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An Examination of the Correlation between the Seven Critical Leadership Functions and Middle School African-American and Hispanic Student Achievement

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AN EXAMINATION OF THE CORRELATION BETWEEN THE SEVEN CRITICAL
LEADERSHIP FUNCTIONS AND MIDDLE SCHOOL AFRICAN-AMERICAN
AND HISPANIC STUDENT ACHIEVEMENT

by

SHANNON A. FLOUNNORY

(Under the direction of Brenda Marina)

ABSTRACT

This quantitative study examined possible correlations between each of the seven critical leadership functions and achievement in the areas of mathematics for eighth grade African-American and Hispanic students. The 117 participants included school leaders and students from 12 of the 19 middle schools in a metropolitan school district in the southeastern region of the United States. Principals from the middle schools in the district distributed the Critical Leadership Functions Questionnaire to members of their leadership team (e.g., assistant principals, school counselors, department chairs, etc.). CRCT scores measured student achievement. The researcher conducted a correlation study, using Pearson's multivariable correlation data analysis method. Two of the fourteen hypotheses, Strategic Leadership with math and reading CRCT scores, resulted in a positive significant correlation between a critical leadership function and Hispanic student achievement. None of the critical leadership functions impacted African-American student achievement at a significant level. Even though most of the results did not yield statistically significant findings, all correlations were positive. The results of

this study can be used to impact future research. Scholars can use other student populations or achievement measures to replicate this study.

INDEX WORDS: African American students, CRCT scores, Critical leadership functions, Hispanic students, Math, Standardized tests, School leaders, Student achievement, Reading

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Electronic Version Approved
Spring 2014

DEDICATION

I dedicate this study to the many people who have devoted their lives to creating equal learning opportunities for minority and economically disadvantaged students throughout the world. Elevated sentiments of gratitude are extended to my late father, Johnny Flounnory who encouraged me to reflect upon my life at an early age, learn from my errors, but most importantly, to learn even more from his. Perhaps it is fair to say that we are finally at peace with one another. To my mother and greatest inspiration, I dedicate this study as a testimony for all of the single mothers who have or had less than model children, but still continued to demand the very best from them by providing them with the motivation to reach for the stars. Raising an African-American male as a single mother deserves the highest levels of praise.

I also dedicate this study to my loving wife Bonita who assumed the primary responsibility of caring for our daughters over the past few years while I endured this long journey. Words will never describe how lucky I am to have a spouse that places her personal interests aside for the purposes of supporting her husband during this most challenging time of life. To my daughters Lindsey and Tia, I am ready to return to being daddy.

Finally, I dedicate this study to all of the students who I have taught over the years and are making positive contributions to society. I am honored to have had a positive influence upon your lives and it is my prayer that you will have similar influences upon others who are in need of role models to look up to.

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I would also like to acknowledge the Division of Research and Evaluation of Fulton County Schools for granting me permission to collect staff perception data from participating middle schools within the district. Your support will never be forgotten. To my colleagues whom are middle school principals within the Fulton County School District, I say thank you to all who assisted me in collecting the data as well as those who did not, regardless of the reasons.

Lastly, I wish to thank the faculty and staff of Stonewall Tell Elementary School in College Park, Georgia for supporting the applications of the research-based leadership practices that I have learned over the years, thus transforming me into a scholar-practitioner. Special acknowledgements are made to our assistant principals, Tammye Coachman and Robin Elder who have consistently provided the calming waters during the turbulent times of the research process. Your support and willingness to assume extra responsibilities during the final stages of this process has been greatly appreciated.

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CHAPTER 1

INTRODUCTION

Research of the late 1960s revealed that schools in the United States were not effective. Inspired by the Civil Rights Act of 1964, Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, and York (1966) penned the *Coleman Report* and found that socioeconomic status was the strongest variable accounting for student achievement. Their account, the *Coleman Report*, gained public notoriety and spawned interest in the school's ability to impact student achievement. According to the report, it was virtually impossible for children from meager socioeconomic backgrounds to learn at the rate of others regardless of teacher effectiveness or school resources.

After examining the criticisms of sampling procedures, analytic methods, and information gathering techniques, Jencks, Smith, Acland, Bane, Cohen, Gintis, and York (1972) corroborated the findings of the *Coleman Report*: students' academic success was largely due to parents' socioeconomic status. They argued that disparities in education could not be addressed without taking inequalities in parents' occupational status and financial status. Consequently, attitudes for fostering climates of lower academic expectations of students from low-income environments may have been cultivated by education leaders.

In an effort to dispute the findings from the *Coleman Report*, researchers evaluated a number of schools, thereby beginning what came to be known as the Effective Schools Movement (Edmonds, 1979; Lezotte & Brookover, 1979). This movement and its corresponding research identified schools with high economically disadvantaged populations that were achieving significant academic successes. Igniting the school reform movement in the mid-1970s, Edmonds (1979) rejected the findings of the *Coleman Report*, reported that

many schools were already effective, and predicted that all schools could be effective.

Outcomes of the effective schools movement included identifying seven distinctive correlates for successful schools: 1) safe and orderly environment, 2) climate of high expectations for success, 3) strong instructional leadership, 4) clear and focused mission, 5) opportunity to learn and student time on task, 6) frequent monitoring of student progress, and 7) positive home and community relations (Lezotte, 1991).

A Nation at Risk, released by the federal government in 1983, argued that the United States was failing to educate its children. According to the report,

All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost. This promise means that all children by virtue of their own efforts, competently guided, can hope to attain the mature informed judgment needed to secure gainful employment, and to manage their own lives, thereby serving not only their own interests, but also the progress of society itself. (National Commission on Excellence in Education, 1983, p. 3)

There has been an abundance of research regarding what makes schools successful in meeting student achievement goals: researchers argue that many schools have demonstrated great increases in achievement over the years. However, the fact remains that public schools with a majority African-American and/or Hispanic student populations experience notable lags in student achievement in comparison to schools with higher concentrations of Caucasian students (Murphy, 2009; Waters & Cameron, 2007). African-American and Hispanic students in the United States on average trail Caucasian students by two to three years and exhibit high school graduation rates 20% lower than the rate of their Caucasian counterparts. A

commitment to addressing these issues by our national leaders with a sense of urgency is imperative in maintaining the economic and social fabric of our society.

The continued underachievement and isolation of such a large and growing population is nothing short of a national tragedy. If proper attention and resources are not provided to address this issue, the United States will maintain its *Nation at Risk* status (Kuykendall, 2004). Race is important, but socioeconomic status is the critical issue (Murphy, 2009). This point is echoed by McKinsey and Company (2009) as they asserted students eligible for free and reduced lunch are roughly two years of learning behind the average of more affluent students of the same age.

A noteworthy number of school leaders at formally nonperforming schools with substantial African-American and/or Hispanic student populations, sustain and increase student achievement for the student body. The purpose of this study is to ascertain if a correlation exists between certain leadership practices within schools and African-American and Hispanic student achievement. Specifically, the researcher wants to determine if varying degrees of the seven critical functions of successful schools yield higher student outcomes for African-American and Hispanic scholars (Portin, Schneider, DeArmond, & Cundlach, 2003).

Framework Guiding this Study

Although the effective schools movement began decades ago, its implications are still present in 2014. The Mid-Continent Research for Education and Learning's (McREL) Balanced Leadership Framework[®] was developed by Waters, Marzano, and McNulty (2003) as a theoretical construct that appears to be aligned with the correlates and implications of the effective schools movement. This framework is based on 30 years of the effect of leadership research. The effect of school leadership (e.g., principals, assistant principals, department and

grade level chairs) on student achievement impacts student outcomes and can create environments that supersede performance results for students in traditionally lower-performing demographic groups (e.g., race, ethnicity, socio-economic status). The result was an identification of 21 principal leadership responsibilities ranging from fostering shared beliefs and a sense of community to cooperation for ensuring that faculty and staff are aware of the most current theories and practices (Walters, Marzano, & McNulty, 2003). The researcher will use this framework to determine if the seven traits of successful school leaders improve academic performance for middle school African-American and Hispanic students.

With needs varying from school to school, no one-size-fits-all approach addresses the needs of school leaders as they attempt to affect student outcomes positively (Alliance for Excellent Education, 2011). Lezotte's (1997) expansion upon the original findings of Edmond's (1979) study has helped to define the second generation of the effective schools research. The concept of second-generation correlates attempts to incorporate the recent research and school improvement findings, and offers an even more challenging developmental stage to which schools should be committed to the *Learning for All* mission. There are two underlying assumptions of the second generation of the effective schools research: school improvement is an endless journey and the second-generation correlates cannot be implemented successfully unless the first-generation correlates are present in the school (Lezotte, 1997).

It can be argued that the greatest impact upon student learning is what happens within the confines of our nation's classrooms. However, current research suggests that the role of the building-level principal in the achievement of student outcomes is one that we must continue to examine, and much of the focus has now been placed upon how principals

influence student outcomes (National Board for Professional Teaching Standards, 2010; Robinson, Lloyd, & Rowe, 2008). Therefore, to be effective, principals cannot simply lead their schools from the comfort of their offices. They must be present in classrooms and other areas of the building, engaging the community for support, and facilitating an environment for continuous improvements. Additionally, they must be consistently visible and willing to share with and delegate leadership to their faculty and staff (Portin, Schneider, DeArmond, & Cundlach, 2003).

Public education stakeholders redefined today's school leaders and expectations (Portin, Alejano, Knapp, & Marzolf, 2006). Emphasis can no longer be placed upon the principal's ability to maintain the status quo by just managing the organizations, instead the emphasis is placed upon the principal's ability to learn and expeditiously manage change for the purposes of increasing student and staff performance (Bottoms & O'Neill, 2001). These leaders must create a common, shared understanding of the purpose of the values of the schools, and take ownership of goals and beliefs that drive the data-decision making process (North Carolina State Board of Education, 2006).

The demand for greater principal accountability led by national, state, and local stakeholders is driven by the need to perform well on high-stakes tests and community interest in school performance. In an effort to assist principals in developing the necessary skills to lead effectively, The National Board of Professional Teaching Standards (NBPTS) initiated an advanced national-certification system for principals. The Advanced Certification for Educational Leaders was developed as a means to measure the performance of accomplished school leaders.

Pritzker (2010) argued that education is approaching an era that will lack a sufficient pool of school leaders who will possess the experience and skills needed to address the increasingly demanding academic needs of our students. In 2009, the Obama Administration initiated a national competition, *Race to the Top*, among states to engage in comprehensive school reform efforts. School leadership is so significant in the ability of schools to make adequate progress that the U.S. Department of Education (2009) made it a key component of the Race to the Top federal education initiative. It is virtually impossible for schools to make significant progress without a principal who is able to handle organizational details and facilitate an environment that is conducive for learning.

There are numerous definitions of leadership based on two key functions: providing direction and exercising influence (Leithwood & Riehl, 2003). Leithwood and Riehl (2003) defined leadership as the ability to mobilize and work with others to achieve shared goals. This definition implies that leaders do not act as dictators; instead, they value the input of those who work with them in order to establish a common purpose and direction. It also implies that leaders know how to delegate tasks and responsibilities. Leadership is more of a function than a role because it encompasses a group of tasks that can be carried out by numerous people in different capacities throughout a school. When delegation is performed correctly, it allows others to become confident and effective (Leithwood & Riehl, 2003).

Robinson, Lloyd, and Rowe (2008) examined the impact of leadership on student outcomes. Their study revealed instructional leadership has a greater impact on student outcomes than transformational leadership. They identified five sets of leadership practices that attribute to positive academic and social student outcomes: (a) establishing goals and expectations; (b) strategic resourcing; (c) planning, coordinating, and evaluating teaching and

curriculum; (d) promoting and participating in teacher learning and development; and (e) consistently ensuring an orderly and supportive environment. The philosophy of focusing on types of leadership, as opposed to leadership as a single concept, was grounded in the idea that the impact of leaders on student outcomes will depend on the types of leadership practices in which they engage.

Portin, Schneider, DeArmond, and Cundlach (2003) developed seven areas of leadership critical to schools: instructional leadership, cultural leadership, managerial leadership, human resource leadership, strategic leadership, external development leadership, and micropolitical leadership. Instructional leadership entails ensuring instructional quality as well as guiding teaching practice. Cultural leadership involves maintaining a school's tradition and tone. Managerial leadership includes handling the everyday logistics of running a school, such as budgeting, scheduling, facility maintenance, and transportation. As the name implies, human resource leadership involves the hiring and professional development of all staff. Strategic leadership deals with guiding a school toward defined goals based on its mission and vision. External development leadership refers to the ability of school leaders to secure the services and support of communities and businesses that surround their schools. Micropolitics is the process used by school leadership to use their authority and influence to further their influence (Portin et al., 2003). The ability of principals to balance their leadership contributes greatly to school climate.

Statement of the Problem

The role of the modern day school leader is multidimensional and has grown increasingly complex since the advent of effective school research (Edmonds, 1979; Gersten & Carmine, 1981). Increased accountability and demands for education reform have

challenged school leaders to do more to close the achievement gap between students of minority cultures and lower socioeconomic backgrounds. The Elementary and Secondary Education Act originally enacted in 1965 was reauthorized in 2001 and renamed the *No Child Left Behind Act* (NCLB). This revolutionary change in educational policy linked federal funding to high-stake achievement goals and has added further complexity to the role of school leaders. Specifically, NCLB has mandated that schools focus their improvement efforts on closing the achievement gaps between traditionally academically at-risk student populations identified as subgroup populations within the school.

As schools began to disaggregate their respective achievement data, racial, socioeconomic, and students with disabilities disparities were made public. Many schools that were once identified as mainstays of academic success are now faced with the NCLB distinction of *needs improvement* due to their inability to meet annual subgroup measurable objective targets specified by the federal government. According to the Center on Education Policy (2010), African-American and Hispanic students made noteworthy academic improvements in both reading and mathematics. However, an achievement gap between these minority groups and their Caucasian peers is both pervasive and persistent. Academic achievement among African-American and Hispanic students lags nearly two grade levels behind their Caucasian peers in the areas of mathematics and reading (Aud, Hussar, Kena, Bianco, Frolich, Kemp, & Tahan, 2011; Haycock, 2001). Even though data supports the achievement gap based on race, select schools seem to contradict the norms and create environments where African-American and Hispanic students flourish.

Purpose Statement

The purpose of this study was to investigate the correlation between African-American and Hispanic middle school students' achievement (e.g., standardized test scores) and their respective school leaders' practices of critical leadership functions in a large metropolitan school district in the southeastern region of the United States ("the district"). These seven critical leadership functions are defined as (a) instructional leadership, (b) cultural leadership, (c) managerial leadership, (d) human resource leadership, (e) strategic leadership, (f) external leadership, and (g) micropolitical leadership (Portin, Schneider, DeArmond, & Cundlach, 2003). The overarching research question for this study was related to the investigation of educational accountability. The research questions that guided this study are as follows:

1. Is there a correlation between African-American eighth grade Criterion Referenced Competency Test (CRCT) mathematics scores and reported school leader critical leadership functions?
2. Is there a correlation between Hispanic eighth grade CRCT mathematics scores and reported school leader critical leadership functions?
3. Is there a correlation between African-American eighth grade CRCT reading scores and reported school leader critical leadership functions?
4. Is there a correlation between Hispanic eighth grade CRCT reading scores and reported school leader critical leadership functions?

Significance of the Study

The effectiveness of the American public education system is of great importance in an age of global competition for goods and services. America's ability to produce skilled workers who can function in a high-tech manufacturing job market is directly related to its

ability to increase the academic outcomes of all students served by the public education system. Educational accountability and school reform initiatives are pervasive at the local, state, and national levels. These school reform efforts seek to build the teaching and learning capacities of our public schools across the nation. According to Leithwood, Seashore, Anderson, and Wahlstrom (2004), successful school leaders can play a substantial and frequently underestimated role in improving student learning. Because of the exponential changes in school size, family structure, educational accountability, and technological advances, the role of modern day school leaders is both voluminous and multitudinous.

The idea of effective school leaders as the catalyst to school reform is not a novelty (Austin & Garber, 1985; Buckner & Jones, 1990; Edmonds, 1979). One of the greatest educational challenges of the 21st century is the national crisis of closing the achievement gap, the disparity in academic performance between groups of students (Viadero, 2000). It is reflected in the accountability measures of school grades, standardized-test scores, course selections, and dropout rates. Recent studies (Aud, Hussar, Planty, & Snyder, 2010; Organization for Economic Co-operation and Development, 2010) indicate troubling performance gaps with African-American and Hispanic students at the lower end of the performance scale, and their Caucasian peers at the high end of the performance scale. Similar academic disparities exist when comparing the academic achievement of students from low-income families and those more economically viable counterparts. While African-American and Hispanic students have made great strides in improving their performance in reading and mathematics, they still lag behind Caucasian students (Sparks, 2011; Viadero, 2000).

School-based leaders are essential to closing the achievement gap. This study is an investigation of the correlation between the critical leadership functions and actions of school-based leadership personnel and students' achievement as recorded on the CRCT. Math and reading were selected because these subjects are necessary for success in other academic content areas. For example, science, social studies, and elective courses require reading and may require mathematical operations. If students fall short in reading and math, they are also unlikely to meet other performance standards. Additionally, the standardized test results in these content areas for eighth grade students determine promotion to the next grade level. This study provided valuable insight to the study of educational leadership of school-based personnel at the middle grade level.

Many educational researchers asserted that school-based leadership is one of the most significant contributing factors in the implementation of school reform and the improvement in student achievement (Combs & Martin, 2011; Fullan, 1998; Hart & Bredeso, 1996; Hoppey & McLeskey, 2014). As the United States continues its perpetual quest to advance as a nation, the by-product of educational accountability must result in significant improvements in student achievement across all demographic areas and ethnic groups. The obtainment of a quality education has been and continues to be the most consistent element that leads to greater economic stability and advancement in family social status.

Assumptions

According to Leedy and Ormrod (2010), "assumptions are so basic that, without them, the research problem itself could not exist" (p.62). Participants' thoughts, actions, and assumptions impact the results and are beyond the researcher's control. The following assumptions were relevant to this study:

1. The study participants answered the questionnaire items honestly and objectively.
2. The study participants signified a representative sample of the middle school population in a state in the southeastern region of the United States.
3. Some study participants were human resource leaders, external development leaders, and micropolitical leaders because of their other administrative responsibilities.
4. Some study participants were instructional leaders, strategic leaders, and managerial leaders as defined by their building level principal.
5. Study participants may have perceived the seven critical leadership functions as important leadership traits and essential to their success as school leadership personnel.
6. Some study participants may have perceived the building principal as the primary cultural leader of their respective schools.
7. Some study participants may have perceived the Curriculum Assistant Principal (CAP) and Curriculum Support Teacher (CST) as the primary instructional leaders of their respective schools.

Methodology

Quantitative methodology is one that looks for correlations among independent and dependent variables. The critical leadership functions and actions were defined as the independent variables and the students' academic performance on the CRCT were defined as the dependent variables. Quantitative correlational research aims to systematically investigate and explain the nature of the correlation between variables in the real world (Creswell, 1994; Creswell, 2013). Often the quantifiable data from descriptive studies are frequently analyzed

in this way. Correlational research studies systematically investigate the correlation between two or more variables of interest, yet they do not adequately examine causation (Porter & Carter, 2000). This study evaluated the correlation between critical leadership functions and student achievement (e.g., CRCT mathematics and reading scores). The researcher used a Likert scale survey instrument to document the perceived practices of the seven critical functions of school leaders in a southeastern United States school district (Portin, Schneider, DeArmond, & Cundlach, 2003). The CRCT mathematics and reading scores and school leaders' responses on the Critical Leadership Functions Questionnaire were used to determine if a correlation exists between African-American and Hispanic middle school students' academic achievement and school leaders' reported practices of the critical leadership functions and actions.

Research Design

The researcher conducted a correlational study, using Pearson's multivariable correlation data analysis method. Using this statistical analysis technique allowed the researcher to examine the magnitude and direction of any identified correlation between school leader critical leadership functions and African-American and Hispanic students' CRCT reading and mathematics test scores. These correlations may be quantitative and used to examine the effects of multiple variables with or without the effects of other variables taken into account (Cohen, Cohen, West, & Aiken, 2003). This study described the statistically significant correlation between leadership functions and two types of CRCT performance data.

Definition of Terms

The following terms are defined to add clarity to this correlational study.

Cultural leadership: Tending to the symbolic resources of the school (e.g., its traditions, climate, and history) (Portin et al, 2003).

External development leadership: Representing the school in the community, developing capital and public relations, student recruitment, buffer and mediation to external interests, and school advocacy (Portin et al, 2003).

Human resource leadership: Recruiting, hiring, firing, inducting, and mentoring teachers and administrators and developing leadership capacity and professional development opportunities (Portin et al, 2003).

Inferential statistics: The process of applying statistical methods in order to draw conclusions from sets of data that arise from systems affected by random variation (Sproull, 2002).

Instructional leadership: Assuring the quality of instruction and teaching resources, modeling teaching practices, and supervising curriculum (Portin et al, 2003).

Leadership: The ability to influence student learning by helping to promote a vision and goals, and by ensuring that resources and processes are in place to enable teachers to teach well (Leithwood & Riehl, 2003).

Managerial leadership: Tending to the operations of the school (e.g., its budget, schedule, facilities, safety and security, and transportation) (Portin et al, 2003).

Micropolitical leadership: Safeguarding and mediation to internal interests, and maximization of financial and human resources (Portin et al, 2003).

Minimum academic standards: Academic proficiency as defined by specific learning objectives and standardized tests (e.g., 800 or above on the Georgia CRCT and 50 percentile or above on the Iowa Tests of Basic Skills).

Professional learning community (PLC): An environment fostering mutual cooperation, emotional support, personal growth, and a synergy of efforts (DuFour & Eaker, 1998).

Quantitative research: The systematic empirical investigation of social phenomena via statistical, mathematical, or computational techniques (Creswell, 1994)

Strategic leadership: Promoting a vision, mission, goals, and developing a means to reach them (Portin et al, 2003).

School climate: The feelings and attitudes brought forth by a school's environment. School climate is a multidimensional construct that encompasses physical, social, and academic dimensions (Loukas, 2007).

Summary

Providing school leadership that enhances student achievement is a challenge that all principals have to meet. A greater challenge is for leaders to increase student achievement for selected subgroups that have traditionally been achieving at lower rates than others. It is important to identify the leadership behaviors that are specific to schools that successfully lead all students to academic success. By investigating schools leaders and academic data in the chosen district, the researcher was able to provide valuable information on the importance of school leadership that leads to consistent increases in academic achievement for African-American and Hispanic students, thus providing a mechanism for closing academic achievement gaps.

By taking a closer look into the correlation of the seven critical functions of leadership and its relation to the academic achievements of African-American and Hispanic students, the researcher revealed which factors contributed to their achievement. Many researchers agree that background factors such as parents' educational and socio-economic levels were much stronger determinants of student performance than school-controllable factors such as climate, instruction and leadership. Through this investigation the factors of the minority students' achievement as a function of school leaders' characteristics was analyzed and noted to find ways for school improvement.

CHAPTER 2

REVIEW OF SELECTED LITERATURE

When addressing the impact of principal leadership on teacher efficacy and student achievement, and to understand why it is such an important issue, it is necessary to look at the *Effective Schools Movement* of the 1980s. Schools throughout the United States have been relying on effective schools research as the framework for school improvement. The Effective Schools Movement was, and perhaps still is, based on the premise that schools are expected to teach all students the skills necessary to be academically successful. Stakeholders demand that schools be effective in providing all students with the skills that are essential to becoming productive members of society (Hallinger & Heck, 2000; Hallinger & Murphy, 1987).

The Effective Schools Movement continues in spite of raised standards and an increase in the number of economically disadvantaged students enrolled in public schools. The resources that support educational success have remained constant or decreased. Effective schools, defined in the movement's early years, are still valid today (Lezotte, 1994). The correlates of effective schools are instructional leadership, clear and focused missions, safe and orderly environment, climate of high expectations, frequent monitoring of students' progress, positive home and school relations, opportunity to learn and student time on task. The most efficient schools require effective principals. A principal's level of effectiveness, whether directly or indirectly, is an imperative factor in student achievement (Smith & Andrews, 1989).

Schools in low-income neighborhoods were mandated to substantiate an increase in academic performance for all students. The responsibility for ensuring this happened rested on the shoulders of school principals (Halverson, Grigg, Prichett, & Thomas, 2007). Maintaining

school effectiveness can be a challenge in high poverty schools. There has been a long-standing concern with the gap in achievement between high poverty schools and their more economically advantaged peers (US Department of Education, 2009). There is a common assumption that academic achievement is reflective of socio-economic status. Common characteristics of high achieving, high poverty schools include: focus on academic achievement, clear curriculum, frequent assessment of student progress and multiple opportunities for improvement, and collaborative scoring of student work (Rice, 2003).

Successful high poverty schools were found to have a very strong focus on student achievement. This focus on achievement included a great emphasis on improvement. School leaders model behaviors to support student achievement and create a culture of success throughout the school. A myriad of scholars discussed leadership attributes that positively impact students' academic performance (Smith, 2005; Kimball, 2011; Huber & Hiltman, 2010). These characteristics support the traits presented by Portin, Schneider, DeArmond, and Cundlach's (2003) instructional leadership, cultural leadership, managerial leadership, human resource leadership, strategic leadership, external leadership, and micropolitical leadership models, which are the basis for this study. The remainder of this chapter will highlight school leader theory and characteristics that reinforce and provide more insight into the seven critical leadership functions.

Principal Leadership

Leadership traits exhibited by principal and other school personnel have been the subject of research for decades because of its impact on school success measures (e.g., standardized test scores, attendance, and grades). Leadership is critical to the development and maintenance of effective schools and the role of the principal is very demanding

(Tschannen-Moran & Barr, 2004; Tornsen, 2009). The concept of instructional leadership emerged during the Effective Schools Movement of the 1980s, and views the principal as the primary source of educational expertise. Under the ideals of instructional leadership, the principal's role is to maintain high expectations for teachers and students, supervise classroom instruction, coordinate the school's curriculum, and monitor student progress (Marks & Printy, 2003). Responsibilities of principals include meeting the expectations from various stakeholders such as parents, teachers, students, the local community, government bodies, and authorizers.

Principal leadership is said to be second only to teachers and classroom instruction among factors that contribute to student learning in schools (Leithwood, 2007). Wahlstrom and Louis (2008) support the idea that principals have an impact on teaching and student achievement. Principals are expected to be competent in the tenets of quality instruction, as well as have adequate knowledge of the curriculum, to know that appropriate content is being delivered to all students.

The NCLB legislation placed increased pressure on schools to ensure that all students received a good education, regardless of race, disability, or socio-economic status. Witziers, Bosker, and Kruger (2003) examined the debate on the possible impact of the principal's leadership on student achievement. Their review of school leadership studies revealed that the effective principal affects student achievement in a positive manner (Gentilucci & Muto, 2007; Robinson, Lloyd, & Rowe, 2008; Ross & Gray, 2006). The review also covered studies that doubt the significance of educational leadership to student achievement. The study recommended a better conceptualization of educational leadership in order to better assess its impact on student achievement.

Specific leadership traits contribute to academic gains for all students. Studying the impact of particular leadership characteristics on African-American and Hispanic students is important because of the national achievement gap between African-American and Hispanic students and their Caucasian counterparts. Moreover, enrollment at individual public schools tends skew toward students of color (e.g., African-American and Hispanic) or Caucasian. Schools with larger proportions of Caucasian enrollment tend to score higher on standardized test scores and other academic measures.

Leadership practices impact student achievement in general, and African-American and Hispanic students in particular. Chenoweth (2010) reported that the myth that students of color are ill-equipped to achieve at high levels still plagues schools in the United States. This generalization overshadows those schools that are successful in helping minority students excel. After examining high performing schools with a high proportion of minority students across the United States, Chenoweth (2010) identified five insights for success that schools with high minority populations should consider: 1) It's everyone's job to run the school, 2) Inspect what you expect and expect that all students will meet or exceed standards, 3) Be relentlessly respectful and respectfully relentless, 4) Use student achievement data to evaluate decisions, and 5) Do whatever it takes to make sure students learn. These five insights highlight aspects of principal leadership that are critical to establishing an effective learning environment.

The idea that it's everyone's job to run the school represents school personnel coming together for a common goal. Everyone must work together to ensure that the school runs both effectively and efficiently. Accomplishing this task requires hiring the right personnel and keeping a laser like focus on instruction. Additionally, principals must stay abreast of research

and encourage collaboration. Inspect what you expect and believe that all students will meet or exceed standards is almost self-explanatory is a common mantra among successful school leaders. This means that principals should keep a close eye on student progress data in order to hold teachers accountable for student achievement. Principals and school leaders must also believe and encourage teachers to believe that all students are capable of achieving academic excellence. To be relentlessly respectful and respectfully relentless means that principals will ensure that they encourage atmospheres of tolerance, respect, and high expectations. They must be relentlessly respectful in order to model how teachers and students should treat each other. They must also be respectfully relentless in encouraging teachers and students to follow their lead (Chenoweth, 2010). “As part of their relentless respect for staff members, effective principals steer clear of arbitrary decisions based on personal preference” (Chenoweth, 2010, p. 21).

Using student achievement data to evaluate decisions is a key component in exemplary schools. Principals have to assist teachers in analyzing student data without them feeling defensive and under attack. The point behind this is to help establish, “the professional expectation that every student will achieve and when students fail, to pinpoint ways to improve” (Chenoweth, 2010, p. 22). Do whatever it takes to make sure students learn means that principals will be willing to go beyond normal expectations in order to create the right environment for teaching and learning. Principals in schools with high minority populations must recognize that it is up to them to create the conditions under which students will learn (Chenoweth, 2010).

To increase the achievement levels of African-American and Hispanic students, principals should focus on high standards, a challenging curriculum, and good teachers.

Haycock (2001) presented four lessons for school leaders: develop standards, provide a challenging curriculum, offer additional assistance, and recognize the role of teachers in the school. The first lesson is to recognize that standards are the key. Clear standards for what students should learn are critical to improving the academic achievement of minority students. Providing all students with a challenging curriculum is the second lesson. Principals cannot operate on the notion that minority students do not require or are incapable of handling challenging work. The curriculum should be aligned with the identified standards. The third key is to provide minority students with extra help when needed. Some students will require more time and more instruction in order to master certain standards. The fourth lesson is to recognize that teachers matter and make an impact on students. “If students are going to be held to high standards, they need teachers who know the subjects and know how to teach the subjects” (Haycock, 2001, p. 31).

Research and data supporting the seven critical leadership functions (e.g., instructional leadership, cultural leadership, managerial leadership, human resource leadership, strategic leadership, external leadership, and micropolitical leadership) are provided as follows (Portin, Schneider, DeArmond, & Cundlach, 2003). Seasoned and contemporary researchers explored these themes and discussed how these traits impact student academic and social achievement. For the purpose of this study, academic performance is explored as the scholar provides a detailed description of each critical leadership function based on a collective body of evidence. Moreover, for the purpose of this study, school leader is not limited to the role of principal, but also includes other management and leadership level employees who contribute to school culture.

Instructional Leadership

Principal leadership is a key factor in successful schools as principals set the tone for what is expected. Accomplished principals are lead learners who make their practice public and view their own learning as a foundational part of the work of school leadership (National Board for Professional Teaching Standards, 2010). As instructional leaders, principals must assume responsibility for the design and implementation of comprehensive professional-learning experiences for their staff. Principals and school leaders affect student achievement indirectly through their influence on school organizational conditions and instructional quality (Enueme & Egwunyenga, 2008; Youngs & King, 2002). Moreover, instructional quality can be strengthened when principals create internal structures and conditions that promote teacher learning (Youngs & King, 2002).

When principals are consistently engaged in learning, it fosters an environment of learning for teachers. When teachers are engaged in continuous learning, the students are inclined to benefit from and engage in more analytical activities. Building a culture of professional learning and collaboration must be centered upon an acknowledgment of teachers as professionals. The principals of successful schools are more than instructional leaders. They organize the expertise, talent, and care of others for the benefit of the school as a whole (Mednick, 2003). As leaders of learning, principals have to motivate others to constantly learn and enhance their practice.

The primary responsibility of principals is to facilitate effective teaching and learning with the ultimate goal of enhancing student achievement. Research has found that the instructional leadership of principals to be a contributing factor for increased student achievement (Hallinger & Heck 2000; Hallinger & Heck 2004; Robinson, Lloyd & Lowe,

2008; Lezotte, 1994, O'Donnell & White, 2005). Principals who hone their instructional leadership skills are committed to meeting the needs of their schools by serving stakeholders and pursuing shared purposes (Sergiovanni, 1991; O'Donnell & White, 2005).

Instructional leadership behaviors that help promote school learning include protecting instructional time, maintaining high visibility, promoting professional development and providing incentives for learning. Protecting instructional time includes limiting interruptions during academic blocks and restricting the use of scheduled instruction for curricular and extracurricular activities. Maintaining high visibility means that there is meaningful interaction with students and staff by the principal. This visibility shows the principal is concerned with teaching and learning, which may contribute to greater performance of both teachers and students. Promoting professional development entails encouraging teachers to use skills learned during in-service activities and attending or leading instruction based in-service activities. Principals can also develop professional learning activities that are aligned with the academic goals of the school. Providing incentives for learning consists of honoring students meeting outlined goals and objectives. As instructional leaders, principals must work with their staff to promote a positive learning environment. School leaders who place emphasis on improving the school's learning environment may help to improve student achievement (O'Donnell & White, 2005). To become effective instructional leaders, principals must be taught and then practice and learn from their mistakes (O'Donnell & White, 2005, p. 67).

Instructional leadership can play a vital role in school improvement. Effective instructional leaders have to establish environments of trust and where teachers and staff are comfortable taking risks. Principals and senior administrators are actively engaged in

teaching and learning. As instructional leaders, it is up to principals to create environments that promote a culture of learning in the school. In these environments, staff frequently assesses teaching and learning because doing so is critical to the school's success. Instructional support is offered and expected from both peers and supervisors. They also have the expectation that teachers will be involved in designing and facilitating learning experiences that will keep students actively involved. The efforts to improve the teaching and learning process include focusing on instruction, improving teaching skills, and having clear expectations (Fink & Resnick, 2001).

Effective instructional leaders are intensely involved in curricular and instructional issues that directly affect student achievement (Cotton, 2003). Principals must be knowledgeable of districts' instructional programs in order to assist teachers in its implementation. Additionally, principals must be able to recognize what quality teaching looks like, and recruit and retain staff that is capable of delivering such. The principal also needs special capabilities for leadership – recruiting loyalty to the common task of teaching a specific group of children (Fink & Resnick, 2001, p.6).

Key elements of instructional leadership must include: prioritization; scientifically based research; focus on alignment of curriculum, instruction, assessments, and standards; data analysis; and a culture of continuous learning for adults. Prioritization refers to the need for teaching and learning to consistently be a top priority. The element of scientifically based research (SBR) requires instructional leaders to be knowledgeable of SBR and effective instruction in order to inform the selection of instructional materials and to monitor the use of materials in the implementation of instruction. The element of focusing on alignment of curriculum, instruction, assessment, and standards implies that curriculum, instruction, and

assessments all must be aligned with the standards, especially if student achievement is to be measured by them. Data analysis requires leaders to collect information from various sources in order to have a clear picture of performance. All decisions, regardless of the level at which they are made, must be based upon appropriate data. Principals can use this data to determine the focus of instruction and professional development for teachers. Effective principals engage instructional staff in the collaborative analysis of assessment data to plan for continual improvement for each student, subgroups of students, and the school as a whole. Instructional leadership has the potential to impact classroom instruction and student achievement (Marzano, McNulty, & Waters, 2005; Hallinger & Murphy, 1987; Hallinger, 2004).

As instructional leaders, principals are held accountable for improving teaching and learning. Dufour (1999) agreed on the importance of principals as instructional leaders by stating “where principals are effective instructional leaders, student achievement escalates” (p. 15). There exists a significance of instructional leadership to student achievement. “While each researcher has generated a slightly different set of descriptions that characterize effective or excellent schools, one variable always emerges as critically important: the leadership abilities of the building principal, particularly in the instructional arena” (McEwan, 2003, p. 1). As instructional leaders, it is important that principals focus on the quality of instruction as the main concern of the school. They must also be willing to allow teachers and other personnel the opportunity to participate in the instructional leadership of the school. When the principal elicits high levels of commitment and professionalism from teachers and work interactively with teachers in a shared instructional leadership capacity, schools have the benefit of integrated leadership; they are organizations that learn and perform at high levels (Marks & Printy, 2003). Schmoker (1999) stated that the role of the instructional leader is:

To provide opportunities for teachers to work together in self-managing teams to improve their own instruction, always with the expectation for improved learning.

The principal's job is to monitor, discuss and support teachers' progress in achieving high levels of student learning on both short-term and annual assessments (p.19).

As instructional leaders, principals serve as learning leaders (DuFour & Eaker 1998; DuFour & Marzano, 2009). Principals have a tremendous influence when they encourage collaboration amongst teachers and when they acknowledge that they have a greater impact through leading and learning than they do through commanding and controlling. In addition to promoting collaboration, instructional leaders must be knowledgeable on how assessments can be utilized to improve both instruction and student learning.

Assessments can provide data needed to make sound instructional decisions.

Principals are responsible for establishing data-driven instructional systems in their schools (Halverson, Grigg, Pritchett, & Thomas, 2007). Instructional leaders require knowledge and frameworks to guide their schools in the use of accountability data and structures that result in systematic improvements in student learning (Halverson et al., 2007). Sergiovanni (1991) proposed one of the first models of instructional leadership. He noted that there are five leadership forces: technical, human, educational, symbolic, and cultural. How these forces are integrated determines the principal's influence. The technical constructs of instructional leadership are management roles. The human component is composed of communicating, motivating, and facilitating. Educational leadership skills require the principal to be well informed about curriculum, learning pedagogy, and effective instruction. Symbolic leadership refers to the need for principals to communicate to all stakeholders what is important and to model the purpose of the school.

The National Association of Elementary School Principals (NAESP) identified six standards of instructional leadership that principals should know and be able to demonstrate. The first of these standards is leadership that places student and adult learning at the center of schools. The second standard is expectations for and commitment to high standards of academic performance. The third standard requires that principals establish safe and secure learning environments for students. The fourth standard requires that staff be provided the resources and support necessary to meet the varying needs of all students. The fifth standard is establishing a collaborative learning community for adults. The sixth standard entails engaging the community in the schools' improvement process. These six standards come together to produce a climate that enables meaningful instruction and learning to take place (National Association of Elementary School Principals, 2002).

Instructional leaders, including but not limited to principals, contribute to student success. This trait is included in the seven critical leadership functions because one of the most readily identified components of an effective school is instruction and learning. School managers who are competent in the area of instructional leadership maintain a visible presence in the school and represent it to external stakeholders, provide professional development for teachers and paraprofessionals, align the curriculum with state and federal standards, and set high expectations for students and employees. Using this leadership style contributes to increased academic performance (Portin, Schneider, DeArmond, & Cundlach, 2003).

Cultural Leadership

School climate and culture appear to be key to achieving school effectiveness. According to Lindahl (2006),

It is essential to recognize that large-scale organizational improvement does not occur in a vacuum or sterile environment. It occurs in human systems, organizations, which already have beliefs, assumptions, expectations, norms, and values, both idiosyncratic to individual members of those organizations and shared (p. 1).

These shared cultural traits and individual perceptions of climate can have a huge impact on and can be impacted by the school improvement process (Lindahl, 2006). Cultures of seclusion and isolation hinder the ability of teachers to embrace change fully (Dana, 1993). Isolated teaching in stand-alone classrooms is the most persistent norm standing in the way of improving schools. Great principals support positive school climates by inspiring and nurturing a culture of high expectations where actions support the common values and the beliefs of the organization (Fulton, Yoon, & Lee, 2005; National Board for Professional Teaching Standards, 2010). Positive school climates and cultures foster environments that enable teachers to engage in and construct knowledge with peers.

Effective school leaders are highly visible. They create positive climates and high teacher morale, which are critical elements in sustaining student achievement. High teacher morale occurs when teachers receive the necessary support to be successful. Common sense tells you that supported and contented teachers will demonstrate more proficient teaching than their unsatisfied colleagues will. Acknowledgment of teachers doing an exemplary job is another strategy to use in the process of maintaining a positive school climate and sustaining student achievement. Principals and school leaders should look for positive things that teachers are doing well and make an effort to highlight them on a regular basis. Similar to physicians, attorneys, or accountants, teachers need opportunities to be respected as

professionals. Within such cultures where positive actions are highlighted, many teachers are comfortable and stay in difficult schools because the emphasis is placed on their intellectual ability and they are viewed as key players in solving the complex issues of the school (Lindahl, 2006; Vail, 2005).

Establishing and maintaining a positive school climate relies heavily upon the ability of principals to build a firm foundation of trust. This begins by viewing leadership as a collaborative process. It is important that teachers believe their decisions are both honored and respected. When this type of relationship exists between staff and leadership, teachers are able to establish trusting relationships with their students. As a result, trusting relationships become a permanent fixture in the school culture (Bryk & Schneider, 2002; Mednick, 2003).

Schools with high levels of trust exhibit gains when compared to schools in which high levels of trust have not been established. Trust provides a greater level of security when implementing new ideas and strategies and trust allows the facilitation of collective decision-making, a critical factor when initiating change (Bryk & Schneider, 2002). In essence, trust allows a smoother transition during the change process; thereby limiting the possibility of negative disruption (Mednick, 2003). Additionally, trust enables schools to feel comfortable reaching out to the community at large for both assistance and feedback (Bryk & Schneider, 2002).

It is important that school leaders go beyond the school gate, to reach out and read and interpret the external community context, connecting this knowledge and understanding to the school's internal community. Both principals and teachers are vital in ensuring that the external community is not overlooked when decisions are being made (Riley & Stoll, 2004). Parents and the external community have important roles in supporting student success.

Facilitating the involvement of these constituents helps improve student learning and performance because it provides the opportunity to address circumstances that are unique to certain schools (Riley & Stoll, 2004; Steinmann, Malcolm, Connell, Davis, & McMann, 2008).

Culturally proficient educational leaders are committed to educating all students to high levels through knowing, valuing and using the students' cultural backgrounds, languages, and learning styles within the selected curricular and instructional contexts. Five essential elements of cultural competence: standards for culturally competent values, behaviors, policies, and practices (Terrell & Lindsey, 2009). The first element is assessing cultural knowledge. This element entails leading the learning about the cultures of others and knowing how to be effective in cross-cultural situations. Valuing diversity means steps have been taken to create decision-making groups that are inclusive of individuals with differing viewpoints and experiences. Managing the dynamics of difference is the third element. This element involves modeling problem solving and conflict resolution strategies as a natural and normal process within the organizational culture of the schools and the cultural contexts of the communities of your school. The fourth element, adapting to diversity, deals with principals initiating learning about cultural groups, and their ability to consider a variety of cultural experiences and backgrounds in all school settings. The fifth element is institutionalizing cultural knowledge. Principals make learning about cultural groups and their experiences and perspectives an integral part of the school's professional development. These elements of cultural competence are significant to overcoming barriers to cultural proficiency (Terrell & Lindsey, 2009).

Terrell and Lindsey (2009) identified three major barriers to cultural proficiency: resistance to change, systems of oppression, and a sense of privilege and entitlement. Resistance to change is a common occurrence with change that involves issues of culture. Often times, those who are resistant view the change as an indicator that their current practices are inefficient. Systems of oppression include racism, sexism, heterosexism, etc. It is important that oppression is a systemic issue separate from personal behavior. A sense of privilege and entitlement is a by-product of systems of oppression. Those who benefit from privilege and entitlement are often blind to the negative effects of systemic oppression on others because they can choose not to see.

Researchers argued that there is a disconnection between educational practices that are designed for a Euro-centric population and the growing diversity in schools within the United States (Banks & Banks, 2004; Howard, 2006; Pang, 2001). It is this disconnect that requires educators to be culturally competent and able to create curriculum that are culturally responsive and relevant to all students. For this to be successful, principals must create school environments that will support culturally responsive and relevant curriculum and encourage constant growth and collaboration between their staff.

Schools across the United States are experiencing tremendous changes in their demographics. Schools that have grown accustomed to serving predominantly white students are seeing their populations include greater varieties in ethnicities, socio-economic levels, and abilities. Cultural leadership extends beyond addressing the diverse needs of the varying cultural populations of a school. Cultural leadership also involves the dynamics of the overall culture of the school.

Principals have a strong role to play in forming school cultures that encourage change. Principals shape the culture in positive ways when they share leadership and take responsibility for shaping classroom improvements (Louis & Wahlstrom, 2011). Louis and Wahlstrom (2011) identified three elements that are necessary for teachers to improve their instruction: culture of excellent instruction, shared norm and values, and culture of trust. This requires both teachers and administrators to share their knowledge and resources to improve classroom practices that are associated with improved student learning (Louis & Wahlstrom, 2011). The second element is shared norms and values. Teachers should be encouraged to take collective responsibility for ensuring that all students learn. Principals play a critical role in fostering the cultures of professional communities necessary for shared values and norms to be established. The third element is a culture of trust. Louis and Wahlstrom (2011) found that teachers' trust in their principals provides the firm foundation for learning and for forming professional communities. This trust is established when teachers are encouraged to share their opinions and when principals make instructional quality a visible priority.

Hallinger (2004) argues that from a cultural perspective, schools are institutions of cultural transmission. Schools are a reflection of the predominant values and norms of the larger culture. Cultural leadership in schools with minority populations can be difficult to navigate, where school factors contribute to the underachievement of students of color. Many African-American and Hispanic students do not receive quality education experiences in the United States. For these students, a substandard education subjects them to being members of a permanent underclass and greatly affects the U.S.'s ability to sustain a society that is well balanced and pluralistic (Smith, 2005).

One of the dynamics that can contribute to low performance of students of color is the assumption of rightness (Smith, 2005; Howard, 2002). The assumption of rightness refers to the assumption of educators that students' academic failure is the fault of the students and their families, and not with the structure of the school. To address this issue, schools need leaders who are culturally proficient and can cultivate this climate to create culturally proficient schools (Smith, 2005). Lindsey, Robins, and Terrell (1999) define cultural proficiency as:

The policies and practices of an organization or the values and behaviors of an individual that enables that agency or person to interact effectively in a culturally diverse environment. Cultural proficiency is reflected in the way an organization treats its employees, its clients, and its community (p. 21).

Smith (2005) argues that culturally competent leaders, those who exhibit cultural proficiency, create and place into action a vision of learning that candidly addresses the needs of all students. These leaders work to abolish negative stereotypes about the academic abilities of students of color, and create an environment that effectively addresses the needs of these students. Additionally, culturally competent leaders model the ways in which they want their staff to interact with these students. They induct cultural knowledge by conducting diversity trainings and incorporating the knowledge gained from those trainings into the school. The academic success of every student matters and high expectations are set for all students. When certain practices are not working, leaders who are culturally competent have to examine those practices and improve them in order to enable diverse student populations to be successful. Student success is not limited by race, ethnicity, or socioeconomic status. All students are expected to meet or achieve high standards.

Understanding students bring varying circumstances to school, school leaders must utilize cultural leadership to recognize the variables and provide services and programs to positively impact student outcomes. Celebrating diversity in all aspects of students' lives is the primary tenant of cultural leadership. Valuing the experiences of others extends beyond students and includes teachers and other personnel. School leaders must meet the demands associated with a more diverse society and student and staff demographics by using cultural leadership characteristics.

Managerial Leadership

The principal's role has become more complex as the nature of society and political expectations. From the 1920s to the 1970s, the predominant role of the principal was that of administrative manager. The management role of the principal includes policy, daily operations, and decision making that is led by the functional needs of conducting the work of the school (Valentine & Prater, 2011; Glasman, 1984). Effective managers must be proficient in four general skills areas to contribute to the outcomes of learning. These skills are conceptual, interpersonal, technical and political in nature and are necessary practices to ensure quality education for rural learners. Conceptual skills can be defined as the manager's mental ability to coordinate all of the organization's activities, analyze and diagnose complex situations (Singh & Gumbi, 2009). Decision-making skills and creative skills are the conceptual skills that are relevant for principals.

A critical aspect of managerial functions is classroom management. Effective classroom management is important because successful schools are characterized as structured learning environments with few disciplinary problems. Principals help create these environments by supporting teachers with establishing an environment conducive for

learning. This is accomplished by controlling public spaces, by stressing discipline, and by handling disciplinary problems in their offices. Principals shield the instructional core from disruptions.

Valentine and Prater (2011) found the day-to-day managerial skills of the principal to be vital to a successful school operation. Principals must effectively organize and fulfill daily tasks. Consistent organizational efficiency is foundational to an effective school (Valentine & Prater, 2011). Good management requires consistency and assurance that daily operations will be handled fairly and expeditiously. By definition, management entails the organization of people and processes to accomplish a goal (Catano & Stronge, 2011; Yukl, 2010).

The managerial role of the principal is important in implementing reform. Johnson (1996) found no evidence of effective leadership without effective management. An administrator, “may foster creative teaching and nurture innovative programs, but if the buses do not run or children are unaccounted for, he or she is judged to have failed as a manager, not to have succeeded as a leader” (Johnson, 1996, p. 220). The management of a school entails daily routines the allocation of resources, and problem solving (Spillane, Halverson, & Diamond, 2004). The managerial role of the principal also involves the allocation of materials, equipment, space, and time (Fullan, 2001). Daily issues, such as establishing an efficient lunch schedule, provide structure within the organization. Protecting instructional time from frequent interruptions is also an important managerial function. The establishment of routines and clear structures, rules, and procedures has been identified as key elements to school effectiveness (Marzano, McNulty, & Waters, 2005).

A key responsibility of principals as managers is managing people, data, and processes to foster school improvement (Wallace Foundation, 2012, p.12). This means that principals

need the leadership skills to plan, implement, support, advocate, communicate, and monitor the school improvement process (The Wallace Foundation, 2012). This part of the job is where everything from facility management to student discipline becomes the daily routine. Lunenburg and Ornstein (2008) illustrated the difference between leadership and management:

The distinction usually entails allocating management with responsibilities for policy implementation, maintaining organizational stability, and dealing with day to day routines of the job such as providing and distributing financial and material resources, managing the school facility, managing the student body, maintaining effective communications with educational stakeholders, reducing disruptions to the instructional program, mediating conflicts, and attending to political demands of the school or school district. Leadership in contrast entails responsibilities for policymaking, organizational change, and other more dynamic process of work (p. 15).

The managerial aspect of school leadership focuses on the functions, tasks, or behaviors of the principal in order to make the school run smoothly. Critical to the school running smoothly is the effectiveness of teachers. As human capital managers, principals are responsible for evaluating a teacher's effectiveness. The principal's function as the agent of school improvement in terms of management is through performance management of the staff. As a result, it is vital that the principal as manager is also proficient at determining whether a teacher is effective in classroom instructional practices. It is also important that principals know the legal processes of mentoring, retaining, non-renewing, or terminating professional staff (Leithwood & Duke, 1999; Lunenberg & Ornstein, 2008). Principals must

tie school improvement strategies to their work at recruiting, selecting, developing, and retaining effective teachers. Additionally, principals are responsible for creating work environments in which staff fully commits their time and energy (Kimball, 2011). Kotter (1990) proposed that managing an organization is necessary to produce predictability and order.

Leadership skills encompass a principal's ability to influence their teachers toward the achievement of a goal. Delegation skills entail shifting decision-making authority from one level of the organization to a lower one, through an assignment of authority to another person to carry out specific activities. A principal's technical skills rest in the ability to use the tools, equipment, procedures, techniques, processes and practices of a specialized field. It is not necessary for principals to be experts, however, at a minimum, they should possess adequate technical knowledge and skills to intelligently direct staff members, organize tasks, communicate work groups' needs to others and solve problems (Singh & Gumbi, 2009). The technical skills needed by principals to be effective managers are computer skills, financial planning & control skills, and political skills.

It is important that teachers are aware of and comprehend their responsibility to teach, supervise, and maintain a safe environment for students. Ghilay and Ghilay (2011) argued that when it comes to the managerial skills of principals, they should be highly rated with regard to the following qualities in order to be effective: communication and collaboration with teachers; organizational characteristics; pedagogical characteristics, values and vision; creation of motivation; and the decision making process. Communication and collaboration increases teachers' autonomy to create an effective school and helps to create a professional work environment (Ghilay & Ghilay, 2011; Blase & Blase, 1994; Bolin, 1989).

Organizational characteristics include school discipline and management of resources. Principals are important in establishing school discipline, both by effective administration and by personal example. Principals of well-disciplined students are usually highly visible models and engage in management by actively interacting with students and teachers and informally monitoring possible problem areas (Ghilay & Ghilay, 2011; Duke, 1989). The management of resources embodies both the wise use of school finances and the effective management of staff. Principals who are good managers must also exhibit certain pedagogical characteristics. They must be knowledgeable of academic content and pedagogical techniques. It is important that they work with teachers to strengthen skills, in addition to collecting, analyzing, and using data in ways that promote excellence.

The decision-making process contributes to the principal's ability to perform as a manager. Shared decision-making is significantly beneficial because it is a process of making educational decisions in a collaborative manner at the school level (Ghilay & Ghilay, 2011). Teachers appreciate it when their views impact school decisions, which results in them feeling respected and empowered. Tas (2011) defined educational management as the process of effectively operating, developing and innovation of an educational organization established to match the public demand for education, in line with predetermined purpose.

Educational management is the process of effectively operating, developing and innovation of an educational organization established to match the public demand for education, in line with predetermined purpose (Tas, 2011). Value and vision are vital to the effective management of a school. Principals should have clear visions for their schools and be vocal about the school's values and plan strategically to achieve the vision (Ghilay & Ghilay, 2011). The values and vision must be visible in policies, programs, and procedures.

According to Ghilay & Ghilay (2011), curriculum, staffing, evaluation, and budget must feel the imprint of the vision, or it will gradually lose credibility. Creation of motivation involves providing intrinsic rewards to teachers and staff. It is easier to manage individuals when there is high job satisfaction amongst those being managed. Teachers and staff measure their job satisfaction by factors such as participation in decision-making, use of valued skills, freedom, and independence, challenge, expression of creativity, and opportunity for learning (Ghilay & Ghilay, 2011).

Human Resource Leadership

Although human resources and management are often viewed as one when it comes to school principal leadership, the two have distinct differences. While the managerial role of the principal focuses mainly on the effective fulfillment of operational tasks, the human resources role of the principal focuses on the human aspect of the job, such as recruiting, hiring, and retaining quality teachers and staff. There are specific measurable teaching competencies that need to be developed and supported (Kimball, 2011). These competencies must be centered on both instructional leadership actions and the human capital functions of recruitment, selection, induction, mentoring, professional development, performance management, and compensation and recognition (Adeyemi, 2008).

Kimball (2011) identifies two critical aspects of managing human capital: teacher acquisition and performance management. Adeyemi (2008) defines human resources as people, manpower, the individual, humanity and society with all its aspirations, needs and capacities. Human resource development is the process of acquiring teachers who have the required education, skills and experience, as well as those who are motivated to use their resources to expand the capabilities of the school. In order to ensure that the principals place

the right people in the right positions, principals have to be hands on in making staffing decisions. These decisions involve a number of steps, which include planning for turnover, marketing the school, networking with talent sources, and enacting careful selection procedures. Planning for turnover is the first step in the staffing process. It is important to be aware of possible openings ahead of time, and begin screening individuals to fill those openings. Gauging teacher intent is very beneficial to this process. Proactive principals try to gauge teacher intent to the best extent possible by using informal, anonymous surveys and getting to know each staff person to learn about his or her aspirations. This enables principals to facilitate succession planning for key staff positions (Kimball, 2011).

As human resource managers, principals have a responsibility to both internal and external stakeholders to ensure that the school is staffed and functions properly. Principals are responsible for making sure students receive effective teaching and learning. They have to be able to create environments that make schools stimulating for staff and students. Additionally, staff should be encouraged to take part in school activities and should know that the principal has confidence in their ability to perform given tasks (Adeyemi, 2011).

Marketing the school requires developing a recruitment message to be delivered to prospective talent, both in and outside the district. The recruitment message should deliver the school vision, its strategies for improving achievement, the competencies teachers and other staff members need to possess or develop to implement the strategies, and support and career growth opportunities (Kimball, 2011). Marketing schools in this manner builds on the idea that teachers are attracted to schools that exhibit strong school leadership and positive working conditions.

Developing and using professional contacts and networks should be part of the recruiting strategy. Kimball (2011) stated that the most important aspect of talent acquisition is the selection process. Making the proper hiring decisions can mean the difference between obtaining the perfect person or the wrong person. The goal is to hire the best possible, high-functioning teacher, not a teacher whose skills are deficient. Choosing the wrong person can be costly as it may result in having to repeat the selection and training process.

Performance management should be based on a system that links performance to school goals, monitors performance, and provides feedback, support, and consequences on whether growth goals are met (Kimball, 2011). It is important that these processes be tied to the school's induction and professional development system. Evaluations are crucial to these systems, but only when done correctly. Evaluation is only effective when it is rooted in a performance management process that includes goal setting, frequent and specific feedback, access to coaching and support, and recognition of successes as well as consequences for ineffective performance.

Goal setting is an effective tool to motivate performance and link individual practice to the teaching standards embedded in the evaluation system. Principals have specific tasks to complete in order to communicate school goals and strategies for meeting them. According to Kimball (2011), principals need to:

1. Break down school goals into specific, measurable goals for student achievement and instructional practice and provide them to teachers;
2. Identify and remove barriers to implementing strategies and meeting goals;
3. Increase teachers' self-efficiency for improving instruction and achieving goals;

4. Use available incentives to reinforce instructional improvement and goal achievement.

Effective principals can sustain high levels of capacity by establishing trust, creating structures that promote teacher learning, and either connecting their faculties to external expertise or helping teachers generate reforms internally. These researchers define the correlation of capacity to instructional quality based on their synthesis of prior research on school reform (Corcoran & Goertz, 1995; Newmann, King, & Rigdon, 1997; Youngs & King, 2002).

The conceptual framework proposed by Youngs and King (2002) suggests that teachers' practices are less likely to improve without professional development activities that address teachers' knowledge and skills. Principals have the ability to improve the aforementioned areas by connecting teachers to external expertise, by creating external structures, and by establishing trusting relationships with school staff. School capacity is more likely to be strengthened when principals foster social trust between themselves and staff members. Additionally, when principals solicit staff opinions on curriculum decisions, hiring, and professional development, they are able to increase trust among teachers and augment collective responsibility for learning (Youngs & King, 2002). Successful instructional leaders must make staff development a primary issue because it involves leadership techniques and procedures designed to impact teacher performance (Leithwood, 1994; Enueme & Egwunyenga, 2008).

Through his description of human resource management, Kimball (2011) has distinguished between leaders who simply manage buildings and those who strategically manage human capital. Huber and Hiltman (2010) suggest that human resource management

includes different aspects of professionalization. They take a position similar to Kimball (2011) in that they believe that a major element of managing human resources is the preparation, induction, and continuous professional development of individual leaders and leadership teams. Huber and Hiltman (2010) also state the importance of personnel marketing and selection.

Strategic Leadership

The strategic direction of schools is often viewed out as an end in itself, but as a means to enhanced staff development leading to a greater teacher productivity and increased student learning. Being strategic is more than strategic planning or strategic intent; it is about deliberate and sustained practice (Quong & Walker, 2010, p. 22). Strategic leadership means positioning the organization to its best advantage in order to maximize goal attainment. In regards to schools, this means achieving the best possible student outcomes now and into the foreseeable future. This leads to an emphasis on target driven pupil performance and the utilization of strategic planning, as the main mechanism for holding schools to account for their overall performance. Strategic leadership is based on long term planning. It necessitates creating and sustaining systems, allocating resources, and communicating vision. It is important for principals to maintain a clear focus on the primary vision for their school (Bell & Chan, 2005).

Strategic leadership can be classified into three phases: Internal strategic leadership, into face strategic leadership, and future strategic leadership. The context of school leadership has changed tremendously since the 1980s. This is evident in numerous past and continuing educational reforms and school-restructuring movements around the world. These changes led to the establishment of new strategic thinking and leadership in education (Cheng, 2010). As a

result, school leaders are now required to be strategic in their leadership and lead their schools proactively to face up to the contextual challenges with strategies. It focused primarily on leaders and their ability to engage in strategic and long-range planning, often reserved for upper-management. Today's educational environment calls for leaders who can collaborate with multiple stakeholders and put strategies in place to respond quickly to solve complex problems that may require new ways of thinking and understanding of rapidly changing knowledge (Quong & Walker, 2010).

In strategic leadership, school leaders must determine how to strategically lead their teachers, students, and other stakeholders to face up to the new change. Internal strategic leadership deals with strategies focused on assuring internal school effectiveness through improving school performance in general and enhancing contents, methods, and processes of teaching and learning. When principals exhibit internal strategic leadership, there is constant reference to concepts such as instructional leadership, curriculum leadership, structural leadership, human leadership, and micropolitical leadership. Future strategic leadership refers to ensuring that students could meet the future challenges and needs of rapid transformations in an era of globalization and informational technology, therefore, focuses on future effectiveness, which is often defined by the relevance of education to the future developers of individuals and their society (Cheng, 2010; Eilerston, Gustafson, & Salo, 2008).

Focusing on the future is critical. Our futures are jeopardized to the extent that we fail as a society to prepare Black and Hispanic students for purposeful and meaningful futures (Kuykendall, 2004, p. 237). Strategic leaders must be able to look beyond the present and into the future. Strategic leadership is centered on strategic intent, which is a concept used to

describe how a school can take a strategic perspective into a rapidly changing and turbulent environment (Quong & Walker, 2010).

In order to successfully practice strategic leadership, school leaders must implement plans. The best-laid plans fall short if stored in a binder or analyzed until good ideas become impossible to achieve. Successful school leaders accomplish goals and objectives based on their vision and mission. They focus action on what is important, securing the resources needed, building confidence as a person and a leader, and modeling the abilities necessary to energize the school community (Quong & Walker, 2010).

Schools need a parallel view of leadership development in which leaders are able to both concentrate on the now of school improvement, and build strategic capability within the school. Strategic leadership involves making short-term improvements sustainable into the future. This process requires leaders to provide direction to support the goals and vision of the school. Developing the plan is coupled with assigning tasks, empowering teachers and administrators, and moving to action (Davies & Davies, 2006).

In summary, strategic leaders chart the course and take action to achieve their goals and objectives. Short and long term goals guide their professional learning and actions. They also recruit a team of people to buy in to their efforts and delegate authority. These leaders perceive change as necessary and know when and how to prioritize thinking and learning (Davies & Davies, 2006; Elmore, 2002; Quong & Walker, 2010).

External Development Leadership

Encouraging the participation of parents and external stakeholders is a key part of external development leadership. Establishing strong community partnerships is vital for improving school success. Creating an atmosphere that is conducive for student learning and

community involvement can be challenging. Principals must be diligent in making sure that strong partnerships are established.

Principals must have a firm vision of what family involvement should be. Engaging families with schools is a process and the catalyst for that process is the leader (Constantino, 2003, p. 18). In 1984, the Improving America's Schools Act (IASA) called for close partnership with schools, communities and families. This partnership would be placed in writing and would outline the expectations and responsibilities of principals, teachers, and parents in helping students learn and to be successful. This compact between principals, parents and teachers is representative of shared responsibility for student learning and achievements. Frequent communication between home and school helps develop positive partnerships (Epstein, Sanders, Simon, Janson, VanVoorhis, Martin, Thomas, Greenfield, Hutchins, & Williams, 2009; Jeynes 2005; Epstein & Sheldon, 2002; Van Voorhis & Sheldon, 2004).

Community partnerships are just as important as parent and family partnerships. Often times, community businesses have resources that could provide skills and expertise to the local school. Collaborating with the community includes not only the families of students in the school, but others who are interested in and affected by the quality of students' education (Epstein et al., 2009). The community includes business partners, health services, senior citizens, governmental agencies, faith-based programs, and cultural organizations. Community relationships have a direct impact on students' learning (Christenson & Sheridan, 2001). In order to effectively manage community involvement, there must be an understanding of what families need.

Community collaboration exposes students to possible future careers and also provides opportunities for extracurricular activities (Epstein et al., 2009). Community involvement as connections between schools and community individuals, organizations, and businesses are forced to directly or indirectly promote students' social, emotional, physical, and intellectual development (Sanders, 2006). According to Sanders (2006) resources (human and material) are at the crux of excellence in education. Many schools struggle to attain the human and material resources needed for schools to be successful. Community involvement can help generate resources that are critical to effective schooling. When such resources are appropriately channeled, they can support innovative educational programs that meet the learning needs of increasingly diverse student populations and promote equity in the educational opportunities available to all students (Sanders, 2006).

Berg, Melaville, and Blank (2006), explored ways in which principals work successfully with community partners, families, and other key stakeholders to improve student outcomes. They believe that together, schools, families, and communities can develop creative solutions to meet the diverse needs of all students. Principals that value community involvement view it as a new way of approaching the increasingly demanding job of the principal and believe that the network of support created by it provides students with opportunities and experiences they need and deserve.

Epstein and Jansorn (2004) stated, "for a school to develop a partnership program involving all parents in ways that increase student success requires new ways of thinking about family and community involvement" (p. 12). All schools should have a purposeful, planned partnership program that creates a welcoming environment and engages families in activities that contribute to students' readiness for school, academic success, and positive

attitudes and behaviors. School administrators and principals are responsible for supporting family and community involvement for student success.

Educators cannot afford to leave it solely up to parents to determine how they can be involved in their children's education. Schools working to increase family involvement can achieve better results by utilizing a team approach to organize partnership programs and linking involvement activities to student achievement goals (Epstein & Jansorn, 2004). Leaders who use external development leadership skills believe it takes a village to educate students. These leaders invite teachers, staff, and community members to participate in the learning process. They realize learning can take many forms and welcome the opportunity to work with others to advance student outcomes (Berg, Melaville, & Blank, 2006; Christenson & Sheridan, 2001; Sanders, 2006).

Micropolitical Leadership

Blase and Blase (2002) define micropolitics as the formal and informal power by individuals and groups to achieve their goals in organizations. Organizational politics occur in schools on a daily basis. Political forces that exist within schools and communities dictate the way things have, are, and will be done. The micropolitics of education entail the daily interactions, negotiations and bargains of any school (Lindle, 1999; Mawhinney, 1999). Understanding the micropolitics of a school is useful in its leadership and management. School politics can be caused by a number of factors. Micropolitics are often seen as a negative aspect of school management. This negative perception is based on the idea that conflict and power are naturally destructive forces. Organizational micropolitics involve structure, hierarchy and management. Emotional micropolitics deal with the psychodynamics of human interaction (Caffyn, 2010).

Micropolitics is concerned with how key players use a variety of strategies such as coercion power, cooperation, and influence to obtain resources and achieve goals, and provides a lens to understand the dynamics, interactions, and inter-relationships that exist in school environments (Ehrich & Cranston, 2004, p. 28). The concept of teams implies that there is a distribution of power. Teams could not exist without the commitment and leadership of principals because they alone do not have the authority to create conditions for others to participate in sharing and decision-making. Principals are responsible for ensuring that the members of their organization work together effectively. Micropolitics can impact whether or not principals are successful at this task. Micropolitics are an inevitable and ubiquitous characteristic of organizational life (Ehrich & Cranston, 2004).

Eilerston, Gustafson, and Salo (2008) take the position that micropolitical activity in schools is about different ways of achieving and using power in order to affect the manner in which things are understood and governed (p. 295). The micropolitical perspective of schools is based on the premise that schools are characterized by varying interests and goals that result in uncertainty or disunity when making decisions on what ought to be achieved and what things ought to be accomplished. They make the argument that micropolitics is more than conflicts and how people exercise their authority or influence in order to promote or protect their interests. It is also about how individuals within a school cooperate and collaborate to support each other in order to achieve specific goals.

Sometimes micropolitical relationships are based only on the use of formal power (authority, expertise), and other times they are based on mutual trust (collegiality, friendship). The interactions among and between individuals within schools represent the very nature of micropolitics in school, the public arena, and the arena of interaction. The private arena refers

to the interactions that take place in a teacher's classroom. The arena of interaction is the environment in which school leaders and teachers interact with one another in order to coordinate activities of the school. This is the arena where decisions are made. The public arena is where the coordination and management of teaching takes place as a whole (Eilersten, Gustafson, & Salo, 2008).

Managing the micropolitics of an organization appears to be important to school leadership. However, Blase and Blase (2002) argue that more research needs to be conducted on the topic. They make the argument that the field of instructional supervision would benefit from the increased use of micropolitical organizational politics perspective. The school political processes and political culture have a profound impact on a school's outcomes, including teaching and learning. How political processes and political culture work together to produce those outcomes are a question that can be answered by empirical study (Blase & Blase, 2002).

Summary

School leaders, such as principals, department chairs, and counselors, who use the seven critical leadership functions allows several strategies to inform their work. The components of each characteristic overlap in some areas such as creating an atmosphere of trust, communication, and professional development. While many scholars investigated characteristics of successful schools, at the time of this study no one tackled this subject relative to eighth grade African-American and Hispanic student outcomes. Middle school is critical in determining academic outcomes in high school. The extensive body of previously conducted research informed this study and provided a sage guide for this investigation.

CHAPTER 3

METHODOLOGY

Chapter three discusses the research methodology portion of this study. It includes an explanation of the educational research procedures and processes that were executed by the researcher. The researcher used the correlation research method to document human behavior and measure the presence or absence of each research hypothesis (Guba & Lincoln, 1994; Lincoln & Guba, 2005). This educational research study was designed to ascertain the correlation of school-based leaders' Critical Leadership Functions and student achievement. The researcher used data collected from the Critical Leadership Functions Questionnaire (CLFQ) and CRCT performance to assess the correlation among eighth grade African-American and Hispanic students in reading and mathematics.

The research design included conducting a pilot study to assess the validity of the instrument as it applies to this specific study to determine if correlations existed between the seven Critical Leadership Functions and student achievement. Once the pilot study results confirmed the validity of the instrument, the researcher distributed the CLFQ to middle school leaders throughout the district. Specifically, data was requested from leadership team members from all 19 middle schools throughout the district (approximately 200 eligible participants). Middle school leadership personnel were also asked to complete a confidential demographic survey. After sending one reminder to potential respondents, 117 participants completed and returned the questionnaire. The original questionnaires were stored in a locked file and the results were entered into an Excel spreadsheet and saved on a password-protected computer. CRCT mathematics and reading scores of eighth grade African-American and Hispanic students attending the 12 of the 19 middle schools in the district were collected from

the Georgia Department of Education's website. SPSS statistical software was used to perform the regression analysis for each hypothesis and calculate descriptive statistics (e.g., mean, variance, observation, correlation, hypothesis difference, and degrees of freedom).

Selection of Research Participants

The population for this study included all school-based leaders and students in public middle schools in the southeastern regions of the United States. The researcher chose to conduct a sample of all middle school leadership personnel (e.g., principals, assistant principals, grade level chairs, department chairs, and deans) from one metropolitan school district (the district) in the southeastern region of the United States. The school system includes approximately 12,000 full time employees: more than 6,800 teachers and other certified personnel, who work in 100 schools and 14 administrative and support buildings (Fulton County Schools, 2012). The school system is geographically bisected by the county's northern and southern boundaries. The geographic boundaries mirror the socioeconomic communities within the county. Northern schools are located in more affluent areas, while schools in the southern part of the district are located in communities with families from lower socioeconomic backgrounds.

Research Questions

The research questions of this study were related to the investigation of educational accountability. Specifically, the findings from these research questions addressed the correlation between school leadership functions and African-American and Hispanic student achievement on standardized tests. The following research questions guided this study:

1. Is there a correlation between African-American eighth grade CRCT mathematics scores and reported school leader critical leadership functions?

2. Is there a correlation between Hispanic eighth grade CRCT mathematics scores and reported school leader critical leadership functions?
3. Is there a correlation between African-American eighth grade CRCT reading scores and reported school leader critical leadership functions?
4. Is there a correlation between Hispanic eighth grade CRCT reading scores and reported school leader critical leadership functions?

Hypotheses

A statement about the population parameter of a given set of data is defined as the statistical hypothesis (Larson & Farber, 2009). Social science researchers develop and test hypotheses to determine if a connection exists or to predict behavior. The primary purpose of discovery is to determine if observations are influenced by other events or behaviors or occur by chance (Harlow & Mulaik, 1997; Popper, 1972). The hypotheses of this research study represented the claims and their corresponding complements. This study consisted of the following hypotheses:

Critical Leadership Function #1: Instructional Leadership

Instructional Leadership and African-American CRCT – Math Performance

- 1.1 There is a correlation between school leaders' Instructional Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

Instructional Leadership and African-American CRCT-Reading Performance

- 1.2 There is a correlation between school leaders' Instructional Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

Instructional Leadership and Hispanic CRCT – Math Performance

1.3 There is a correlation between school leaders' Instructional Leadership scores and eighth grade Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Instructional Leadership and Hispanic CRCT-Reading Performance

1.4 There is a correlation between school leaders' Instructional Leadership scores and eighth grade Hispanic students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Critical Leadership Function #2: Cultural Leadership

Cultural Leadership and African-American CRCT – Math Performance

2.1 There is a correlation between school leaders' Cultural Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Cultural Leadership and African-American CRCT-Reading Performance

2.2 There is a correlation between school leaders' Cultural Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Cultural Leadership and Hispanic CRCT – Math Performance

2.3 There is a correlation between school leaders' Cultural Leadership scores and eighth grade Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Cultural Leadership and Hispanic CRCT-Reading Performance

2.4 There is a correlation between school leaders' Cultural Leadership scores and eighth grade Hispanic reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Critical Leadership Function #3: Managerial Leadership

Managerial Leadership and African-American CRCT – Math Performance

3.1 There is a correlation between school leaders' Managerial Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Managerial Leadership and African-American CRCT-Reading Performance

3.2 There is a correlation between school leaders' Managerial Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Managerial Leadership and Hispanic CRCT – Math Performance

3.3 There is a correlation between school leaders' Managerial Leadership scores and eighth grade Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Managerial Leadership and Hispanic CRCT-Reading Performance

3.4 There is a correlation between school leaders' Managerial Leadership scores and eighth grade Hispanic students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Critical Leadership Function #4: Human Resource Leadership

Human Resource Leadership and African-American CRCT – Math Performance

4.1 There is a correlation between school leaders' Human Resource Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Human Resource Leadership and African-American CRCT-Reading Performance

4.2 There is a correlation between school leaders' Human Resource Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Human Resource Leadership and Hispanic CRCT – Math Performance

4.3 There is a correlation between school leaders' Human Resource Leadership scores and eighth grade Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Human Resource Leadership and Hispanic CRCT-Reading Performance

4.4 There is a correlation between school leaders' Human Resource Leadership scores and eighth grade Hispanic students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Critical Leadership Function #5: Strategic Leadership

Strategic Leadership and African-American CRCT – Math Performance

5.1 There is a correlation between school leaders' Strategic Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

Strategic Leadership and African-American CRCT-Reading Performance

5.2 There is a correlation between school leaders' Strategic Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

Strategic Leadership and Hispanic CRCT – Math Performance

5.3 There is a correlation between school leaders' Strategic Leadership scores and eighth grade Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

Strategic Leadership and Hispanic CRCT-Reading Performance

5.4 There is a correlation between school leaders' Strategic Leadership scores and eighth grade Hispanic students' reading CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

Critical Leadership Function #6: External Development Leadership

External Development Leadership and African-American CRCT – Math Performance

6.1 There is a correlation between school leaders' External Development Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

External Development Leadership and African-American CRCT-Reading Performance

6.2 There is a correlation between school leaders' External Development Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

External Development Leadership and Hispanic CRCT – Math Performance

6.3 There is a correlation between school leaders' External Development Leadership scores and eighth grade Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crit}$).

External Development Leadership and Hispanic CRCT-Reading Performance

6.4 There is a correlation between school leaders' External Development Leadership scores and eighth grade students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Critical Leadership Function #7: Micropolitical Leadership

Micropolitical Leadership and African-American CRCT – Math Performance

7.1 There is a correlation between school leaders' Micropolitical Leadership scores and eighth grade African-American students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Micropolitical Leadership and African-American CRCT-Reading Performance

7.2 There is a correlation between school leaders' Micropolitical Leadership scores and eighth grade African-American students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Micropolitical Leadership and Hispanic CRCT – Math Performance

7.3 There is a correlation between school leaders' Micropolitical Leadership scores and Hispanic students' mathematics CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Micropolitical Leadership and Hispanic CRCT-Reading Performance

7.4 There is a correlation between school leaders' Micropolitical Leadership scores and eighth grade Hispanic students' reading CRCT scores ($H_0: r_{cal} \leq r_{crt}$).

Instrumentation

This study was an extension of the work of Portin et al. (2003) who examined school leadership to determine the functions that school leaders practice in application and not just theory. The Critical Leadership Functions Questionnaire (CLFQ) (see Appendix A) was administered to the identified participants that comprise the sample of the population. Data collected from the CLFQ was used to score the school leadership personnel's leadership perceptions across seven critical leadership functions (e.g., Instructional Leadership, Cultural

Leadership, Managerial Leadership, Human Resource Leadership, Strategic Leadership, External Leadership, and Micropolitical Leadership). The questionnaire (see Appendix A) was administered to each member of the leadership team consisting of principals, assistant principals, deans, grade level chairs and department chairs of the participating schools in the district for a total of 117 participants out of a possible 175 employees from 12 of the 19 middle schools in district.

Reliability

Reliability is the measure of consistency of a test, questionnaire, observation, or other measuring device. Stability reliability is a specific type of reliability testing that examines the agreement of a measuring instrument over time. To determine stability, a measure or test is repeated on the same subjects at a future date. Results are compared and correlated with the initial test to give a measure of stability (Bernstein & Putnam, 1986; Carmines & Zeller, 1979; Russ-Eft, 1980). According Creswell (1994), validity refers to the degree in which a survey instrument measures what it intends to measure. External validity refers to the extent to which the results of a study may be generalized. Internal validity refers to the rigor with which the survey instrument items were developed (Carmines & Zeller, 1979). Under the direction of the Wallace Foundation, the College of Education and the Center on Reinventing Public Education of the Daniel J. Evans School of Public Affairs conducted a pilot study of five elementary schools, seven middle schools, seven high schools, and two K-12 schools to examine principal characteristics (Portin, Schneider, DeArmond, and Cundlach, 2003). Later, the Center on Reinventing Public Education of Daniel J. Evans School of Public Affairs conducted a larger study to test the reliability and validity of the critical leadership functions and actions as defined by the Wallace Foundation. The larger study consisted of

more than 150 interviews with school leaders, across 21 diverse school districts over the course of 2 years. It was through the body of these two educational leadership studies that the CLFQ was vetted for both validity and reliability. The CLFQ met reliability and credibility standards after extensive testing and analysis (White, 2002).

A pilot study can be considered a dress rehearsal or trial run for a primary study. It is used to identify weaknesses in the study and increase the success of the final study. A twin-tailed t-test was used to examine the reliability of this version of the instrument used for this study. This method of analysis was used to determine if the means of two populations for an outcome differ. In order for the two-tailed t-test to be effective, a normal distribution is assumed. In the case of this study, the analysis tool was used to compare the null and alternative hypotheses to determine if a positive correlation existed between student achievement and evidence of the seven critical leadership functions. The researcher tested the null hypothesis without knowledge about the direction of the possible correlation with the alternative hypothesis (Baker, 1994; Lancaster, Dodd, & Williamson, 2004; Simon, 2011).

The CLFQ assessed leaders' use of the seven critical leadership functions via 24 Likert-scale type questions. Each question on the CLFQ questionnaire incorporated these five response choices: never, rarely, occasionally, frequently, and most frequently. The seven leadership functions (i.e., instructional leadership, cultural leadership, managerial leadership, human resources leadership, strategic leadership, external development leadership, and micropolitical leadership) describe the actions school leaders use to meet the demands of a twenty first century school leader.

Research Procedures

It is imperative that permission be granted to conduct this study from the appropriate authorities. Permission to conduct this study was obtained from the District's Director of Policy, Testing, and Evaluation (see Appendix B). In addition, Institutional Review Board approval was received from Georgia Southern University (see Appendix C). The researcher strictly adhered to human subjects guidelines and expectations as issued from Georgia Southern University and the school district.

Following the pilot study, the researcher sent a letter of introduction and requested participation from the 19 middle school principals in the district (see Appendix D). The letter of introduction included information about the research study and asked principals to distribute the questionnaire to members of their leadership teams. The introductory letter asked principals to indicate the number of surveys they needed as the number of school leaders on each team varied. The responses to the introduction letter determined the number of Critical Leadership Functions Questionnaires to send to each location. The researcher contacted principals who did not respond to the introductory letter (see Appendix D) 10 days after sending the document to confirm receipt and asked them if they were interested and available to participate. Three principals confirmed their availability during the follow up correspondence. Five principals did not respond to any communication about the study and two indicated that they chose not to participate. Data were collected from school leaders between September 2013 and November 2013 and student CRCT test scores from the 2012 – 2013 school year was used.

The CLFQ packets [participation letter (see Appendix E) and CLFQ (see Appendix A)] were mailed to the building principals who agreed to participate in the study with

individual self-addressed stamped envelopes. The researcher used the district and each middle school's website to determine the number of school leaders serving each school. The researchers contacted school principals directly in two cases when the number of school leaders was unclear based on public information. The number of packets sent to each school corresponded to the number of members of each leadership team (e.g., principal, assistant principals, deans, department chairs and grade level chairs, etc.) because the numbers and roles within this group varied by school. The researcher included identification numbers on each CLFQ packet. Identification numbers signified the respective school and random number for each individual participant. Each participant, including school principals, was able to return his or her CLFQ to the researcher or principal after completion. Two weeks after delivering the documents to the principals, the researcher sent a reminder message to principals at each school to solicit additional responses within the next 10 business days. Representatives from eight of the schools completed and returned the questionnaires without a reminder and two did so after the first reminder.

The researcher collected data from 117 school leaders (e.g., CLFQ scores and demographic information) and the Georgia Department of Education (e.g., CRCT mathematics and reading scores of eighth grade African-American and Hispanic students attending the 19 middle schools in the district) immediately after sending the CLFQ packets to principals. Information collected from hard copies of the CLFQ was stored in a locked file cabinet in the researcher's home office. This data was transferred to an Excel file and saved in a password-protected document. The researcher compiled average CLFQ scores by school to determine the overall leadership behaviors present in a school instead of individual leadership practices. The researcher downloaded the mathematics and reading CRCT scores for eighth

grade African-American and Hispanic school students attending participating schools from the Georgia Department of Education's website to a password protected file on a personal computer. The raw data remained secure and was stored for five years. The data stored in Excel was uploaded into SPSS for analysis.

Data Analysis

The researcher employed the use of inferential statistics to analyze the data collected from the CLFQ and CRCT scores. Devore and Peck (1993) described inferential statistics as the outcomes of testing hypotheses used to make analytical deductions about data collected. The CLFQ responses were aggregated manually and analyzed through the use of a TI-84 Plus calculator, the data analysis component of Microsoft Excel, and SPSS version 19. All the hypotheses of this study were tested at the $\alpha = .05$ level of significance. As a statistical hypothesis testing approach, a Pearson's multivariable correlation research design method was used to analyze the data, test hypotheses, determine research findings, and draw relational conclusions. A Pearson's multivariable correlation research design is a type of design that examines the extent to which two or more variables relate. All seven critical leadership functions hypotheses were tested for the strength of their correlation between CRCT mathematics and reading scores of eighth grade African-American and Hispanic students at participating middle schools. The researcher analyzed the data collected to determine if a correlation between each of the seven critical leadership functions and students' standardized test scores exists. The result of the analysis included the magnitude and direction of the correlation, if a correlation existed.

Limitations and Delimitations

Limitations are used to identify threats and potential weaknesses in a research study (Creswell, 1994; Shipman, 1998). Listed below are the identified limitations in this research study:

1. Participants may or may not have responded to the Critical Leadership Functions Questionnaire honestly
2. School-based leadership personnel did not submit the demographic information and complete every question on the Critical Leadership Functions Questionnaire
3. Reported critical leadership functions perceptions were not a true representation of actual leadership performed
4. The researcher did not make causal conclusions from correlational findings, because statistical significance cannot rule out all alternative explanations for correlational findings

Delimitations are used to identify how the research study will be reduced appropriately in scope (Creswell, 1994; Creswell, 2008; Creswell, 2012b). Listed below are the identified delimitations in this research study:

1. This study involved a specific group of school-based leadership personnel, only seven critical leadership functions and actions, and only two CRCT performance metrics. The results of the research cannot be generalized to other school-based personnel, alternative leadership functions, or alternative student performance metrics

2. For efficient manageability purposes of the collected data, the questionnaire administered employed the use of a Likert-scale and did not include any open-ended response items
3. The study's data was obtained only from middle school site-based leadership personnel from the school district

Summary

The researcher used chapter three to describe the methods used to conduct this study. It was the researcher's investigative intent to thoroughly assess the correlation between the critical leadership functions and student academic performance as identified by students' CRCT performance among eighth grade African-American and Hispanic students in the areas of reading and math. A detailed description of the subjects and how they were selected is presented. Next, the researcher defined the research questions, including each null and alternate hypothesis. The researcher provided a description of the instrument, the Critical Leadership Functions Questionnaire. The assumptions and research procedures were also outlined. Finally, the data collection and analysis results are reported in chapter four and recommendations for practice are provided in chapter five.

CHAPTER 4

RESULTS

The reliability of the CLFQ determines if the results presented in this chapter accurately reflect the conditions studied. Assessments conducted by the Wallace Foundation and the Center on Reinventing Public Education of Daniel J. Evans School of Public Affairs yielded positive results: the instrument measures data, "the same way each time it is used under the same conditions with the same subjects" (Adams, Khan, Raeside, & White, 2007, p. 235). Since the Wallace Foundation and the Center on Reinventing Public Education deemed the instrument used for this study, the CLFQ, reliable the following results are meritorious (Creswell, 2012a). The final group of 117 participants included school leaders from 12 of the 19 middle schools in the urban district in the southern region of the United States who completed the questionnaire. The sample reflected 72.67 percent (117/161) of the entire population of middle school leaders. Participants rated their professional practices as measured by the CLFQ and provided demographic information. This data was used to determine if correlations existed between the CLFQ results and reading and math CRCT scores for eighth grade African-American and Hispanic students at the corresponding schools.

The researcher used the absolute values of r_{cal} to determine if each null hypothesis was significant as evidenced by the equations listed below. In this case, the calculated value instead of the sign, positive or negative, is used (Bagozzi, Youjae, Phillips, 1991; Dawson & Richter, 2006; Lieberson, 1991; Werkmuster, 1974).

Null Hypothesis: If $|r_{cal}| \leq r_{critical}$ value, the correlation is not significant.

Alternative Hypothesis: If $|r_{cal}| > r_{critical}$ value, the correlation is significant.

Based on the regression analysis conducted ($\alpha = 0.05$), two of the 14 hypotheses, the correlation between the strategic leadership critical leadership function and Hispanic student achievement in reading and math, resulted in a positive and significant correlation. None of the critical leadership functions impacted African-American student achievement at a significant level.

Results of Pilot Study

Even though the Wallace Foundation and the Center on Reinventing Public Education of Daniel J. Evans School of Public Affairs deemed the instrument reliable the researcher conducted a pilot study with a sample of the population (White, 2002). In the case of this pilot study, two leaders from six schools (12 participants) completed the instrument (Baker, 1994; Lancaster, Dodd, & Williamson, 2004; Simon, 2011). The results of the two-tailed t-test supported the reliability and validity of the instrument (see Appendix F). The test only applied to the instrument and the data was not analyzed with CRCT reading and math scores.

The following null and alternative hypotheses guided the data collection and analysis:

Null Hypothesis

$H_0: \mu_r = \mu_s$ (There is no statistically significant difference between the test and retest averages at the $\alpha = .05$)

Alternative Hypothesis

$H_A: \mu_r \neq \mu_s$ (There is a statistically significant difference between the test and retest averages at the $\alpha = .05$)

In addition to conducting the hypothesis test, the following descriptive statistics were generated: mean, variance, observation, correlation, hypothesis difference, and degrees of freedom (see Appendix F). The individual two-tail results and critical score for the two-tail t-

test for the seven critical leadership functions include: instructional leadership (two-tail results = 0.426; critical score = 2.571), cultural leadership (two-tail results = 0.396; critical score = 2.571), managerial leadership (two-tail results = 0.849; critical score = 2.571), human resource leadership (two-tail results = 0.041; critical score = 2.571), strategic leadership (two-tail results = 0.296; critical score = 2.571), external development leadership (two-tail results = 0.235; critical score = 2.571), and micropolitical leadership (two-tail results = 0.259; critical score = 2.571). Based on the results of the two-tailed t-test, there was no statistically significant difference between the test and retest averages at the $\alpha = .05$ significance level. In short, the researcher did not reject the null hypothesis: the instrument accurately measured the intended leadership functions.

African-American Student Results

There was no significant correlation between the seven critical leadership functions (instructional leadership, cultural leadership, managerial leadership, human resources leadership, strategic leadership, external development leadership, and micropolitical leadership) and African-American student achievement as evidenced by math (CRCT-M) and reading (CRCT-R) CRCT scores. Reported characteristics included the degrees of freedom (df), alpha (α), regression – critical (r_{cal}), and regression – actual (r_{crt}).

Table 1

Testing for Significance of the Correlation between African-American Student Achievement and Instructional Leadership

	Instructional Leadership	CRCT-M	CRCT-R
Instructional Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.095$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.2025$	$r_{cal} = 0.942$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

There was no statistically significant correlation between African-American students CRCT-M and Instructional Leadership, which means the null hypothesis was not rejected (see Table 1). The calculated value of r was 0.095. The r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. Conversely, the alternative hypothesis maintains that there was statistically significant correlation between African-American students CRCT-M and Instructional Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis is not rejected. The results indicate that there was not significant evidence of a correlation between African-American students CRCT-M and Instructional Leadership function at the .05 confidence level.

In regards to the correlations between African-American student CRCT-R and Instructional Leadership, the calculated value of r is 0.2025, the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. For the null hypothesis, there was no statistically significant correlation between African-American students CRCT-R and Instructional Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and Instructional Leadership. Because $r_{\text{cal}} < r_{\text{crit}@.05}$, the null hypothesis was not rejected. The results indicated that there was insufficient evidence of a correlation between African-American students CRCT-R and Instructional Leadership function at the .05 confidence level.

Table 2

Testing for Significance of the Correlation Between African-American Student Achievement and Cultural Leadership

	Cultural Leadership	CRCT-M	CRCT-R
Cultural Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{\text{cal}} = 0.168$		
	$r_{\text{crit}} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{\text{cal}} = 0.099$	$r_{\text{cal}} = 0.942$	
	$r_{\text{crit}} = 0.4973$	$r_{\text{crit}} = 0.4973$	

The calculated r was 0.168 and the r critical is 0.4973 at 10 degrees of freedom and a .05 confidence level for the correlation between African-American student CRCT-M and cultural leadership (see Table 2). The null hypothesis maintained that there was no statistically significant correlation between African-American students CRCT-M and Cultural Leadership. The alternative hypothesis maintained: there was a statistically significant correlation between African-American students CRCT-M and Cultural Leadership. Because $r_{\text{cal}} < r_{\text{crit}@.05}$, the null hypothesis was not rejected. The findings indicate that there was not sufficient evidence of a correlation between African-American students CRCT-M and Cultural Leadership function at the .05 confidence level.

The following results emerged related to African-American students' CRCT-R scores and cultural leadership: calculated value of r was 0.099 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. Based on this information, the null hypothesis maintained that there was no statistically significant correlation between African-American students CRCT-R and Cultural Leadership and the alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and Cultural Leadership. Because $r_{\text{cal}} < r_{\text{crit}@.05}$, the null hypothesis was not rejected. The findings indicated that there was not sufficient evidence of a correlation between African-American students CRCT-R and Cultural Leadership function at the .05 confidence level.

Table 3

Testing for Significance of the Correlation Between African-American Student Achievement and Managerial Leadership

	Managerial Leadership	CRCT-M	CRCT-R
Managerial Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.075$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.275$	$r_{cal} = 0.942$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The calculated value of r was 0.075 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the African-American student CRCT-M and Managerial Leadership variable (see Table 3). The null hypothesis maintains that there was not a statistically significant correlation between African-American students CRCT-M and Managerial Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-M and Managerial Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-M and Managerial Leadership function at the .05 confidence level.

The results for African-American students CRCT-R and Managerial Leadership were: the calculated value of r was 0.275. The r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. The null hypothesis maintains that there was not a statistically significant correlation between African-American students CRCT-R and Managerial Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and Managerial Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American student CRCT-R and Managerial Leadership functions at the .05 confidence level.

Table 4

Testing for Significance of the Correlation Between African-American Student Achievement and Human Resources Leadership

	Human Resources Leadership	CRCT-M	CRCT-R
Human Resources Leadership			
CRCT-M	$df = 10$ $\alpha = .05$ $r_{cal} = 0.042$ $r_{crit} = 0.4973$		
CRCT-R	$df = 10$ $\alpha = .05$ $r_{cal} = 0.216$ $r_{crit} = 0.4973$	$df = 10$ $\alpha = .05$ $r_{cal} = 0.942$ $r_{crit} = 0.4973$	

The calculated value of r was 0.042 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between African-American students CRCT-M and Human Resources Leadership (see Table 4). The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-M and Human Resources Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-M and Human Resources Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The

results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-M and Human Resources Leadership function at the .05 confidence level.

The results from the African-American students CRCT-R and Human Resources Leadership hypothesis were: the calculated value of r was 0.216 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-R and Human Resources Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and Human Resources Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-R and Human Resources Leadership function at the .05 confidence level.

Table 5

Testing for Significance of the Correlation Between African-American Student Achievement and Strategic Leadership

	Strategic Leadership	CRCT-M	CRCT-R
Strategic Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.442$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.417$	$r_{cal} = 0.942$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The calculated value of r was 0.442 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the African-American students CRCT-M and strategic leadership correlation (see Table 5). The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-M and Strategic Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-M and Strategic Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-M and Strategic Leadership function at the .05 confidence level.

The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-M and Strategic Leadership functions at the .05 confidence level. The calculated value of r was 0.417 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between African-American students CRCT-R and Strategic Leadership. The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-R and Strategic Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and Strategic Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-R and Strategic Leadership function at the .05 confidence level.

Table 6

Testing for Significance of the Correlation Between African-American Student Achievement and External Development Leadership

	External Development Leadership	CRCT-M	CRCT-R
External Development Leadership			
CRCT-M	df = 10 $\alpha = .05$ $r_{cal} = 0.181$ $r_{crit} = 0.4973$		
CRCT-R	df = 10 $\alpha = .05$ $r_{cal} = 0.138$ $r_{crit} = 0.4973$	df = 10 $\alpha = .05$ $r_{cal} = 0.942$ $r_{crit} = 0.4973$	

The analysis of the correlation between the African-American students CRCT-M and External Development Leadership variables yielded the calculated value of r was 0.181 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level (see Table 6). The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-M and External Development Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-M and External Development Leadership. Because $r_{cal} < r_{crit@.05}$, the

null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-M and External Development Leadership function at the .05 confidence level.

The calculated value of r was 0.138 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between African-American students CRCT-R and External Development Leadership. The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-R and External Development Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and External Development Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-R and External Development Leadership function at the .05 confidence level.

Table 7

Testing for Significance of the Correlation Between African-American Student Achievement and Micropolitical Leadership

	Micropolitical Leadership	CRCT-M	CRCT-R
Micropolitical Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.388$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.192$	$r_{cal} = 0.942$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The calculated value of r was 0.388 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between African-American students CRCT-M and Micropolitical Leadership (see Table 7). The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-M and Micropolitical Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-M and Micropolitical Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-

American students CRCT-M and Micropolitical Leadership function at the .05 confidence level.

The following values were calculated for the correlations between African-American students CRCT-R and Micropolitical Leadership: the calculated value of r was 0.192 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. The null hypothesis maintained that there was not a statistically significant correlation between African-American students CRCT-R and Micropolitical Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between African-American students CRCT-R and Micropolitical Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between African-American students CRCT-R and Micropolitical Leadership function at the .05 confidence level.

Hispanic Student Results

Two of the 14 hypotheses resulted in a significant correlation between a critical leadership function and Hispanic student achievement (see Table 8). In both cases there was a correlation between the Strategic Leadership function and Hispanic students' reading and math CRCT scores. The data analysis for each null and alternative hypothesis was provided below along with the degrees of freedom (df), alpha (α), regression – critical (r_{cal}), and regression – actual (r_{act}).

Table 8

Testing for Significance of the Correlation Between Hispanic Student Achievement and Instructional Leadership

	Instructional Leadership	CRCT-M	CRCT-R
Instructional Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.001$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.006$	$r_{cal} = 0.944$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The results of the correlation between Hispanic students CRCT-M and Instructional Leadership variables were: the calculated value of r was 0.001 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and Instructional Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and Instructional Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and Instructional Leadership function at the .05 confidence level.

The calculated value of r was 0.006 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-R and Instructional Leadership. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and Instructional Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and Instructional Leadership. Because $r_{\text{cal}} < r_{\text{crit@.05}}$, the null hypothesis was not rejected. The findings indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Instructional Leadership function at the .05 confidence level.

Table 9

Testing for Significance of the Correlation Between Hispanic Student Achievement and Cultural Leadership

	Cultural Leadership	CRCT-M	CRCT-R
Cultural Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.087$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.093$	$r_{cal} = 0.944$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The calculated value of r was 0.087 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-M and Cultural Leadership (see Table 9). The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and Cultural Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and Cultural Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and Cultural Leadership function at the .05 confidence level.

The results for the Hispanic students CRCT-R and Cultural Leadership variables included the calculated value of r was 0.093 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and Cultural Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and Cultural Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Cultural Leadership function at the .05 confidence level.

Table 10

Testing for Significance of the Correlation Between Hispanic Student Achievement and Managerial Leadership

	Managerial Leadership	CRCT-M	CRCT-R
Managerial Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.254$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.204$	$r_{cal} = 0.944$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The calculated value of r was .245 and the r critical was .4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-M and Managerial Leadership (see Table 10). The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and Managerial Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and Managerial Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and Managerial Leadership function at the .05 confidence level.

The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and Managerial Leadership functions at the .05 confidence level. The results of the data analysis for Hispanic students CRCT-R and Managerial Leadership included: the calculated value of r was 0.204 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and Managerial Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and Managerial Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Managerial Leadership function at the .05 confidence level.

Table 11

Testing for Significance of the Correlation Between Hispanic Student Achievement and Human Resources Leadership

	Human Resources Leadership	CRCT-M	CRCT-R
Human Resources Leadership			
CRCT-M	$df = 10$ $\alpha = .05$ $r_{cal} = 0.196$ $r_{crit} = 0.4973$		
CRCT-R	$df = 10$ $\alpha = .05$ $r_{cal} = 0.136$ $r_{crit} = 0.4973$	$df = 10$ $\alpha = .05$ $r_{cal} = 0.942$ $r_{crit} = 0.4973$	

Analysis of the data for the correlation between Hispanic students CRCT-M and Human Resources Leadership yielded the following results: the calculated value of r was 0.196 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level (see Table 11). The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and Human Resources Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and Human Resources Leadership. Because $r_{cal} < r_{crit@.05}$, the null

hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and Human Resources Leadership function at the .05 confidence level.

The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Human Resources Leadership functions at the .05 confidence level. The calculated value of r was 0.136 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-R and Human Resources Leadership. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and Human Resources Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and Human Resources Leadership. Because $r_{\text{cal}} < r_{\text{crit}@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Human Resources Leadership function at the .05 confidence level.

Table 12

Testing for Significance of the Correlation Between Hispanic Student Achievement and Strategic Leadership

	Strategic Leadership	CRCT-M	CRCT-R
Strategic Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.566$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.546$	$r_{cal} = 0.942$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The results of the data analysis for Hispanic students CRCT-M and Strategic Leadership were: the calculated value of r was 0.566 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level (see Table 12). The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and Strategic Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and Strategic Leadership. Because $r_{cal} > r_{crit@.05}$, the null hypothesis was rejected. The results indicated that there was sufficient evidence of a correlation between Hispanic students CRCT-M and Strategic Leadership function at the .05 confidence level.

The results indicated that there was sufficient evidence of a correlation between Hispanic students CRCT-R and Strategic Leadership functions at the .05 confidence level. The calculated value of r was 0.546 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-R and Strategic Leadership. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and Strategic Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and Strategic Leadership. Because $r_{cal} > r_{crit@.05}$, the null hypothesis was rejected. The results indicated that there was sufficient evidence of a correlation between Hispanic students CRCT-R and Strategic Leadership function at the .05 confidence level.

Table 13

Testing for Significance of the Correlation Between Hispanic Student Achievement and External Development Leadership

	External Development Leadership	CRCT-M	CRCT-R
External Development Leadership			
CRCT-M	df = 10 $\alpha = .05$ $r_{cal} = 0.114$ $r_{crit} = 0.4973$		
CRCT-R	df = 10 $\alpha = .05$ $r_{cal} = 0.112$ $r_{crit} = 0.4973$	df = 10 $\alpha = .05$ $r_{cal} = 0.942$ $r_{crit} = 0.4973$	

The following results emerged for the correlation between Hispanic students CRCT-M and External Development Leadership: the calculated value of r was 0.114 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level (see Table 13). The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and External Development Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and External Development Leadership. Because $r_{cal} < r_{crit@.05}$, the null

hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and External Development Leadership function at the .05 confidence level.

The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and External Development Leadership functions at the .05 confidence level. The calculated value of r was 0.112 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-R and External Development Leadership. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and External Development Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and External Development Leadership. Because $r_{\text{cal}} < r_{\text{crit}@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and External Development Leadership function at the .05 confidence level.

Table 14

Testing for Significance of the Correlation Between Hispanic Student Achievement and Micropolitical Leadership

	Micropolitical Leadership	CRCT-M	CRCT-R
Micropolitical Leadership			
CRCT-M	df = 10		
	$\alpha = .05$		
	$r_{cal} = 0.330$		
	$r_{crit} = 0.4973$		
CRCT-R	df = 10	df = 10	
	$\alpha = .05$	$\alpha = .05$	
	$r_{cal} = 0.374$	$r_{cal} = 0.942$	
	$r_{crit} = 0.4973$	$r_{crit} = 0.4973$	

The analysis of the data for Hispanic students CRCT-M and Micropolitical Leadership revealed the calculated value of r was 0.380 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level (see Table 14). The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-M and Micropolitical Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-M and Micropolitical Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-M and Micropolitical Leadership function at the .05 confidence level.

The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Micropolitical Leadership functions at the .05 confidence level. The calculated value of r was 0.374 and the r critical was 0.4973 at 10 degrees of freedom and .05 confidence level for the correlation between Hispanic students CRCT-R and Micropolitical Leadership. The null hypothesis maintained that there was not a statistically significant correlation between Hispanic students CRCT-R and Micropolitical Leadership. The alternative hypothesis maintained that there was a statistically significant correlation between Hispanic students CRCT-R and Micropolitical Leadership. Because $r_{cal} < r_{crit@.05}$, the null hypothesis was not rejected. The results indicated that there was not sufficient evidence of a correlation between Hispanic students CRCT-R and Micropolitical Leadership function at the .05 confidence level.

Summary

The data provided insightful, although with a limited number significant results, conclusions about the correlation between the seven critical leadership functions and eighth grade student achievement for African-American and Hispanic students in the reading and math disciplines. The researcher the selected the 0.05 confidence level to determine significance: hypotheses included positive and negative correlations between the Critical Leadership Function and CRCT scores but did not necessarily do so at the 0.05 standard. None of the results revealed scientifically significant results between eighth grade African-American students' CRCT reading and math scores and the seven critical leadership functions. All of the correlations between eighth grade African-American students' CRCT reading and math scores and the seven critical leadership functions were negative. The correlation

between Hispanic Students CRCT math scores and the instructional leadership variable were not statistically significant and negative. One critical leadership function, strategic leadership, yielded a significant correlation for Hispanic student reading and math scores. The other 14 hypotheses did not produce significant correlations. Positive, but not statistically significant, correlations emerged for the following variables: 1) Hispanic Students CRCT-R and Instructional Leadership, 2) Hispanic Students CRCT-M and Cultural Leadership, 3) Hispanic Students CRCT-R and Cultural Leadership, 4), Hispanic Students CRCT-M and Managerial Leadership, 5) Hispanic Students CRCT-R and Managerial Leadership, 6) Hispanic Students CRCT-M and Human Resources Leadership, 7) Hispanic Students CRCT-R and Human Resources Leadership, 8) Hispanic Students CRCT-M and External Development Leadership, 9) Hispanic Students CRCT-R and External Development Leadership, 10) Hispanic Students CRCT-M and Micro-political Leadership, and 11) Hispanic Students CRCT-R and Instructional Leadership.

CHAPTER 5

DISCUSSION, IMPLICATIONS, FUTURE RESEARCH, AND RECOMMENDATIONS

Discussion

The purpose of this chapter is to discuss the response rate, review the results, provide suggestions for future research, and offer recommendations for practice. Examining the response rate includes a discussion about the schools that chose to participate and those that did not. A review of the findings offered insight into how to interpret the results presented in chapter four. The recommendations for practice section provide advice for school leaders to improve students' academic progress and working within the contemporary educational landscape.

A dissertation is the rare opportunity to publish research results that may not produce statistically significant results (Jackson, 2007; Renkewitz, Fuchs, Fiedler, 2011). Even though most of the null hypotheses for this study did not produce significant results, the results can impact school leaders and inform instructional practices. They can target professional development workshops to address the seven critical leadership styles since they impacted Hispanic student achievement at statistically significant levels. Professional development and goals should also extend beyond the seven critical leadership functions since the correlations for African American students did not produce significantly significant results. Characteristics that positively impact African American student achievement include celebrating their culture (Clarkson & Johnstone, 2011; West-Olatunji, Shure, Pringle, Adams, Baratelli, Milton, Flesner, & Lewis, 2008), giving teachers a voice in the decision-making process (White-Smith, 2012), instructional techniques to support students' diverse learning

styles (Tomes, 2008). All of the critical leadership functions, with the exception of instructional leadership and math, were positive for Hispanic students.

Response Rate

Even though 117 school leaders completed the questionnaire, they represented only 12 of the 19 (63 percent) schools within the district. A possible explanation for not receiving participation from each of the 19 middle schools in the district include the educational climate, increased accountability efforts, and survey fatigue (L. Franklin, personal communication, December 3, 2013; D. Bolds, personal communication, December 3, 2013). The organization of the school district went from a traditional structure to a charter system in the past year (Samuels, 2012). This change coupled with the looming budget deficits throughout the state make educators cautious about additional expectations, especially when the questions relate to their professional practice (Konczal, 2012; US Department of Education, 2012). With an increased focus on accountability, school leaders are keenly focused on student achievement and school morale. Asking school leaders to participate in a study conducted by external researchers may be considered as an activity to derail their teams from the ultimate goal: meeting and exceeding the standards. Principals are concerned about public perception and accountability, which leads to a laser focus on every activity within their buildings. In an effort to manage school operations, they are less apt to introduce outside influences that do not have an immediate impact on student achievement. The Critical Leadership Functions Questionnaire, along with a host of other surveys and assessments, were disseminated near the beginning of the school year. Principals and schools leaders could have experienced survey fatigue, being tired to completing questionnaires, which seem to address similar themes. They may wonder why there isn't a more coordinated effort in regards to

seeking feedback and opinions and view the constant barrage of surveys as busy work that keeps them away from preparing for class and instruction (L. Franklin, personal communication, December 3, 2013; D. Bolds, personal communication, December 3, 2013).

Implications

As previously stated, there were only two statistically significant findings out of the 28 hypotheses tested. The correlation between Hispanic student CRCT math and reading scores correlated to the Strategic Leadership function at an alpha (α) level of 0.05. This study is still relevant, important to academia, and useful for educators in spite of the lack of statistically significant results. Reading and math standardized test scores were used as the student achievement measures. The limits of standardized testing and using the CRCT as a performance indicator have been studied for decades. These tests may not accurately assess or measure student achievement, particularly for students from the target population (Riffert, 2005; Sattler, 1979; Williams, 2005). Using other student success measures such as grade point averages, norm-referenced tests such as the Iowa Test of Basic Skills, or course grades may have generated different results. Moreover, other states such as California (Standardized Testing and Reporting), Louisiana (LEAP Alternate Assessment), and Rhode Island (New England Common Assessment Program) utilize different assessments (Time for Learning, 2014). Using other student identifiers such as gender or different racial and ethnic groups may also impact the study. For example, comparing the results of male and female students or including Asian and Caucasian participants may generate different results. Additionally, conducting a more general study that includes all students in the schools may also be an option. This study can be considered a springboard for future research based on the limited number of statistically significant findings.

Future Research

Researchers do not need to recreate the wheel when developing ideas to investigate. Using this dissertation as a springboard or inspiration, other studies can advance educational practices and student achievement. This study can be replicated beyond one grade (e.g., kindergarten, third, or ninth) or school types (i.e., middle, high, or private schools). Studying students in different grades or school type can be done in isolation or as a comparison. Researchers studied elementary and high school student achievement, but have yet to do so using the seven critical leadership functions and standardized test scores as variables. For example, scholars can replicate this study with high school students or compare the results between private and public eighth grade students. The author of this study used math and reading CRCT scores as evidence of student achievement because it is the assessment tool administered in the district. However, other achievement measures such as SAT, ACT, or Iowa Test of Basic Skills scores may be utilized for a future study. Analyzing the data based on school leader characteristics, such as education levels and duration in the profession are also recommendations for future research. The same study could be replicated by analyzing data based on the demographic information collected about educational levels: the results of school leaders with bachelor's, master's, specialists, or doctorate degrees could be compared. Another option would be to aggregate participants by their years of experience in the field: novice educators (0 – 5 years), intermediate educators (6 – 10 years) seasoned educators (11 or more years). Future research related to student groups can include gender and race/ethnicity. This study used male and female African-American and Hispanic students. Other studies could use the same population and identify students' gender or include all students and determine if there was a correlation between the critical leadership functions and

academic achievement between male and female students. Moreover, a general study could be conducted to measure the correlation between school leaders' use of the seven critical leadership functions and student achievement for all middle schools or throughout the district.

Recommendations for Practice

Regardless of the myriad of competing forces, the principal is the primary instructional leader of school. Correlations did not exist for the seven critical leadership functions for African American students at a statistically significant level; however, there was a statistically significant correlation between the strategic leadership function and Hispanic student math and reading scores. School leaders should develop their ability to use all of the functions to aid Hispanic student achievement. One may assume only instructional techniques impact student achievement. However, this is far from the case. The entire educational environment, which includes students; parents/caregivers; school and community stakeholders; district leaders; and state, regional, and national law makers and regulators, is involved in individual and collective student achievement.

Educational leaders, particularly principals, need to understand the environment in which they work and advance student achievement. They need to be multidimensional as evidenced by all of the critical leadership functions having a positive correlation to student achievement. Principals cannot work in the vacuum of their schools. It's important for school leaders to engage in the entire educational arena. Doing so may lead to a better understanding of the educational and political atmosphere, additional resources for schools, or approval of school-wide initiatives for increased student achievement. Principals also need to expand their scope beyond organizational responsibilities such as bus schedules, textbook purchases, or student discipline. Principals and other leaders also need to be aware of how school based

personnel interact with students, parents, and community partners. These correlations serve students in overt ways that are beneficial but difficult to quantify or directly link to test scores. Principals must see the balance between cultivating external correlations with managing the school as an instructional institution. Paying too much attention to the former may cause principals to lose focus on the internal challenges and successes directly impacting student achievement. Sound judgment is key for school leaders: whether decisions are directly linked to instruction or involve student safety in light of armed intruders or inclement weather, students with outstanding meal balances, or selecting furnishings and décor. The principal must remain steadfast in regards to the student achievement goal and ensure that all correlations, actions, rules, and decisions support the objective. Maintaining the big picture view of their roles, school leaders must espouse the seven critical leadership functions: 1) instructional leadership, 2) cultural leadership, 3) managerial leadership, 4) human resource leadership, 5) strategic leadership, 6) external leadership, and 7) micropolitical leadership to support Hispanic student achievement (Portin, et al., 2003). Additionally, principals must expect school leaders they supervise and mentor to adopt these traits, understanding that they positively impact student achievement.

Concluding Thoughts

The aforementioned recommendations for research and practice present benefits to educators at all levels. Even though not at significant levels, each of the seven critical leadership functions were positively correlated to math and reading CRCT scores for eighth grade African-American and Hispanic students. When adopted by researchers and school leaders, the recommendations presented in this chapter should positively impact student

achievement (Braun, Gable, & Kite, 2011; Templeton, 2011; ten Bruggencate, Luyten, Scheerens, & Slegers, 2012).

Expanding the scope of this study to all of the middle schools, other grade levels, or entire districts; using other student populations; or aggregating the results based on school leaders' educational levels and years of experience may yield fruitful results (Brown & Green, 2014; Page & Kearney, 2013; Psencik & Baldwin, 2012; Schrum & Levin, 2013). Finally, the results of this dissertation can provide guidance for school leaders related to how they interact and perceive stakeholders at the school, district, state, regional, and national levels.

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APPENDICES

APPENDIX A

Critical Leadership Functions Questionnaire

IDENTIFICATION NUMBER: _____

Demographic Information: Please complete the following questions by entering or circling the number that corresponds to the appropriate answer.

School: _____ Gender: Female Male

Position: _____ Number of Years in Leadership at this school: _____

Questionnaire instructions: Use the Likert-scale provided below to indicate the extent to which you execute the following critical leadership functions in your professional activities. Indicate your response by bubbling 1, 2, 3, 4, or 5 based on the scale below. Please return the completed questionnaire to your school principal or the researcher via the attached self-addressed stamped envelope.

5 – Very Frequently 4 – Frequently 3 – Occasionally 2 – Rarely 1 – Never

Critical Leadership Function #1:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Assure the quality of instruction through effective monitoring of instructional delivery and content specific assessments.	O	O	O	O	O
2. Model teaching practices that expose teachers to research-based instructional practice and new developments in academia.	O	O	O	O	O
3. Supervise curriculum development and implementation	O	O	O	O	O
4. Allocate materials and resources needed to accomplish organizational goal relevant to instruction	O	O	O	O	O

APPENDIX A

Critical Leadership Functions Questionnaire Continued

Critical Leadership Function #2:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Establish and/or help maintain the school's sense of tone through daily interaction with the school's internal and external stakeholders.	0	0	0	0	0
2. Establish and/or help maintain the school's history and traditions.	0	0	0	0	0
3. Establish and/or help maintain the school's historically transmitted patterns of school norms, values, and beliefs.	0	0	0	0	0
4. Establish and/or help maintain the school's rituals and ceremonies.	0	0	0	0	0

Critical Leadership Function #3:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Lead and/or manage the schools financial resources (i.e. locally generated funds, federally granted funds, or departmentally allocated funds).	0	0	0	0	0
2. Lead and/or manage the school's scheduling process and curriculum implementation.	0	0	0	0	0
3. Manage the school's facilities and/or school-based student transportation process.	0	0	0	0	0
4. Lead and/or manage the facilitation of student management (i.e., student discipline and attendance).	0	0	0	0	0
5. Manage school-based operations that ensure school safety and security through the maintenance of consistent emergency preparedness.	0	0	0	0	0

APPENDIX A

Critical Leadership Functions Questionnaire Continued

Critical Leadership Function #4:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Hire, induct, evaluate, terminate and mentor teachers and other school-based leaders when appropriate	0	0	0	0	0
2. Develop the leadership capacity of teachers through the initiation of new instructional programs and/or providing non-evaluative feedback	0	0	0	0	0
3. Facilitate professional development opportunities and assist teachers with the self-assessment of work produces their facilitate student growth and achievement.					

Critical Leadership Function #5:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Develop and/or assist with the execution of the annual school improvement plan	0	0	0	0	0
2. Promote the vision and help actualize the school's mission	0	0	0	0	0
3. Monitor the school's organizational and instructional effectiveness	0	0	0	0	0
4. Enable short-term objectives to be met through the execution of real-time leadership actions while concurrently building the school's capability and capacity for long-term goal achievement.	0	0	0	0	0

APPENDIX A

Critical Leadership Functions Questionnaire Continued

Critical Leadership Function #6:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Serve as school representative within the community at-large.	0	0	0	0	0
2. Help identify and secure financial resources through strategic relationships with external partners.	0	0	0	0	0
3. Buffer and mediate external interests when appropriate.	0	0	0	0	0
4. Communicate to parent the aims, goals and interest of the school or those school related matters under my supervision or leadership.	0	0	0	0	0

Critical Leadership Function #7:					
As a school-based leader, I	(1) Never	(2) Rarely	(3) Occasionally	(4) Frequently	(5) Very Frequently
1. Facilitate a sense of collective responsibility amongst instructional and non-instructional personnel.	0	0	0	0	0
2. Promote a collaborative, collegial, consensual, and democratic work place.	0	0	0	0	0
3. Provide leadership and/or management between conflictive, negative, and dysfunctional groups within the school organizational setting	0	0	0	0	0
4. Foster an environment that offers a context for inquiry, organizational learning, and institutional change.	0	0	0	0	0

APPENDIX B

School District Institutional Research Board Approval Letter



BOARD OF EDUCATION
Linda Schultz, *President*
Linda McCain, *Vice President*
Julia C. Bernath • Linda P. Bryant • Gail Dean
Catherine Maddox • Katie Reeves
Robert M. Avossa, Ed.D., *Superintendent*

July 9, 2013

Mr. Shannon Flounnory
Principal
Stonewall Tell Elementary School
3310 Stonewall Tell Road
College Park 30349

Dear Mr. Flounnory:

Your request to conduct the research study "An Examination of the Relationship Between the Seven Critical Leadership Functions and Middle School African-American and Hispanic Student Achievement" in Fulton County Schools has been approved. Please note that while this approval permits you to approach the 19 schools identified in the application, the final decision regarding participation is a local option and rests with each school principal.

No identification of Fulton County Schools (students' names, teachers' names, administrators' names, etc.) is to be included in your findings. Also, complete confidentiality of records must be maintained. Once this study is complete, please send to me at the address below a copy/summary of the completed study. If I can provide additional information, please contact me at **(404) 669-4922**.

Sincerely,

Kenneth Zeff
Chief Strategy and Innovation Officer

STRATEGY AND INNOVATION

786 Cleveland Ave., S.W., Atlanta, Georgia 30315-7299 • 404-763-6830 • www.fultonschools.org

APPENDIX C

Georgia Southern University Institutional Research Board Approval Letter

Georgia Southern University Office of Research Services & Sponsored Programs		
Institutional Review Board (IRB)		
Phone: 912-478-0843		Veazey Hall 2021
Fax: 912-478-0719	IRB@GeorgiaSouthern.edu	P.O. Box 8005 Statesboro, GA 30460

To: Shannon Flounnory
Dr. Brenda Marina

cc: Charles E. Patterson
Vice President for Research and Dean of the Graduate College

From: Office of Research Services and Sponsored Programs
Administrative Support Office for Research Oversight Committees
(IACUC/IBC/IRB)

Initial Approval Date: 6/27/13

Subject: Status of Application for Approval to Utilize Human Subjects in Research

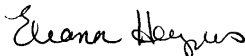
After a review of your proposed research project numbered **H13476** and titled "**An Examination of the Relationship Between the Seven Critical Leadership Functions and Middle School African-American and Hispanic Student Achievement**," it appears that your research involves activities that do not require full approval by the Institutional Review Board (IRB) according to federal guidelines.

According to the Code of Federal Regulations Title 45 Part 46, your research protocol is determined to be exempt from full review under the following exemption category(s):

B2 Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (I) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (II) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that your research, as submitted, is exempt from IRB approval. No further action or IRB oversight is required, as long as the project remains the same. If you alter the project, it is your responsibility to notify the IRB and acquire a new determination of exemption. Because this project was determined to be exempt from further IRB oversight, this project does not require an expiration date.

Sincerely,



Eleanor Haynes
Compliance Officer

APPENDIX D

Introduction Letter

Shannon A. Flounnory
Doctoral Candidate
Georgia Southern University

May 15, 2013

Dear School Principal:

In order to fulfill the degree requirements for my Doctorate of Education degree, I am conducting a study to assess the correlation between the seven critical leadership functions and African-American and Hispanic student academic performance as measured by mathematics and reading CRCT scores.

I am seeking your assistance to recruit participants for the study. Specifically, I am asking if you would be willing to distribute the Critical Leadership Functions Questionnaire to your school leadership team members during a leadership team meeting or allow me to do so. Please note participation is voluntary and it should take approximately 15 minutes to complete the survey. If you agree to administer the questionnaire to your staff, please send me the number of members on your leadership team via email at flounnory@fultonschools.org. Please collect surveys and place in school mail addressed to me at Stonewall Tell Elementary School. As a token of appreciation for your participation, please accept this \$10.00 as an honorarium for participation of your team.

Regards,

Shannon A. Flounnory
Doctoral Candidate

APPENDIX E

Participation Letter/Informed Consent

INFORMED CONSENT

for a Research Study entitled

“An Examination of the Relationship Between the Seven Critical Leadership Functions and Middle School African-American and Hispanic Student Achievement”

Dear School Leader:

You are invited to participate in a research study to determine if a correlation exists between school leaders' use of critical leadership functions and CRCT mathematics and reading scores of African-American and Hispanic of eighth grade students. The study is being conducted by Shannon A. Flounnory, a doctoral candidate of the Georgia Southern University Department of Leadership, Technology, and Human Development. You were selected as a possible participant because you are a school leader in a middle school in a metropolitan area of a city in the Southeastern region of the United States.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to complete a brief survey. Your total time commitment will be approximately fifteen minutes.

Are there any risks or discomforts? The risks associated with participating in this study are minimal or relatively non-existent.

Are there any costs? If you decide to participate, you will not incur any costs.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with the researcher or Georgia Southern University.

Your privacy will be protected. Any information obtained in connection with this study will remain anonymous. Information obtained through your participation may be used to fulfill the degree requirements for a Doctorate of Education.

If you have questions about this study, please contact Shannon A. Flounnory at flounnory@fultonschools.org . A copy of this document will be given to you to keep. If you have questions about your rights as a research participant, you may contact the Georgia Southern University Office of Research Services and Sponsored Programs by phone 912-478-5465 or e-mail at research@georgiasouthern.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Signature _____ Date _____

