results from the present study relate to policy at least insomuch to the manner or type of formal assessment students are administered. There have been concerns about testing formats that do not encourage challenging teaching practices and instructional practices that narrow the curriculum as a result of current assessment practices (GAO, 2009). For instance most often, multiple choice items are chosen over other item types of assessment. Multiple choice tests tend to focus on recognizing facts and information while open-ended formats are more likely to require students to apply critical thinking skills (GAO, 2009).They are cost effective and can be scored within tight time frames (GAO, 2009). While multiple choice tests provide cost and time effectiveness, the use thereof make it difficult, if not impossible, to measure highly complex content. Furthermore, the answers of these types of assessments have proven to be easy to alter by various members of school personnel. Concerns have been raised that, to avoid potential consequences from low-scoring assessment results under NCLB, teachers are narrowing the curriculum being taught (GAO, 2009). This teaching tactic has been referred to as "teaching to the test" in which educators have been cited as spending more classroom time on tested subjects at the expense of other non-tested subjects. NCLB indirectly causes the restriction of the breadth of content covered due to

the focus of possibly unattainable test scores. Teachers are pressured to only present on the content covered by the test, or focus more time on test-taking strategies than on subject content.

To enable all students to achieve the high standards of learning envisioned by standards-based accountability systems, teachers need extensive skills and knowledge in order to use effective teaching practices in the classroom. Professional development (GAO, 2009) is critical to supporting teachers' learning of new skills and their application. The Government Accountability Office (2009) concluded that professional development will more likely have positive impacts on both teacher learning and student achievement if it:

- Focuses on a content area with direct links to the curriculum;
- Challenges teachers intellectually through reflection and critical problem solving;
- Aligns with goals and standards for student learning;
- Lasts long enough so that teachers can practice and revise their techniques;
- Occurs collaboratively within a teacher learning community—ongoing teams of teachers that meet regularly for the purposes of learning, joint lesson planning, and problem solving;
- Involves all the teachers within a school or department;
- Provides active learning opportunities with direct applications to the classroom;
- Is based on teachers' input regarding their learning needs.

Nevertheless, a concern regarding issues surrounding teachers' professional development is:

> Professional development training for teachers is often too short, provides no classroom follow up, and models more "telling than guiding" practices. Given the decentralized nature of the U.S. education system, the support and opportunity for professional development services for teachers varies among states and school districts, and there are notable examples of states that have focused resources on various aspects of professional development. (GAO, 2009)

According to nationally representative data analyzed by the United States Government Accountability Office (GAO) (2009) most principals reported their schools focused on multiple instructional practices in their voluntary school improvement efforts in school year 2006-2007. These strategies were used more often at schools with higher proportions of low-income students ("high-poverty schools") and schools with higher proportions of minority students ("high-minority schools") than at schools with lower proportions of low-income students ("low-poverty schools") and schools with lower proportions of minority students ("low-minority schools").

The following is a list of ten school improvement strategies identified by GOA (2009),

- Using student achievement data to inform instruction and school improvement
- Providing additional instruction to low-achieving students
- Aligning curriculum and instruction with standards and/or assessments
- Increasing the intensity, focus, and effectiveness of professional development
- Implementing new instructional approaches or curricula in reading
- Implementing new instructional approaches or curricula in mathematics
- Providing extended-time instructional programs

- Restructuring the school day to teach core content areas in greater depth
- Implementing strategies for increasing parents' involvement in their children's education
- Increasing instructional time for all students

The three most common strategies were: (a) using student achievement data to inform instruction and school improvement; (b) providing additional instruction to low-achieving students; and (c) aligning curriculum and instruction with standards and/or assessments. Nearly all school principals placed a major or moderate focus on three or more surveyed strategies in their school improvement efforts, and over 80% of principals placed a major or moderate focus on six or more strategies (GOA, 2009). The number of improvement strategies emphasized was not necessarily an indication of the intensity or quality of the improvement efforts.

The GOA (2009) reported that nearly all principals used multiple improvement strategies in effort to impact student achievement, despite statistically significant differences across a range of school characteristics, including percentage of the school's students receiving free or reduced price meals (poverty), percentage of minority students, the school's location, and AYP status.

When comparing schools across poverty levels, the GOA (2009) found that principals at high-poverty schools were two to three times more likely than principals at low-poverty schools to focus on five particular strategies in their school improvement efforts. They are as follows: (a) restructuring the school day to teach core content areas in greater depth, (b) increasing instructional time for all students, (c) providing extended-time instructional programs, (d) implementing strategies for increasing parents'

involvement in their children's education, and (e) increasing the intensity, focus, and effectiveness of professional development.

When comparing schools across minority levels, (GOA, 2009) found that principals at high- and moderate-minority schools were approximately two to three times more likely than principals at low-minority schools to make six particular school improvement strategies a major or moderate focus of their school improvement efforts.

Principals at schools with a high percentage of minority students were more than three times as likely as principals at schools with a low percentage of minority students to provide extended-time instruction such as after-school programs. A school's location was associated with differences in principals' use of strategies as well. Principals at rural schools were only about one-third to one-half as likely as central city schools to make five of these school improvement strategies a moderate or major focus of their school improvement efforts (GOA, 2009).

According to the Government Accountability Office (2009), AYP status had some correlation with the demographic characteristics of poverty and minority, and those characteristics explained the patterns of principals regarding their strategic approach school improvement. Schools that had not made AYP were more likely to make six of the school improvement strategies a moderate or major focus of their school improvement plan than schools that had made AYP. Schools identified for improvement under NCLB or schools that have not made AYP for two or more consecutive years were engaged in a greater number of improvement efforts than non-identified schools.

This study was concluded in the wake of what is described as possibly the largest test-cheating scandal in U.S. history. A state investigation named about 180 educators,

including 38 principals, at nearly 80 percent of 56 of the district's elementary and middle schools examined who cheated on the state annual student-performance test, known as the Criterion-Referenced Competency Test (CRCT).

Investigators, Bowers, Wilson, and Hyde (2011) uncovered evidence of cheating in 44 of 56 schools they examined. These schools were investigated due to cheating on a 2009 standardized state test, with 178 educators implicated, including 38 principals. The report indicated widespread cheating has occurred since at least 2001 and the orders to cheat came from the superintendent. The manner of cheating has been described as the erasure and correction of mistakes on students' answer sheets.

Investigators concluded the widespread cheating they uncovered was influenced by fear and anxiety. The former superintendent of the 48,000-student district, was accused of creating a culture of fear, pressuring faculty and administrators into accepting ever-increasing targets of achievement while turning a blind eye to the way those goals were achieved (Bowers et al., 2011). Teachers and principals feared for their jobs if they did not meet testing goals, and there was anxiety over how to do it.

Two middle schools identified for this study were named in this particular scandal. One of the two schools was omitted from this study due to a low response rate. One school, School 6 participated in the study. Therefore, the data associated with this particular school were unreliable and the overall perspective of teachers as it relates to principal leadership, school climate, and student achievement is skewed as it relates to this study due to the overbearing possibilities of cheating by administrators and teachers. Not only were students' scores affected but the perceptions of teachers may have been just as affected due to the implications of these circumstances.

Educators at every level have found themselves facing pressures that are just too great for them to remain honest (Springer, 2011). For instance, teachers cheat because the administrators told them to do it; administrators cheat because the superintendent demanded unrealistically high scores. A counterfeit higher score for an elementary or middle school student may result in a school or a teacher gaining temporary success; however, for students whose results do not accurately reflect their skill level, they are being cheated of the remedial work necessary to achieve in later years (Springer, 2011).

Test scores are not the only way, to assess student achievement. The 90/90/90 Schools did not tolerate annual state or district tests as the sole measurements of achievement (Reeves, 2003); these schools consistently elevated the importance of classroom-based, teacher-made tests that are collaboratively scored and used to provide immediate feedback to both students and teachers. Accountability should be a holistic endeavor with multiple assessments of achievement. The best accountability systems include a balance of state, district, and school-based measures.

Further implications for policy encompass the use of growth models as part of determining AYP results. The Commission of No Child Left Behind (2006) defined growth models as measurement student progress by tracking the achievement scores of the same students from one year to the next to determine whether student achievement has increased. This manner of comparing data for the same students over time is believed to account for a more precise measurement. This can give school leaders and the public more "actionable" information on school performance and student achievement. Growth models provide information on student performance and the performance of the school as a whole for multiple years in addition to the measurement of a school's ability to

facilitate continuous academic progress toward specific academic targets (Commission of No Child Left Behind, 2006).

Practice

This study included schools with short spans of existence as well as schools where the principal had a short tenure at the existing site. Some of these principals encountered the issues associated with change as it relates to leading a school and either maintaining or achieving AYP. Change is one of the difficult problems for all administrators (Tarter et al., 1990). Teachers are typically resistant to change because they are uncertain on how the change will affect them. The principal is the key player in galvanizing teachers together when changes must be made. Principals must treat teachers as professionals when change occurs to create a healthy organization that allows for teacher collaboration.

The educational administration profession has found it difficult to develop a knowledge base that adequately meets specifications as it relates to qualifying individuals and core professional responsibilities fulfilling essential tasks in various contexts (Thomson, 1993). Practitioners can reference published literature in their respective field concerning their problems. However, practitioners of educational administration do not resort to literature pertained to their field due to the lack of current knowledge about the problems they find themselves facing (Thompson, 1993).

The professional knowledge base of the school administrator differs from the academic knowledge base of those in universities who conduct research and produce scholarship on schools and school administration. Claims for a knowledge base in educational administration primarily represent the expertise of these individuals.

The literature on principals is sparse in part because of the difficulties faced in defining and measuring principal effectiveness and in part because of the paucity of high-quality data on which convincing empirical strategies can be based (Clark, Martorell, & Rockoff, 2009). The knowledge and skill base of a profession should provide a platform for practice. It also must address core professional responsibilities so that persons qualifying for practice can fulfill the essential tasks of the profession in various contexts.

Researchers Clark, Martorell, and Rockoff, (2009) sought which qualities of principals seem to be most closely linked to good outcomes for their schools, such as gains in student achievement, fewer teacher and student absences, or lower rates of teacher turnover. Researchers found that principals get better at their jobs with every year of experience, and particularly so in the first few years on the job. This finding is related to the oft-quoted finding about teachers in that they tend to get better with experience, however, only up until the third year on the job (Clark, Martorell, & Rockoff, 2009). Having graduated from a highly selective university, or spending time as a classroom teacher seemed to be less important for principals. Experience as an assistant principal also seemed to lead to better school outcomes, the researchers found, but only for inexperienced principals.

This study agrees with Riehl and Sipple (1996) in that teachers receiving administrative support are more likely to be committed to the schools goals and values. Principals must develop a climate where their teachers feel they are protected and supported by their principal, and that their principal will deliver for their teachers. Principals must be as committed to their school as the teachers (Tarter et al., 1990).

Perhaps the most important findings of the study were the effects SES had on teacher commitment. These findings suggest that all schools have the opportunity to have committed teachers no matter the socioeconomic status. A school with low socio-economic status may still have a committed faculty, if the principal finds ways to build up the expertise of the teacher subculture. Findings support that neither the principal nor the school is susceptible to the economics of their school environment. Findings are also applicable to schools of suburbia as well which often do not experience low levels of SES; nonetheless, student behaviors have proven to be very similar in both urban and suburban schools. Teacher commitment can account for redirecting negative student behaviors regardless of school climate.

The relationship between school climate and teacher commitment is complex. Climate and teacher commitment are critical components of school effectiveness. Climate influences the behavior of its members (Hoy et al., 1996). The study shows that teacher commitment is shaped by their working conditions, agreeing with Firestone and Pennell (1993). Teachers are willing to commit to a school in which they feel the support of the principal and other teachers. The continued study of organizational climate offers educators a means of better understanding the operation of schools. Finally, the results of this study suggest that claims related to school climate and leadership impacting student outcomes on standardized tests may be overblown.

The typical conclusion drawn by quantitative leadership researchers is that school leaders have small and indirect effects on student outcomes that are essentially mediated by teachers (Hallinger & Heck, 1998; Robinson et al., 2009). Transformational leadership

research has indicated that although it has an effect on staff attitudes, those effects do not usually follow through to student outcomes (Robinson et al., 2009).

Abstract leadership theories provide poor guides to the specific leadership practices that have greater impacts on student outcomes. Comparisons between the leadership of high- and low-performing schools evinced substantial differences as related to student academic outcomes (Robinson et al., 2009). Leithwood and Jantzi (2006) concluded that transformational leadership explained very little of the variance in students' gains in literacy and numeracy. Furthermore, the researchers suggested that the impact of instructional leadership on student outcomes is notably greater than that of transformational leadership (Mark & Printy, 2003; Kelley et al., 2005).

Leaders in higher performing schools are distinguished from lower performing schools by their personal involvement in planning, coordinating, and evaluating teaching and teachers the leadership of higher performing schools is distinguished by its active oversight and coordination of the instructional program (Robinson et al., 2009). School leaders and staff work together to review and improve teaching—an idea captured by that of shared instructional leadership (Heck et al., 1990; Heck et al., 1991; Marks & Printy, 2003; Robinson et al., 2009). Leadership in high-performing schools was more directly involved in coordinating the curriculum across year levels.

Instructional leadership has shown a more pronounced impact than transformational leadership. Transformational leadership is considered more focused on the relationship between leaders and followers than on the educational work of school leadership (Robinson et al., 2009). The quality of these relationships is not predictive of the quality of student outcomes. Educational leadership requires a conglomerate of

building collegial teams, a loyal and cohesive staff, and sharing an inspirational vision. It also involves focusing such relationships on some very specific pedagogical work, and the leadership practices involved are better captured by measures of instructional leadership than of transformational leadership (Robinson et al., 2009).

Research

The purpose of the study was to investigate the leadership behaviors of middle school principals and the effect these behaviors have on establishing climate as perceived by teachers. The study took place within nine urban middle schools in the southeastern region of the United States. The schools were chosen from a purposeful sample of 16 middle schools. The study revealed that the results of the MLQ-5X and the OCDQ-RM which both illustrated a one-time glimpse at the leadership and climate of the schools.

The MLQ-(5X) contained 45 items, nine conceptually distinct leadership factors, and three leadership outcomes. Five scales were identified as characteristic of transformational leadership (Idealized influence attributed and behavior, Inspirational motivation, Individual consideration, and Intellectual stimulation). Three scales were defined as characteristic of transactional leadership (Contingent reward, Management-by exception-active, and Management-by-exception-passive). One scale was described as non-leadership (Laissez-faire). The MLQ is the most widely used instrument to assess transformational leadership theory (Kirkbride, 2006). The MLQ had been criticized in some areas for its conceptual framework (Charbonneau, 2004; Yukl, 1998; Northouse, 1997). According to Tepper and Percy (1994), the most immediate concern regarding the MLQ was its structural validity.

The openness of organizational climate is typically measured by exploring open and authentic relationships between teachers and principals and among teachers themselves (Hoy et al., 2003). The OCDQ-RM is a 50-item climate instrument with six dimensions that describe the behavior of middle school teachers and principals (Hoy et al., 1996). This instrument, unlike other versions of the OCDQ, was designed for use in middle schools. It measures the following three aspects of principal behavior: Supportive, Directive, and Restrictive. Additionally, the following three aspects of teacher behavior are assessed: Collegial, Committed, and Disengaged. These six aspects of interactions define two openness dimensions of middle school climate the openness of teacher-principal relations and the openness of teacher-teacher and student-teacher relations (Hoy et al., 1996).

The results of the research have implications not only for the principals of the schools that participated in the study, but also for all principals in the field that strive for teacher commitment. The findings that transactional leadership is strongly correlated with the school climate attribute "Supportive" emphasize the need for principals to support their teachers, protect their teachers, and provide opportunity for their teachers to develop social rapport. Teachers must demonstrate a feeling of professional competence for their colleagues and also provide strong social support (Friedkin & Slater, 1994; Kruse & Louis, 2009; Smith, 2009). The results of this study are consistent with the theory that teachers will be committed to an organization when led by a principal who provides professional support in a nonthreatening, noncontrolling manner (Tarter et al., 1990). When teachers "go the extra mile" with their students and demonstrate enthusiasm, they become "a part of" or they are committed to the organization.

Situational leadership stresses that a principal's effectiveness is dependent upon the ability to analyze the competencies, abilities, and commitments of teachers with regard to the task at hand and then respond accordingly. The teachers feel principals work to meet the individual needs of various teachers or the situation; however, teachers seem to indicate a desire for consistent treatment. This might suggest that teachers fail to understand that differential treatment is needed based on the developmental level of the teacher or the task in question. This implication needs additional study.

Furthermore, the results do not consider all of the variables that have been established by earlier research to determine the effects of professional and personal behaviors of the principals. Also, here are additional effects of the school context on instructional leadership such as gender, training, experience, as well as the following effects of school leadership on the organization: school mission and goals, expectations, curriculum, teaching, and teacher engagement (Hallinger, 2003).

Considering the findings in this study, more research is needed to identify (a) more significant factors related to principal leadership and (b) other factors that affect student achievement. These factors can vary from school to school and from region to region throughout the country. Few findings from research on principal leadership are sufficiently grounded as to be uniformly applicable in all schools.

The fact that School 1 is a charter school and was the only school in the study to reveal an “opened” climate is noteworthy. Furthermore, Schools 5 and 7were the only schools in the study to evince an “engaged” climate which is significant as well. A closer look at the dynamics of Schools 1, 5 and 7 is warranted. For instance, School 1 has only been in existence for three years. School 5 has only been in existence for the duration of

three consecutive years, including the 2009-2010 school year. School 5 is a single gender academy that services only girls. The population for the school year during this study was 319. The percentage of the students receiving FARMS was 89.66. Nevertheless, School 7 serviced 660 students with a FARMS percentage of 91.36.

In-depth studies surrounding single-gender schools and school climate should be implemented. The fact that School 5 services only females in addition to the fact that teachers may still have "buy-in" regarding founding concepts and pillars of its program requires further delving. A case study of these particular schools would portray a more lucid picture of the teachers' perceptions of the principal's leadership style as well as the overall climate. Furthermore, a field study should entail but not limited to the following: classroom observations, teacher interviews, principal and assistant principal interviews as well as a subsequent psychometric assessments.

Although schools are major social environments in which students share beliefs, values and norms; in addition to, places where students' cognitive and affective functioning is shaped by the characteristics of their schools and schooling. The combination of unprecedented challenges and organizational weaknesses is typical of schools in the largest cities. There seems to be a contradiction between the evidence that leaders have a weak indirect effect on student outcomes and the expectations of the public and policy makers that leaders make a substantial difference. The fact that the principal's effect on student achievement is indirect seems virtually irrelevant since it is presumed that achieving results through others is the essence of managerial work (Bridges, 1986).

The capacity for schools to endure stems from the quality of school leadership which is the key to continued organizational learning and improvement. The indirect relationship that exists between leadership and student outcomes is facilitated by principals through teachers which make a more direct impact on students. Case studies of "turn around" schools and of interventions into teaching and learning invariably credit school and district leadership with considerable responsibility for school and teaching effectiveness (Edmonds, 1979; Scheurich, 1998). The literature on sustainability also sees the quality of school leadership as a key to continued organizational learning and improvement (Datnow, 2005; Hargreaves & Fink, 2003). Unfortunately, actions taken in pursuit of a one-size-fits-all philosophy weaken individual schools.

Success in leading reforms to increase student achievement often hinged upon a principal's ability to create a shared vision within the school community and success in implementing new organizational structures that engage teachers in shared decision-making. Teacher-principal relationships can affect performance outcomes (Thomas, 1997). The key in this is communication of both goals and results and properly informing all parties of the criteria by which judgments will be made. Furthermore, the principal engages the entire school staff in making decisions results in more commitment to school reform initiatives. It is the principal's responsibility to ensure that these goals are widely known and supported throughout the school community. Urban schools that make AYP have plausible characteristics that can be identified; however, replication of these characteristics is extremely difficult.

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Appendices

Appendix A

Principal Correspondence

P.O. Box 360495
Decatur, Georgia 30036
Month, Day, 2009

Attention: Principal Name
School Name
Street Address
City, State, and Zip Code

My name is Xavier Butler and I am currently a doctoral candidate at The George Washington University in the Graduate School of Education and Human Development. My degree will be in the field of Educational Administration and Policy Studies. My faculty supervisor is Dr. Virginia Roach. I am writing to request your voluntary participation in my dissertation study entitled "In What Ways Do Principals Relate to School Climate in 'Turnaround' Successful High Poverty Middle Schools?" (IRB #060914). This letter of introduction is seeking your assistance during my data gathering process.

The building level administrator (i.e. Principal) has been the focus of much of the attention given to effective schooling in recent years. Your school has been selected to be part of a district-wide study to find out if there are any relationships between principal leadership, school climate and student achievement. By understanding how teachers perceive their principal's leadership style, the climate, and the impact that both have on student achievement, current and future educators will be better equipped to help students achieve their maximum potential.

Enclosed you shall find the two instruments I am using in this study, the Multifactor Leadership Questionnaire and the Organizational Climate Descriptor Questionnaire, which we are asking middle school teachers, of Atlanta Public Schools, to complete. If you grant permission to participate in the study, we will be asking 20 of your teachers to complete the survey, return it to the office secretary, and the secretary will then return the information to me. The surveys take approximately 20 minutes total to complete. Data gathered will be used to better understand the principal leadership behaviors of Prince George's County Public Schools' middle school principals. Survey responses received will also be used to identify schools for further study of principal leadership behaviors and school climate. You may withdraw your participation from this study at any time. Your employment status will not be affected either way.

Participation in completing this survey is voluntary, and there is no penalty if you refuse to participate. Please be assured that individual school and teacher responses will not be disclosed, and data collected from this study will be treated in the strictest of confidence. As an address confidentiality measure, a fictitious name will be used for your school in this study. Surveys have been numbered to link data and identify schools who have not returned surveys; however, once all data is returned, the list will be destroyed eliminating any future ability to link specific schools to their surveys. There are no risks anticipated for participants completing this study, or then a slight risk of breach of confidentiality, and there are no personal benefits. However, by completing the survey, participants will have an opportunity to influence the future principal leadership behaviors of school leaders.

The Office of Human Research of George Washington University, at telephone number (202) 994-2715, can provide further information about your rights as a research participant. If you think you have been harmed in this study, please report this to the Principal Investigator, Virginia Roach, at 202-994-3094. If you have any questions at all please utilize the following contact information: (404) 313-5479 or xbutler@gwmail.gwu.edu. Thank you for your assistance in this research study and best wishes for a successful school year. I look forward to your response.

Sincerely,
Xavier Butler
Doctoral Student

_____

Principal's Signature

Appendix B

Teacher Correspondence

P.O. Box 360495
Decatur, Georgia 30036
Month, Day, 2009

Attention: Teacher
School Name
Street Address
City, State, Zip Code

My name is Xavier Butler and I am currently a doctoral candidate at The George Washington University in the Graduate School of Education and Human Development. My degree will be in the field of Educational Administration and Policy Studies. My faculty supervisor is Dr. Virginia Roach. I am writing to request your voluntary participation in my dissertation study entitled "In What Ways Do Principals Relate to School Climate in 'Turnaround' Successful High Poverty Middle Schools?" (IRB #060914). This letter of introduction is seeking your assistance during my data gathering process.

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Enclosed you shall find the two instruments I am using in this study, the Multifactor Leadership Questionnaire and the Organizational Climate Descriptor Questionnaire, which we are asking middle school teachers, of Atlanta Public Schools, to complete. If you grant permission to participate in the study, we will be asking 20 of your teachers to complete the survey, return it to the office secretary, and the secretary will then return the information to me. The surveys take approximately 20 minutes total to complete. Data gathered will be used to better understand the principal leadership behaviors of Atlanta Public Schools' middle school principals. Survey responses received will also be used to identify schools for further study of principal leadership behaviors and school climate. You may withdraw your participation from this study at any time. Your employment status will not be affected either way.

Participation in completing this survey is voluntary, and there is no penalty if you refuse to participate. Please be assured that individual school and teacher responses will not be disclosed, and data collected from this study will be treated in the strictest of confidence. As an address confidentiality measure, a fictitious name will be used for your school in this study. Surveys have been numbered to link data and identify schools who have not returned surveys; however, once all data is returned, the list will be destroyed eliminating any future ability to link specific schools to their surveys. There are no risks anticipated for participants completing this study, or then a slight risk of breach of confidentiality, and there are no personal benefits. However, by completing the survey, participants will have an opportunity to influence the future principal leadership behaviors of school leaders.

The Office of Human Research of George Washington University, at telephone number (202) 994-2715, can provide further information about your rights as a research participant. If you think you have been harmed in this study, please report this to the Principal Investigator, Virginia Roach, at 202-994-3094. If you have any questions at all please utilize the following contact information: (404) 313-5479 or xbutler@gwmail.gwu.edu. Thank you for your assistance in this research study and best wishes for a successful school year. I look forward to your response.

Sincerely,

Xavier Butler

Doctoral Student

Appendix C

Follow-up Teacher Correspondence

P.O. Box 360495
Decatur, Georgia 30036
Month, Day, 2009

Teacher Name
School Address

About two weeks ago I sent two questionnaires to you that asked about your perceptions of your principal's leadership style as well as your school's climate. To the best of my knowledge it has not yet been returned. Many of your fellow teachers have already responded with their perceptions about your school's leadership.

Importance of your Response

I am writing again because of the importance that your opinion has for developing an accurate picture of you school. Although I sent questionnaires to participating teachers in your school, it is only by hearing from each of you that I can be sure that the results truly reflect the leadership style of your principal.

Effort Required and Confidentiality

I have enclosed replacement copies of the questionnaires for your convenience. It should take you less than ten minutes to fill out and return. An identification number is printed on the front cover of the questionnaire so that I will know which school a returned questionnaire applies. The study will report information compiled at the school level so that individuals can never be connected to their responses in any way. Additionally, the report will use fictitious school names so that the school's anonymity is preserved. Protecting the confidentiality of your answers is an essential aspect of this study and a requirement by my University.

Response Requested by October16, 2009

I hope that you will fill out and return the questionnaire in the next week. But if for any reason you prefer not to answer it, please let me know by returning the blank questionnaire in the enclosed stamped envelope. Thank you again for your participation.

Sincerely,

Xavier Butler
Doctoral Student

Appendix D

The MLQ-5X

Author's Note

The Multifactor Leadership Questionnaire is considered a proprietary instrument for which users must pay a fee and be granted permission prior to its use. In order to preserve its proprietary nature, the questions in their entirety are not permitted to be included in this study. For more information about the MLQ and possible use, see Bass & Avolio (2000), or contact the Distributor, Mind Garden, Inc., 1690 Woodside Rd. #202, Redwood City, CA 94061 USA www.mindgarden.com for the Multifactor Leadership Questionnaire by Bass & Avolio. Copyright 1995, 2000 by Bass & Avolio All rights reserved. Reproduction is prohibited without the Distributor's written consent.

Appendix E

The OCDQ-RM Approval

From: Wayne Hoy [mailto:whoy@mac.com]

Sent: Monday, October 01, 2007 2:19 PM

To: xbutler@gwu.eud

Cc: Virginia Roach

Subject: Permission to use the OCDQ-RM

To: Xavier Butler

Fr: Wayne K. Hoy

Re: Permission

You have my permission to use the OCDQ-RM in your study. You might also want to check the OHI-RM as another possibility. Both measures are available on my Web site(www.coe.ohio-state.edu/whoy). Just download the form and make as many copies as you need.

Good luck in your research.

Wayne

Wayne K. Hoy

Fawcett Professor of

Education Administration

www.coe.ohio-state.edu/whoy

614-292-4672

Appendix F

The OCDQ-RM

ORGANIZATIONAL CLIAMTE DESCRIPTION QUESTIONNAIRE (REVISED) FOR THE MIDDLE SCHOOL LEVEL
OCDQ-RM

DIRECTIONS: The following are statements about your school. Please indicate the extent to which each statement characterizes your school by circling the appropriate response.

RO=RARELY OCCURS SO=SOMETIMES OCCURS O=OFTEN OCCURS VFO=VERY FREQUENTLY OCCURS

1. The principal compliments teachers. . . . . RO SO O VFO
2. Teachers have parties for each other. . . . . RO SO O VFO
3. Teachers are burdened with busywork . . . . . RO SO O VFO
4. Routine duties interfere with the job of teaching . . . . . RO SO O VFO
5. Teachers "go the extra mile" with their students . . . . . RO SO O VFO
6. Teachers are committed to helping their students. . . . . RO SO O VFO
7. Teachers help students on their own time. . . . . RO SO O VFO
8. Teachers interrupt other teachers who are talking in staff meetings. . . . . RO SO O VFO
9. The principal rules with an iron fist . . . . . RO SO O VFO
10. The principal encourages teacher autonomy. . . . . RO SO O VFO
11. The principal goes out of his/her way to help teachers. . . . . RO SO O VFO
12. The principal is available after school to help teachers when assistance is needed. . . . RO SO O VFO
13. Teachers invite other faculty members to visit them at home . . . . . RO SO O VFO
14. Teachers socialize with each other on a regular basis. . . . . RO SO O VFO
15. The principal uses constructive criticism . . . . . RO SO O VFO
16. Teaches who have personal problems receive support from other staff members. . . . . RO SO O VFO
17. Teachers stay after school to tutor students who need help . . . . . RO SO O VFO
18. Teachers accept additional duties if students will benefit. . . . . RO SO O VFO
19. The principal looks out for the personal welfare of the faculty . . . . . RO SO O VFO
20. The principal supervises teachers closely. . . . . RO SO O VFO
21. Teachers leave school immediately after school is over. . . . . RO SO O VFO
22. Most of the teachers here accept the faults of their colleagues. . . . . RO SO O VFO
23. Teachers exert group pressure on non-conforming faculty members. . . . . RO SO O VFO

24. The principal listens to and accepts teachers' suggestions. . . . . RO SO O VFO

25. Teachers have fun socializing together during school time . . . . . RO SO O VFO

26. Teachers ramble when they talk at faculty meetings . . . . . RO SO O VFO

27. Teachers are rude to other staff members. . . . . RO SO O VFO

28. Teachers make "wise cracks" to each other during meetings. . . . . RO SO O VFO

29. Teachers mock teachers who are different . . . . . RO SO O VFO

30. Teachers don't listen to other teachers . . . . . RO SO O VFO

31. Teachers like to hear gossip about other staff members. . . . . RO SO O VFO

32. The principal treats teaches as equals. . . . . RO SO O VFO

33. The principal corrects teachers' mistakes. . . . . RO SO O VFO

34. Teachers provide strong social support for colleagues. . . . . RO SO O VFO

35. Teachers respect the professional competence of their colleagues. . . . . RO SO O VFO

36. The principal goes out of his/her way to show appreciation to teachers . . . . . RO SO O VFO

37. The principal keeps a close check on sign-in times . . . . . RO SO O VFO

38. The principal monitors everything teachers do. . . . . RO SO O VFO

39. Administrative paperwork is burdensome at this school . . . . . RO SO O VFO

40. Teachers help and support each other. . . . . RO SO O VFO

41. The principal closely checks teacher activities. . . . . RO SO O VFO

42. Assigned non-teaching duties are excessive. . . . . RO SO O VFO

43. The interactions between team/unit members are cooperative. . . . . RO SO O VFO

44. The principal accepts and implements ideas suggested by faculty members. . . . . RO SO O VFO

45. Members of teams/units consider other members to be their friends. . . . . RO SO O VFO

46. Extra help is available to students who need help. . . . . RO SO O VFO

47. Teachers volunteer to sponsor after school activities. . . . . RO SO O VFO

48. Teachers spend time after school with students who have individual problems . . . . . RO SO O VFO

49. The principal sets an example by working hard himself/herself. . . . . RO SO O VFO

50. Teachers are polite to one another . . . . . RO SO O VFO