ABSTRACT

Title of Dissertation: PRINCIPALS’ LEADERSHIP STYLES AND THE IMPACT ON STUDENT ACHIEVEMENT


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As accountability efforts in education have increased, there has been an increased interest in the significance of effective instructional leadership. Policymakers have looked toward school-based leadership as a means to positively impact student achievement and to close the achievement gap. This political reliance on school-based leadership to accomplish the goals of school improvement can be seen in No Child Left Behind. The present research was based on the premise that specific leadership behaviors have been found to impact students’ academic outcomes. The academic literature supports the view that school-based leadership influences student achievement.

The purpose of the research was to examine the impact of middle school principals’ leadership styles on students’ academic achievement. Particularly, the study analyzed the leadership styles of middle schools principals that headed schools that have met or not met their school achievement indicators (AMO). Employing MLQ survey, the researcher examined principals’ leadership styles. Moreover, the study examined whether AMO outcomes differed based on the principals’ self-identifying characteristics of: age, gender, totals years of experience as principal, and years of experience in education.
Transformational, transactional and laissez-faire leadership styles were singled out for investigation and these specific leadership styles were analyzed within the content of student achievement outcomes. Consequently, it was found that AMO status accounted for 22.4% of the variability in leadership style taken together; while AMO status accounted for 7.6% of the variability related to transformational leadership; and AMO status accounted for 5.7% of the variability on transactional leadership, laissez-faire had nearly no relationship.
PRINCIPALS’ LEADERSHIP STYLES AND THE IMPACT ON STUDENT ACHIEVEMENT

By

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Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park in partial fulfillment of the requirements for the degree of Doctor of Education 2015

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Dedication

This dissertation is dedicated to my mother, Maxine Shortridge, whose guidance and words of wisdom taught me to value education and instilled in me a lifelong love of learning and perseverance; and to my father, Keith Shortridge, who would have been proud of this accomplishment, and to my brother, Hashim Shortridge, by following his example, I started on the road to higher education. This work is also dedicated to my wife, Jasmine Shortridge, whose help and support were pivotal to the accomplishment of this undertaking; and, to my boys, Lucas and Keith, please know that success depends greatly on your ability to persevere. This work is also dedicated to my daughter, Maddie; may you grow up never having to hear me say, “I can’t right now. . .I’m working on my dissertation.”
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Contents

List of Tables ................................................................. viii

Chapter I: Introduction ..................................................... 1

Statement of the Problem ................................................... 5

Purpose of the Study ......................................................... 6

Research Questions .......................................................... 6

Definition of Terms .......................................................... 7

Significant of the Study ...................................................... 8

Chapter II: Review of the Literature .................................... 10

History of Federal Involvement in Education ....................... 11

The Early Years ............................................................... 12

The Truman and Eisenhower Years .................................... 13

The Kennedy and Johnson Years ......................................... 14

Federal Education Legislation of the 1970s and 1980s ............ 15

The Clinton Years ............................................................. 16

The Introduction of “No Child Left Behind” (NCLB) ............. 17

Race to the Top ............................................................... 17
Summary………………………………………………………………18

The School-based Instructional Leader………………………………19

Behaviors of Effective Principal………………………………………20

The ELCC Standards………………………………………………..22

Instructional and Transformational Leadership………………………25

Instructional Leadership………………………………………………26

Transformational Leadership…………………………………………28

Motivation and Organizational Climate…………………………………30

Emotional Intelligence and Leadership…………………………………32

Overview of Maryland’s Testing and Accountability Efforts……………34

Essential Components………………………………………………35

Chapter III: Methodology………………………………………………41

Purpose of the Study…………………………………………………41

Rationale………………………………………………………………41

Conceptual Framework………………………………………………42

Research Questions…………………………………………………..44

Study Design and Procedures…………………………………………45
Procedures………………………………………………………………46
Selection of Participants………………………………………………46
Instrumentation…………………………………………………………48
Data Collection…………………………………………………………51
Human Subjects and Confidentiality…………………………………52
Data Analysis……………………………………………………………52

Chapter IV: Research Findings…………………………………………54
Purpose…………………………………………………………………54
Profile of Study’s Participants……………………………………….54
Description of MLQ Scores…………………………………………55
Findings of Research Questions………………………………………57
Summary of Study’s Findings………………………………………..60

Chapter V: Summary, Conclusions, Discussion and Recommendations...62
Summary………………………………………………………………62
Conclusions and Discussion………………………………………..65
Recommendations…………………………………………………..70
Limitations of the Study……………………………………………73
Appendix A: Invitation Letter to Principal to Participate in the Study .....75

Appendix B: Online Consent Form ..................................................76

Appendix C: Permission for Use of Multifactor Leadership Questionnaire.78

Appendix D: Sample of Multifactor Leadership Questionnaire.............79

References..............................................................................................80
List of Tables

Table 1: Participant Demographics (Frequencies)...........................................48
Table 2: Participants’ Educational experience (Means and Standard Deviations)…..55
Table 3: Descriptive Statistics MLQ Scores (Means and Standard Deviations)……..57
Table 4: Multivariate Test of Leadership Effects on AMO Status.......................58
Table 5: Univariate (Between Groups) ANOVAs...........................................59
Table 6: Multivariate Test of Covariates effect on AMO Status..........................60
Overview

The political will to raise the standards of accountability in public education has been on the incline since the release of The National Commission on the Excellence in Education’s report on the condition of the American education system in 1983, titled *A Nation at Risk*. This report provided voters and legislators with a sentiment that schools in the United States were failing to equip students with the skills needed to keep the United States economically competitive (Anderson, 2007, Cross, 2010, Tyack & Cuban, 1995; Vinovskis, 2009). Furthermore, incremental discontent for the United States’ education system has been sustained by the lackluster performance of U.S. students on tests that compared them with their international peers (Eberts, Hollenbeck, & Stone, 2002). In fact, these results were especially worrisome when the data were disaggregated to reflect performance by students in urban areas (Eberts et al., 2002). This sentiment spurred national efforts at improving students’ performance through increasing accountability.

As accountability efforts in education have increased, there has been an increased interest in the significance of effective instructional leadership. Policymakers have looked toward school-based leadership as a means to positively impact student achievement and to close the achievement gap. This political reliance on school-based leadership to accomplish the goals of school improvement can be seen in the No Child Left Behind (NCLB) Act of 2001 (P.L. 107-110; the reauthorization of the Elementary and Secondary Education Act [ESEA] signed into law in January of 2002). Provisions of
this law require professional development be provided to principals to enable them in
providing high-quality instructional leadership (sec. 2122.C2). Moreover, section
2122.b7 of NCLB calls for principals to have skill sets that allow them to be effective
collaborators with internal and external stakeholders. Foreshadowing the next
supports the tenets of effective school-based leadership. This document promotes
educational excellence for all children as a moral imperative, which is achievable in part
by ensuring that schools are led by highly effective principals. It is evident that federal
policymakers view school-based leadership as integral to driving school reforms that
increase student achievement and close the achievement gap. As gleaned from *A
Blueprint for Reform*, federal policy makers support the notion that school-based leaders’
skills must encompass elements of instructional improvement and stakeholder
collaboration. This view of principal leadership is also shared by academics.

The academic literature is replete with studies that support the notion that
instructional leadership has a proven positive influence on student achievement (Goddard
& Miller, 2010). Marzano, Waters, and McNulty (2005) concluded in a meta-analysis that
principal leadership was a significant factor in positive upticks in student achievement.
Additionally, a meta-analysis conducted by Leithwood and Jantzi (2005) purported that
transformational leadership was significantly and indirectly related to student outcomes
and student engagement. Observations made by Deal and Peterson (1999) maintained that
transformational leadership was effective at establishing positive school environments
that were guided by common norms, beliefs and values. In the same vein, a meta-
analysis authored by Robinson, Lloyd and Rowe (2008) singled out instructional and
transformational leadership as having an influence on student learning and noted that, on average, instructional leadership had a larger impact on student learning than transformational leadership. Researchers have long questioned whether a particular concept of school-based leadership was more effective than another one. This assertion was tested by Marks and Printy (2003) in which they analyzed data that implied school leaders are most effective when they exhibit characteristics of different principal leadership modalities. For example, their findings led them to conclude that school leaders are most effective when they exhibit shared instructional leadership, or a combination of leadership practices that are both instructional and transformational. The aforementioned studies support the notion that school-based leadership is a significant factor in the academic achievement of students. Given the findings of recent research in the field of instructional leadership, it is assumed that policymakers have a good reason to place effective school leadership prominently in school improvement policy efforts. However, the findings of this research also support the idea that the type of school-based leadership style influences school achievement.

Since the release of *A Nation at Risk* (1983), the role of the modern principal has evolved from management-oriented to instruction-based functions. The actions of modern principals should be rooted in the goal of improving teaching and learning. Gülcan (2012) enumerated characteristics of effective instructional leaders: a) identify and communicate the mission and vision of the school; b) maintain a school environment that is conducive to learning; c) promote the professional development of staff; d) monitor teachers’ instruction; e) maintain a positive school climate and initiate organizational change (p. 627). While it has been established that the job of principal is
driven by improvement of instruction for the purpose of increasing student achievement, the notion that school improvement goals can be reached through the principal’s ability to motivate teachers is gaining acceptance. This sentiment is expressed in a study by Akpan and Archibong (2012), which states, “Motivation of staff and students is an important function of a school administrator. As a leader, he should have the ability to discharge his leadership roles with and through people to achieve the school goals” (p. 213).

The concept that leaders have an impact on the climate and motivation of their subordinates is prevalent in business literature (Barker, 2001). Dating back to the 1960s, Harvard University researchers David McClelland, George Litwin and Robert Stringer developed the connections between leadership styles, motivation and organizational climate (Litwin & Stringer, 1968). Barker (2001) used the well-established theories of organizational climate and motivation, developed by Litwin and Stringer, to describe how school leaders motivated staff and students. He concluded that Litwin and Stringers’s framework for understanding motivation and organizational climate was applicable to the school environment (Barker, 2001).

Federal education policy is aligned with academic research that cites school-based leadership as having significant influence over student achievement. This dynamic has placed increased pressure on school-based leaders to constantly improve student outcomes. Moreover, organizational climate and motivation theory, frequently used in the business field, may contribute to a knowledge base or skill set that principals can employ to increase their effectiveness as instructional leaders.
Statement of Problem

Competent and highly qualified principals are inextricably linked to successful schools. Research supports the notion that effective instructional leadership contributes to student achievement (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, Lloyd & Rowe, 2008). Federal policy makes effective instructional leadership central to school improvement and reform. This dynamic has placed increased pressures on school leaders to perform at their highest abilities, and many school leaders seem to be meeting these challenges. In Maryland, schools have had a long tradition of excellence, ranking first in the nation by Education Week for four years running (Chandler, 2012). In 2005, MGT of America Inc. was contracted by the Maryland State Department of Education (MSDE) to conduct a legislatively mandated evaluation on the effects the Bridge to Excellence in Public Schools Act of 2002 (BTE) had on Maryland’s public schools. This evaluation found that since 2003, Maryland’s schools have made substantial improvements in reading and math proficiency. Furthermore, Maryland’s sub-group proficiency gaps were closing by 51 percent in reading and 49 percent in math (MGT of America, Inc., 2008). The strides Maryland schools have made in improving academic outcomes for students is worthy of study. Certainly, these improvements in student achievement were made with the leadership of school principal. However, more research is necessary to explain how principals’ leadership styles contribute to increased student academic outcomes. A study of the leadership styles of Maryland’s principals would contribute to the body of knowledge on educational leadership and explain how principals’ leadership styles impact student achievement.
Purpose of the Study

Given the relative success of the schools in Maryland, a study of the leadership styles of principals would contribute significantly to the research literature. The purpose of this study was to identify and analyze the leadership styles of middle schools principals and determine whether leadership style differed in relationship to student achievement. While it is acknowledged that student achievement can be measured in vastly different ways, student achievement in the present study was defined by schools attainment of met status on their respective Annual Measurable Objective (AMO) for two consecutive years. Lastly, this study examined whether differences that were found in leadership styles of principals in schools with differing AMO status remain after controlling for principals’ other characteristics including gender, age, years in education, and years as a principal.

Research Questions

This study will be guided by the following research questions:

Research Question 1:

Are the three leadership styles identified by the Multifactor Leadership Questionnaire (MLQ) different among middle school principals that have met AMO and middle school principal that have not met AMO?
Research Question 2:

To what degree do any differences in leadership styles found for principals in schools with differing AMO status remain after controlling for principals’ characteristics including gender, age, years in education, and years as a principal?

Definitions of Terms

The following list of definitions is intended to clarify the study’s terminology and variables.

Operational Definitions:

a) **Annual Measurable Objective (AMO):** the performance target set by the state to assess the progress of student subgroups, schools and school districts on an annual basis. This state established annual target is increased incrementally to ensure schools are on track to meet 100 percent proficiency in reading and mathematics by 2014 (Maryland’s Accountability Assessment Program, 2008). The AMO targets are specific to each individual school.

b) **Maryland School Assessment (MSA):** the state-issued tests that are given to students in grades 3 through 8 to assess their content knowledge of Maryland’s content standards in mathematics and reading. Each student receives a score in each content area, which identifies his or her score as basic, proficient, or advanced. These tests are peer reviewed by the U.S. Department of Education and must meet the requirements of NCLB (Maryland’s Accountability Assessment Program, 2008).
The Multifactor Leadership Questionnaire (MLQ), developed by Bruce J. Avolio and Bernard M. Bass, was employed to assess principals’ dominate leadership styles. Each leadership style encompasses a distinctive type of leadership behavior. The three leadership styles are described below:

a) Transformational leadership is characterized by leadership behaviors that seek to motivate and inspire its followers by nurturing their desire to contribute to a shared mission or goal. Transformational leaders establish themselves as mentors or role models by gaining the trust of their followers. Additionally, transformational leaders communicate the goals or expected outcomes of the organization so that their followers feel a part of the organization’s success (Bass, 1985; Burns, 1978).

b) Transactional leadership is characterized by more traditional management behavior that seeks to create exchange relationships with followers. Transactional leaders clarify subordinates’ roles and responsibilities in the organization and provide subordinates with rewards for meeting objectives, while exacting corrective actions when subordinates fail to meet objectives (Burns, 1978).

c) Laissez-faire leadership is generally perceived as a lack of leadership and failure to manage. Laissez-faire leadership is marked with absences and inaction during important decision-making opportunities (Avolio, Bass & Jung, 1990).

Significance of the Study

Given the relative success of Maryland’s schools, a study focused on the leadership styles of Maryland’s principals as correlated with improved academic achievement of students would be a significant contribution to the study of educational
leadership. The findings of this study could inform school-based leadership. The information obtained by this study may help principals adjust their leadership style to attain increased effectiveness.
CHAPTER Two: Review of the Literature

Introduction

America’s K-12 education system has entered a new age of accountability for teachers and administrators. The impetus for this increase in accountability has its origins in public sentiment regarding declining school performance (Tyack & Cuban, 1995). In recent history, federal education policy has attempted to improve the performance of the nation’s schools by setting performance standards and holding states accountable. These policies have increasingly focused on the leadership ability of school-based administrators to navigate the road of school reform and improvement: Provisions of the No Child Left Behind Act of 2001 and Obama’s A Blue Print for Reform call for principals to be effective instructional leaders that can spearhead educational improvement. It is evident that successful schools will require highly qualified principals who can support effective instruction and teacher performance.

Chapter II first provides the historical underpinnings of the federal government’s role in education. A historical survey of the federal government’s evolving role in education elucidates a relationship between amplified federal involvement and increasing accountability. Next, Chapter II explores the role of the principal as the school-based instructional leader, along with leadership and management theories. The chapter consists of six sections: a) history of federal involvement in education; b) the school-based instructional leader; c) instructional and transformational leadership; d) motivation and organizational climate; e) emotional intelligence and leadership; f) overview of Maryland’s testing and accountability efforts.
History of Federal Involvement in Education

A common understanding, partly rooted in the interpretation of the Tenth Amendment, is that federal government has historically played a limited role in education. Federal interest in education, however, can be traced back to the nation’s founding (Borman, Stringfield, & Slavin, 2001; Cross, 2010; Vinovskis, 2009). Two of our nation’s most influential Founding Fathers were emphatic in their support of education: John Adams proclaimed his support for education in a pivotal writing titled, *Thoughts on Government*, where he states, “Laws for the liberal education of youth, especially for the lower classes of people, are so extremely wise and useful that to a humane and generous mind, no expense for this purpose would be thought extravagant” (as cited in McCullough, 2001, p.103). Thomas Jefferson, in his 1806 State of the Union address, exclaimed, “An amendment to our constitution must here come in the aid of public education. The influence over government must be shared among all people” (as cited in Padover, 1939, p. 87).

Despite the support of national luminaries such as Adams and Jefferson, our nation has long debated the federal government’s role in education (Anderson, 2007; Cross, 2010). Early efforts at establishing a federal presence in education reveal a clear ideological division on the issue. These divisions will have perpetual influence on both the reasons and rationale for the codification of federal education bills (Tyack & Cuban, 1995). Most opponents of an increased federal role in education have cited a desire to maintain local control, while backers reasoned their stance on the general welfare clause of the Constitution (Anderson, 2007). Consequently, the debate over the proper role of the federal government will influence all federal education legislation.
The Early Years

The first national legislation aimed at supporting schools was the Northwest Ordinance of 1787. Seen by some as a significant precursor to future federal education legislation, this law required that land for schools be set aside in the emerging townships of the western territories (Cross, 2010). Congress took up the issue again during the Civil War: Modeled on the Northwest Ordinance, the 1862 Morrill Act created land grants to assist states in developing colleges of agriculture and mechanics (Anderson, 2007; Cross, 2010).

These early years of federal involvement in education were not without controversy. Many opponents organized to thwart what they viewed as federal encroachment on the states’ Tenth Amendment right. In fact, detractors’ opposition to a small Department of Education, established in 1867, succeeded in downgrading it from cabinet-level to bureau-level in just a year (Anderson, 2007).

Additional federal education legislation was not enacted until World War I. Partially due to the low numbers of literate military recruits, Congress passed the Smith-Hughes Act of 1917. This was the first federal legislation that authorized direct federal program support for schools (Anderson, 2007; Cross, 2010). However, the scale of this support was not very significant, as .3% of the funding to support elementary and secondary schools came from the federal government. Local and state governments provided the remainder (Cross, 2010). Concerns over literacy continued to fuel federal legislative activity over the next decade; no legislation, however, was enacted. In 1929, the National Advisory Committee on Education was commissioned at the request of President Herbert Hoover. While this commission suggested a coherent federal policy
and the creation of general aid programs, the realities of the Great Depression prevented forward action on these suggestions (Cross, 2010).

The Great Depression brought forth unprecedented federal money for education. Depression-era relief agencies provided states and local governments with support to pay almost 40,000 teachers nationwide. Additionally, the depression-era Public Works Administration (PWA) built schools across the nation (Cross, 2010).

However, early in the nation’s history, federal involvement in education remained controversial. Small moves forward and many steps backward characterize this early history of federal involvement in education.

The Truman and Eisenhower Years

Little federal education legislation came out of Washington during World War II, despite the introduction of several bills. Exceptions to this trend were a series of acts that allocated funds toward local school districts. These monies were meant to counterweigh the expenses of educating students from federal installations (Anderson, 2007). In contrast, the war’s aftermath saw one of the most significant education laws in the Nation’s history.

The Servicemen’s Readjustment Act of 1944, widely known as the GI Bill, made it possible for numerous veterans to attend college or vocational school. According to Cross, “This program transformed the federal government’s role in education and, in the progress, transformed American society by expanding opportunities for higher learning to hundreds of thousands of veterans and their families” (Political Education, 2010, p. 3).

Political dynamics in the 1950s buttressed the federal role in education; these included Presidential races, Congressional actions and a Supreme Court decision.
Impelled by the military buildup of the Korean War, Congress passed the Impact Aid Act during the beginning of the 1950s. This legislation solidified the aid provisions in the Landrum Act of 1941 (Cross, 2010). Moreover, booming public school enrollment contributed to education becoming a key issue in the 1952 presidential campaign (Cross, 2010). More importantly, in 1954, the Supreme Court delivered its historic Brown v. Board of Education decision. This ruling altered the federal perspective, “by injecting a new federal priority into state and local school policy-making” (Anderson, 2007, p. 38).

The Soviet Union’s successful launch of Sputnik in 1957 heightened and shifted American educational priorities, invoking a new urgency about science and math education. The emphasis in the national debate shifted from school construction to teaching quality (Anderson, 2007; Cross, 2010). With the passing of the National Defense Education Act of 1958, Congress appropriated one billion dollars to support math, science and foreign language education; the bill subsidized student loans and aided schools in developing science and language laboratories (Cross, 2010).

The Kennedy and Johnson Years

Education was again a major issue in the 1960 presidential campaign. John Kennedy, Jr., attempted to gain the upper hand by characterizing Richard Nixon as opposing a new enthusiasm for federal support for education (Cross, 2010). The 1960s did see a change in how federal education legislation is framed. Until then, major federal education legislation had come about in the context of national defense. Two landmark 1960s bills illuminate how the paradigm shifted. They were the Civil Rights Act of 1964 and the Elementary and Secondary Education Act (ESEA) of 1965 (Anderson, 2007; Cross, 2010). Responding to the Brown v. Board of Education decision, Title IV of the
Civil Rights Act prevents public educational institutions from denying access to individuals based on race, color or national origin (Anderson, 2007).

President Johnson, a former teacher, championed ESEA; he believed that education was instrumental to moving individuals out of poverty (Anderson, 2007). With a billion-dollar layout in its first year, ESEA provided K-12 education with unprecedented federal support (Anderson, 2007; Cross, 2010), and provided states with funds to support schools in the area of instructional materials, professional development, and other educational programs (Cross, 2010).

The federal education legislation of the 1960s normalized the federal government’s involvement in K-12 education. While future federal education legislation has derived some justification from national defense needs, defense will no longer play a primary role in justifying a federal role in education (Anderson, 2007).

Federal Education Legislation of the 1970s and 1980s

Although earlier federal legislation emphasized deference to local authorities, the laws and regulations of the 1970s contained greater accountability toward state government and made states more accountable to the federal government. Federal funds were earmarked for specific programs, with reporting requirements in, for example, regulations for distribution of ESEA’s Title I funds (Cross, 2010), and in the Education for All Handicapped Children Act of 1975 (PL 94-142). This federal law, later called the Individuals with Disabilities Education Act (IDEA), required schools to provide all students with a *free, appropriate public education*. In the context of increasing federal accountability, IDEA is significant in the degree to which this law’s regulations mandate how schools must serve students with disabilities (Cross, 2010). The implementation of
ESEA and IDEA represent a significant milestone in the widening of the federal involvement in schooling.

Years after Johnson’s “Great Society” and ESEA’s Title I provisions, the 1983 report of The National Commission on Excellence in Education, *A Nation at Risk*, reflected continuing public alarm and dissatisfaction with American public schools. “The education foundations of our society are presently being eroded by a rising tide of mediocrity,” it warned (National Commission on Excellence in Education, 1983). *A Nation at Risk* added to the impetus for accountability and standards-based reform (Cross, 2010; Anderson, 2007; Tyack & Cuban, 1995; Vinovskis, 2009). By the end of the Reagan presidency, deference toward local control of education had faded. Moreover, the accountability spotlight directed at states, as noted in ESEA and IDEA, would soon focus on teachers and administrators.

The Clinton Years

At the beginning of President Clinton’s presidency, the education standards movement was well underway. Clinton capitalized on this movement by appointing one of the key architects of the standards movement, South Carolina governor Richard W. Riley, to the Department of Education post, with another proponent of standards, Marshall S. Smith, as Undersecretary (Anderson, 2007). Clinton and his education team promulgated The Goals 2000: Educate America Act of 1994. This legislation, which reauthorized ESEA, sought to reform the nations’ schools under three principles: 1) clear and common expectations; 2) high expectations for learning; and 3) accountability systems for responding to results (Anderson, 2007).

The Introduction of “No Child Left Behind” (NCLB)
Shortly after George W. Bush’s inauguration, he announced his plan to reauthorize ESEA, under its new title No Child Left Behind Act (NCLB). The passage of the No Child Left Behind Act of 2001 was a product of the accountability movement in education. Standards became the means for measuring school performance. A regime of sanctions would punish states, local districts and schools when these standards were not met (Ravitch, 2010). In essence, NCLB realigned the responsibility for school governance of accountability from the local government level to the state (Caillier, 2010 ). NCLB focused its punitive measures on states, and expanded the federal government’s involvement in K-12 education (Anderson, 2007; Cross, 2010; Ravitch, 2010; Vinovskis, 2009).

Race to the Top

When President Barack Obama entered office, the United States was in the grips of the Great Recession. In an effort to stimulate the nation’s economy, support job growth and invest in education, Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA). The ARRA contained a competitive grant program designed to spur educational innovation and reform. This grant program, called Race to the Top, offered state governments a portion of $4.35 billion to adopt and support educational reform. ARRA laid out four core areas: 1) education standards and assessments that prepare students for college and careers; 2) student data systems that can inform and improve instruction; 3) development and retention of effective teachers and principals, especially in high-need districts; and 4) resources to support rigorous interventions in low-performing schools (Education U. S., 2009).
Summary

The United States federal government has a long history of involvement in public education (Anderson, 2007; Cross, 2010; Tyack & Cuban, 1995; Vinovskis, 2009). Notable Founding Fathers asserted the necessity of an educated citizenry to maintain a free and democratic society (McCullough, 2001). Although many contemporaries agreed with this premise, issues over states’ rights and limited power of the federal government permeated the national dialogue on education (Anderson, 2007; Cross, 2010; Tyack & Cuban, 1995). Many opponents of federal involvement in education grounded their arguments in the powers reserved to the states by the Tenth Amendment (Anderson, 2007; Cross, 2010). Given this political backdrop, much of the early education legislation passed by Congress was highly deferential to local government control (Anderson, 2007; Cross, 2010; Tyack & Cuban, 1995).

However, as a growing nation, faced with prolific immigration and involvement in international conflicts, the United States could not ignore the need for an adequate public education system (Tyack & Cuban, 1995). The emergence of the nineteenth-century saw a growing national interest for the federal government to support an adequate public education system (Anderson, 2007; Cross, 2010; Tyack & Cuban, 1995). While Congress was able to pass federal education legislation during World War I, no other major education legislation would come out of Washington, D.C. until the end of World War II (Anderson, 2007; Cross, 2010). With the passing of the GI Bill the federal government took a momentous step toward increased involvement in education. However, the political and social dynamics of the 1950s and 1960s brought education issues to the forefront of the national dialogue. A shift in public sentiment related to
issues of education was highly influenced by Supreme Court case *Brown v. Board of Education* 1954, Civil Rights Act of 1964 and Elementary and Secondary Education Act (ESEA) of 1965. Since the 1960s, education has remained an integral part of United States political conversation.

Viewed historically, the increasing trend of federal involvement in K-12 education has coincided with significant increases in accountability as an instrument of school improvement. Coincidentally, accountability has highlighted the role of the school principal as central to school improvement and reform.

The School-based Instructional Leader

School leaders must have the skills to navigate a myriad of complex situations and perform an assortment of roles (Hallinger, 2005; Gülcan, 2012). Consequently, effective school leaders must find equilibrium between performing political, managerial and instructional roles (Cuban, 1988). In recent years, school leaders have been expected to master tasks that transcend managerial duties in order to improve school performance. Gülcan (2012) states, “School administrators should possess the characteristics of a leader more than a manager in order to reach the organizational goals” (p. 626). Writing about instructional leadership, Southworth (2002) asserts the notion that school leaders should act as leaders of instruction that foster improvement in instruction. It is clear that the actions of the modern principals are based on improving instruction. Indeed, the research literature supports the premise that school principals must focus their efforts on improving classroom instruction as a precursor to sustaining school improvement (Akpan & Archibong, 2012; Cuban; 1988; Goddard & Miller, 2010; Gulcan, 2012; Hallinger,
Behaviors of effective principals

Philip Hallinger’s research on effective schools grounded his development of the Principal Instructional Management Rating Scale (PIMRS). This validated instrument measured effective instructional leadership behaviors by setting three dimensions of effective instructional leadership behavior: 1) Defines the Mission, 2) Manages Curriculum and Instruction (C&I), and 3) Promotes School Climate (Hallinger & Murphy, 1987). The PIMRS enumerated 10 functions that subordinate each of the dimensions. Frames goals and Communicates goals are functions of the Defines the Mission dimension. Manages C&I has four functions: Knows CI, Coordinates Curriculum, Supervises and Evaluates and Monitors Progress. Lastly, Promotes School Climate dimension contains four functions: Sets Standards, Sets Expectations, Protects Time, and Promotes Improvement (Hallinger & Murphy, 1987, p. 56).

Not long after Hallinger developed PIMRS, Keefe and Jenkins (1984) published the Instructional Leadership Handbook; the definition of instructional leadership given by Keefe and Jenkins strongly emphasized the role of the principal as an individual that promotes improvement in teaching and learning (Keefe & Jenkins, 1984). The role of an effective instructional leader is expressed in four domains: formative, planning, implementation and evaluation. The formative domain communicates the need for the principal to demonstrate an extensive knowledge of curriculum trends, methodologies, school organization and instructional media. The planning domain requires that the principal facilitate teachers’ goal setting and instructional organization. Furthermore,
principals should be able to synthesize information about instruction into appropriate decision-making actions in the area of programming, school structure and budget. Academics are emphasized in the implementation domain, which includes teacher selection, deployment of resources, and setting high expectations for teachers and students. Lastly, school achievement data such as class pass rates, advanced courses, graduation rates and school demographic data are elements of the evaluation domain (Keefe & Jenkins, 1984).

In a mixed-methods dissertation study, Larsen (1984) identified six functions related to instructional leadership: 1) goal setting, 2) coordination, 3) supervision and evaluation, 4) staff development, 5) school climate, and 6) school and community relations (p. 108). Moreover, Larsen identified 10 behaviors significant to the role of instructional leaders. These ten behaviors were inextricably linked to the effective implementation of the six functions. These behaviors are:

1) *Ensures that school instructional goals are developed congruent with district policies.*
2) *Ensures that instructional goals were clearly communicated to everyone.*
3) *Communicates high expectations for student academic performance to staff.*
4) *Participates in formal and/or informal discussion concerning instruction as it impacts student achievement.*
5) *Ensures that systematic procedures for monitoring student progress are utilized by staff.*
6) *Assists teachers in securing available resources for program implementation.*
7) *Makes regular visits to classrooms.*
8) *Evaluates curricular programs.*

9) *Observes innovative curricular programs.*

10) *Establishes a safe/ orderly school environment with a clear discipline code*  
    (Larsen, 1984, p. 109).

Smith and Andrew (1989) focused on strategic interactions made by instructional leaders in their research. They identified four interactions of principals that lead to higher levels of student achievement. First, the principal interactions should convey a sense of caring, which should create an environment where teachers are comfortable taking risks toward improving practices. Principals should be available to provide teachers with resources and supports. Secondly, the principal should hallmark effective teaching and provide teachers with regular feedback with an eye on improvement. Thirdly, the principal should clearly define achievement goals and outcomes that anchor school programs and instruction. The principal should promote a shared value in the ability of all students to learn and experience success. Lastly, the principal must be visible throughout the school. Teachers and students must feel that the principal is present during the daily school operations (Smith & Andrews, 1989).

The ELCC Standards

The standards developed by the Educational Leadership Constituent Council (ELCC) were a collaborative undertaking that involved many professional education organizations. The ELCC standards were developed to strengthen educational leadership-preparation programs by establishing a foundation for professional development and instruction in the area of educational leadership. The ELCC standards serve as a common set of standards for the licensure of educational administrators; additionally, they are used
to guide the accreditation of educational leadership programs at many colleges and universities (Wilmore, 2002).

In the most recently revised set of building-level standards, ELCC enumerates a set of seven standards. Each standard represents both knowledge and skills that should be possessed by an effective educational leader. The 2011 standards are organized into an overarching standard, which encompasses elements related to the standard. These elements are further defined by knowledge and skills required by the educational leader to meet the standard (Educational Leadership Recognition Standards: Building Level, 2011).

The 2011 ELCC build-level standards are:

- **Standard 1.0: A building-level education leader applies knowledge that promotes the success of every student by collaboratively facilitating the development, articulation, implementation, and stewardship of a shared school vision of learning through the collection and use of data to identify school goals, assess organizational effectiveness, and implement school plans to achieve school goals; promotion of continual and sustainable school improvement; and evaluation of school progress and revision of school plans supported by school-based stakeholders.**

- **Standard 2.0: A building-level education leader applies knowledge that promotes the success of every student by sustaining a school culture and instructional program conducive to student learning through collaboration, trust, and a personalized learning environment with high expectations for students; creating and evaluating a comprehensive, rigorous and coherent curricular and
instructional school program; developing and supervising the instructional and leadership capacity of school staff; and promoting the most effective and appropriate technologies to support teaching and learning within a school environment.

- **Standard 3.0:** A building-level education leader applies knowledge that promotes the success of every student by ensuring the management of the school organization, operation, and resources through monitoring and evaluating the school management and operational systems; efficiently using human, fiscal, and technological resources in a school environment; promoting and protecting the welfare and safety of school students and staff; developing school capacity for distributed leadership; and ensuring that teacher and organizational time is focused to support high-quality instruction and student learning.

- **Standard 4.0:** A building-level education leader applies knowledge that promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources on behalf of the school by collecting and analyzing information pertinent to improvement of the school’s educational environment; promoting an understanding appreciation, and use of the diverse cultural, social, and intellectual resources within the school community; building and sustaining positive school relationships with families and caregivers; and cultivating productive school relationships with community partners.

- **Standard 5.0:** A building-level education leader applies knowledge that promotes the success of every student by acting with integrity, fairness, and in an ethical
manner to ensure a school system of accountability for every student’s academic and social success by modeling school principles of self-awareness, reflective practice, transparency, and ethical behavior as related to their roles within the school; safeguarding the values of democracy, equity, and diversity within the school; evaluating the potential moral and legal consequences of decision making in the school; and promoting social justice within the school to ensure that individual student needs inform all aspects of schooling.

- Standard 6.0: A building-level education leader applies knowledge that promotes the success of every student by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context through advocating for school students, families, and caregivers; acting to influence local, district, state, and national decisions affecting student learning in a school environment; and anticipating and assessing emerging trends and initiatives in order to adapt school-based leadership strategies.

- Standard 7.0: A building-level education leader applies knowledge that promotes the success of every student through a substantial and sustained educational leadership internship experience that has school-based field experiences and clinical internship practice within a school setting and is monitored by a qualified, on-site mentor (Educational Leadership Recognition Standards: Building Level, 2011).

Instructional and Transformational leadership

Since the late 1970s, two conceptual models of educational leadership have dominated the research literature. The characteristics and effectiveness of instructional
and transformational leadership has been the subject of many research studies (Heck & Hallinger, 1999). Both of these conceptualizations of educational leadership focus on leadership behaviors that have an effect on overall student achievement (Leithwood & Jantzi, 1999; Southworth, 2002). Edmonds (1979) and Lezotte and Bancroft (1985) researched a variety of schools in the United States focused on school improvement efforts that used the model of Effective Schools. Their work gave rise to continued research on effective schools and the concept of instructional leadership (Goddard, Neumerski, Goddard, Salloum, & Berebitsky, 2010). Conversely, conceptualization of transformational leadership has existed in the literature outside of educational research for decades (Marks & Printy, 2003). Burns (1978) is attributed with providing the theoretical framework for transformative leadership in his research that focused on the relationship between the leader and the follower. His research found that transformational leaders have the ability to motivate their followers in a continued pursuit toward higher goals.

Instructional Leadership

Instructional leadership generally refers to school-based leadership that places improved teaching and learning at its core. This concept includes the specific actions the principal undertakes to assess instructional improvement needs, manage improved instruction, and maintain high expectations for the quality of instruction (Banburg & Andrews, 1990; Goddard, et al., 2010; Heck & Hallinger, 1999; Hallinger, 1992; Hallinger & Murphy, 1986). While instructional leadership is a concept that has been the subject of much research, there is not a common definition accepted by researchers (Goddard et al., 2010). However, a review of the literature does reveal common
characteristics of instructional leadership. First and foremost, the notion that the principal is responsible for instruction and student achievement is interwoven throughout the academic literature (Hallinger, 1992; Hallinger & Murphy, 1986). Some literature supports the idea that the principal should have a working knowledge of the curriculum and focus his or her actions around instructional improvement (Hallinger, 1992; Hallinger & Murphy, 1986). It is a commonly held tenet that instructional leaders maintain a climate of high expectations for students and teachers (Bossert, Dwyer, Rowan, & Lee, 1982; Heck, Larsen, & Marcoulides, 1990; Marks & Printy, 2003; Mortimore, 1993). Lastly, it is also established that principals should keep an eye on school instructional improvement and student achievement constantly (Banburg & Andrews, 1990; Hallinger, 1992; Hallinger & Murphy, 1986).

In a recent meta-analysis, Hallinger (2005) presented a model of instructional leadership that enumerates three underpinning dimensions: 1) defining the school mission, 2) managing the instructional program, and 3) and promoting a positive school-learning climate. For the first dimension, Hallinger purported, “This dimension concerns the principal’s role in determining the central purpose of the school. The dimension focuses on the principal’s role in working with staff to ensure that the school has clear, measurable, time-based goals focused on the academic progress of students” (p.225). Certainly, the principal must clearly communicate the school’s mission to staff and provide a shared plan for progress. In managing the instructional program, Hallinger explains that, “this dimension requires the principal to be deeply engaged in stimulating, supervising and monitoring teaching and learning in the school” (p. 226). In other words, the principal should have a keen knowledge of the curriculum, which allows for relevant
conversations about teaching and learning. Hallinger states that the third dimension, “is broader in scope and purpose than the other two” (p. 226). He makes the point that, “instructionally effective schools develop a culture of continuous improvement in which rewards are aligned with purpose and practice” (p.226). Viewed holistically, the principal must model high expectations for students and teachers, and foster a school climate of collaboration that supports high-quality instruction.

Transformational Leadership

The theory of transformational leadership has been researched over 20 years (Bass, 1985). While the concept of transformational leadership has existed in the non-educational literature for decades (Marks & Printy, 2003), it became well known in the educational discipline during the 1980s and early 1990s (Hallinger, 2003). Moreover, increasing interest in school reform and restructuring helped to spur the popularity of transformational leadership (Hallinger, 2003; Leithwood & Jantzi, 2005).

Transformational leadership refers to a leader’s ability to increase organizational capacity, enhance individual commitment, improve performance, spur motivation and collaboration by empowering followers within the organization to carry out duties that are congruent with the improvement objectives of the organization (Hallinger, 2003; Marks & Printy, 2003; Leithwood & Jantzi, 2005). Marks and Printy (2003) highlight the previous point by stating, “Transformative leaders motivate followers by raising their consciousness about the importance of organizational goals and by inspiring them to transcend their own self-interest for the sake of the organization” (p. 375).

The work of Bass and Avolio (1994) and Leithwood (1994) framed the concept of transformational leadership. Bass and Avolio noted that transformational leaders are able
to motivate followers to achieve the organizational goals. Bass built on the works of Burns to construct the four “I’s” of transformational leadership: 1) *idealized influence*, leaders must build trust within the organization and become a role model in order to exact change; 2) *inspirational motivation*, leaders maximize the performance of their followers by nurturing a shared mission; 3) *intellectual stimulation*, leaders encourage innovation, creativity and out-of-the-box thinking; and 4) *individualized consideration*, leaders act as coaches or mentor that help followers reflect upon their practices and foster professional development (Bass & Avolio, 1994, pp. 3-4). In a study conducted by Bass, Avolio, Jung and Berson (2003) on transformational and transaction leadership in high-stress environments, the researchers found that a combination of both leadership styles proved to be a predictor of organizational effectiveness.

Leithwood and Jantzi (1999) considered six components of transformational leadership related to school-based leadership: a) having high-performance expectations, b) developing a school vision, c) providing intellectual stimulation, d) having individual support, e) modeling best practices and values, and f) having a shared decision-making process. Leithwood and Jantzi’s work bolsters the notion that transformational leadership requires grass-roots action from followers.

Transformational leadership is characterized by the notion of shared leadership; in many respects, it is antithetical to the idea of top-down leadership (Hallinger, 2003; Marks & Printy, 2003). Pertaining to school-based leadership, the transformational leadership model assumes that the principal will not be alone in creating a climate of shared leadership. Leadership will be decentralized, which would empower teachers to make decisions that are in the best interest of the school’s goal for improvement.
(Hallinger, 2003). The leadership behaviors of the principal would be based on developing an understanding of the needs of the staff to achieve the school’s objectives (Hallinger, 2003). Contrasting transformational leadership and instructional leadership, Hallinger (2003) makes the following points:

- Top-down vs. bottom-up focus on approach to school improvement.
- First-order or second-order target for change.
- Managerial or transactional vs. transformational relationship to staff (p. 337).

Transformational leadership is a leadership style that is characterized by a specific shared approach to leadership. Transformational leaders build the capacity for leadership within the organization by empowering followers to take ownership of the goals and objectives of the organization. This broad leadership approach might be applied to more narrowly defined leadership approaches such as instructional leadership.

Motivation and Organizational Climate

McClelland and Burnham (2003) describe successful leaders as individuals that are able to create professional climates, which motivate productive job performance. McClelland and Burnham claim that competent leaders should have a desire to use power to influence and inspire their staff to work at their maximum potential (p. 118). These leaders communicate the goals of the organization and use socialized power to raise the productivity of the whole organization (McClelland & Burnham, 2003). McCelland and Burnham (2003) assert, “. . . the best mangers possess two characteristics that act as regulators - a great emotional maturity, where there is little egotism and a democratic, coaching managerial style” (p. 126). David McClelland, a pioneer of research-based
theory of human motivation, has made many contributions to the study of leadership styles; his work on motivation theory influenced studies conducted by Litwin and Stringer (1968) on the relationship between leadership styles and the work environment.

Litwin and Stringer’s (1968) research on motivation and organizational climate suggest that leaders develop particular styles according to underpinning traits of the workplace. A manager’s particular leadership style will have predictable effects on the workplace climate, which will affect job performance. Managers must learn to alter their leadership style in order to promote a change in workplace climate.

Litwin and Stringer (1968) tested the relationship between a manager’s leadership style and the workplace climate. Subordinates were asked to rate their perceptions of how they were treated based on six dimensions. These dimensions are: a) structure-- workers’ feelings about workplace constraints; how many rules are present; b) responsibility-- what was the level of autonomy felt by the workers; c) risk-- how much risk did the workers feel the job entailed; d) reward-- how much did workers feel they were rewarded for their good performance; e) warmth and support-- did the workers feel warm and supported, any team spirit; f) conflict - did the workers feel that management was open to suggestions or criticism (p.67-68).

The work of Litwin, Stringer and McClelland supported Daniel Goleman’s work on emotional intelligence. Goleman, a research psychologist, has written extensively on how effective leadership is dependent on aspects of emotional intelligence (Goleman, Boyatzis, & McKee, 2002). Individuals with high emotional intelligence exhibit self-awareness, self-management, social awareness and relationship management. Leaders that exhibit high emotional intelligence are able to motivate individuals by speaking
authentically, relating his or her personal experiences or values to their staff. Goleman
denotes that effective leaders create *resonance* through speech or actions, which
promotes a personal connection with their followers (Goleman, et al., 2002).

Building on the work of Goleman, Litwin and Stringer, the Hay Group
Incorporated, used data from a random sample of 3,871 corporate executives to study
effective leadership. Their research identified six different leadership styles related to
different elements of emotional intelligence (Goleman, 2000). Asserted by Goleman
(2000) and Goleman, et al., (2002) the six styles identified by the research of the Hay
Group could assist leaders in developing and maintaining a productive workplace
climate, if used appropriately by leaders. Consequently, the U.K. Department for
Education and Employment commissioned the Hay Group to conduct a study of 42
schools. This study found a connection between school success and productive leadership
styles exhibited by the schools’ headmasters. The questionnaire used in this study was
aligned with the six leadership styles that Goleman states are necessary for a leader to
build a productive workplace climate (Goleman, 2000; Goleman, et al., 2002).

**Emotional Intelligence and Leadership**

The question of how successful leadership and emotional intelligence are related
continues to be in the emergent stage of academic research; research in the field of
leadership has touched the surface of this relationship (Barling, Slater, & Kelloway,
2000; Higgs & Aiken, 2003; Scott-Ladd & Chan, 2004). The literature suggests that
leaders who exhibit high aptitude for emotional intelligence are more committed to their
organization and are more satisfied with their work (Abraham, 2000; Goleman, 1998;
Golman, 2000). Furthermore, these leaders are thought to have greater success and use
emotions strategically to build greater organizational motivation and capacity for improvement (Goleman, 2000; Goleman, et al., 2002; McClelland & Burnham, 2003). George (2000) suggested that leaders with high emotional intelligence use their skill set to improve decision-making skills and establish enthusiasm, trust and collegiality within an organization, which enhances the attainment of the organization’s goals.

Writing prolifically on emotional intelligence, Daniel Goleman has contributed substantially to the popularity of the concept (Scott-Ladd & Chan, 2004). Other researchers have made important contributions to the concept, as well. Work conducted by Mayer and Solavey (1997) contributed to the definition of emotional intelligence that has been used by others in the field. Mayer and Solavey (1997) postulated that emotional intelligence is an individual’s ability to correctly assess a social situation and regulate his or her own emotional response, which allows the individual to self-monitor the intensity and direction of their own and others emotional response. Yet, many would dispute the exact nature and definition of emotional intelligence, thus universal agreement has not been established. Barling, Slater and Kelloway (2000) suggest that various researchers have claimed numerous characteristics regarding emotional intelligence. While a consensus among researchers on the exact nature of emotional intelligence remains elusive, the works by Goleman (1995) and Salovery and Mayer (1990) have established five characteristics of emotional intelligence. They are: a) understanding one’s own emotions, b) knowing how to manage one’s emotions, c) having self-control over one’s emotions, including delayed gratification, d) having empathy for other’s emotions and e) managing relationships.
Recent studies exploring the relationship of emotional intelligence and successful leadership have found a positive connection between the two (Higgs & Aitken, 2003; Scott-Ladd & Chan, 2004). Survey research conducted by Gardner and Stough (2002) found a strong relationship ($r=0.68$) between transformational leadership and emotional intelligence. Their researchers surveyed 110 senior-level managers using The Swinburne University Emotional Intelligence Test (SUEIT) to establish the participants’ emotional intelligence; and to assess the participants’ styles of leadership, the researchers used the Multifactor Leadership Questionnaire (MLQ Form 5X) (Gardner & Stough, 2002). Research conducted in the United Kingdom by Dulewicz and Higgs (2003) concluded that board members’ emotional intelligence aptitude was viewed as important to the management that served under them. This study’s findings supported Goleman’s assertion that the higher an individual advances, the greater the need for emotional intelligence competencies. Barbuto and Burbach (2006) studied the emotional intelligence and leadership styles of 80 United States elected leaders. Their work “found several correlations that reinforce the role of emotional intelligence in leadership” (p.57). A quantitative research study by Barling, Slater, and Kelloway (2000), of 57 mid-level managers, found that emotional intelligence was connected with the following three aspects of transformational leadership: a) idealized influence, b) inspirational motivation, and c) individualized consideration (p. 160).

Overview of Maryland’s Testing and Accountability efforts

Maryland has maintained high standards in its educational testing development throughout numerous testing systems implementations. The state focuses on aspects ranging from curriculum development to stakeholder involvement, as well as
modifications to satisfy federal law such as NCLB. Throughout, the Maryland State Department of Education is committed to processes that are easily accepted by educators and community (Maryland Department of Education, 2008).

The *Maryland School Assessments (MSA)* is the current testing system in Maryland for children in grades 3-8 in reading and math; students in grades 5 and 8 are also tested in science. The MSA was developed in response to the requirements of the *No Child Left Behind Act*. One of those requirements is that individual test results must be provided to students. Ratings are organized into three categories: Basic, Proficient, and Advanced. Furthermore, the *High School Assessments (HSA)* were also developed in response to NCLB. These “end of course” tests are given for English 2, Government, Algebra/Data Analysis, and Biology; the responses are a combination of structured and constructed responses. As with the MSA, the scores on these tests are provided to individual students, schools and school districts. Passing the HSAs is a graduation requirement for students. Both the MSA and HSA are the tests used by the state to assess the progress of student subgroups, schools and districts toward meeting prescribed AMO targets. These annual targets are increased incrementally to ensure schools are on track to meet 100 percent proficiency in reading and math by 2014 (MSDE, 2008).

**Essential Components**

Throughout the development of its testing systems, the state has made and implemented changes to the test due to several factors: curriculum, requests for proposals, relationship with vendors, educational stakeholder involvement at every level, oversight, transparency, research, and continuous improvement. The GAO (Government
Accounting Office) identified these factors as contributing to the quality and reputation of Maryland’s testing assessments (MSDE, 2008, p. 6).

One of the strengths of Maryland’s testing system is alignment with the curriculum. In the case of Maryland’s curriculum development, teachers from all grades and content areas were chosen to develop the appropriate curriculum. Prior to any testing of the approved curriculum, the school districts were given ample time to make appropriate changes to their instruction and curriculum (MSDE, 2008).

Once the State Board of Education approved a curriculum, there was a need for testing system development. In order to maximize the available resources and professional expertise, the State Board of Education prepared requests for proposals (RFPs) giving the specific requirements, expectations and deliverables (MSDE, 2008).

Maryland has involved its teachers in the test development process, from curriculum development to the scoring techniques. This reliance on the expertise of its human capital has grounded the state’s testing systems in respect, easing acceptance and implementation (MSDE, 2008).

Along with involvement of its teachers and educators, the state engaged with external agencies. The U.S. Department of Education in particular oversaw the process and results; it conducted an annual peer review of the testing system to ensure the adherence to NCLB standards. The peer review team consisted of staff from both MSDE and the US Department of Education (USED). The role of the USED staff member provided support and technical guidance to the peer review team, as well as complete a evaluation report based on state-provided data. The team’s evaluation is intended to guide
and support improvement in the system; its secondary function is to give USED a recommendation regarding approval of the state’s assessment system (MSDE, 2008).

Maryland’s assessment tools have USED approval. Every question item, test form and score is highly scrutinized by the testing developers; the pressure to have a quality assessment tool is derived from the goal to develop a tool that has evidence of reliability, validity, and fairness—the three most important qualities of test scores (MSDE, 2008).

Maryland has shown commitment to developing quality assessment tools; it [Maryland] has remained faithful to the national criteria for best practices in the field of test development. The criteria are defined by various organizations such as the American Educational Research Association, American Psychological Association, NCLB legislation, and the principals of universal design (p.10). In Maryland, the MSAs and HSAs are known as “high-stakes” tests as they meet federal requirements and state graduation requirement; therefore, these assessment tools adhere to rigorous criteria in the best practices standards (MSDE, 2008).

The development of each test item is scrutinized, examined, and reviewed numerous times to ensure that the depth of knowledge of the content area is translated in the measurement tool. The item responses include selected response better known as multiple-choice; this format gives question with 3-4 suggested answers of which only one is correct or the best choice. The constructed response includes that brief constructed response and the extended constructed response. The last format is student-produced response; this format is solely for the mathematics assessments, as they require the student to calculate answers and choice of responses are not available.
In order to administer an assessment tool that is equitable, fair and administered in a standardized manner, MSDE has partnered with contractors to develop examiners manuals for each content area; the manuals are filled with guidelines for teachers to use in planning and administering the test. In conjunction with the examiner’s manual, there is another manual provided for use by the Local Accountability Coordinators and School test coordinators known as the TACM or Test Administration and Coordination Manual. The guidelines in this manual provide details on the test schedules, the needed accommodations and instructions on activities that are permitted prior to, during, and after the test administration on both the computer-assisted or paper-and-pencil tests (MSDE, 2008).

After the administration of the test, the scoring process is the following step. Specialized companies, who have been awarded the contract for scoring of constructed responses, are given the test items to score for the HSA and MSA constructed responses. These companies employ raters or scorers to review the responses; these individuals must have a college degree, participate in project-specific reader training in Maryland, have passed a writing sample test, and have qualified to score using the Maryland criteria. In addition to the scorer, there is a team leader in charge of a pool of scorers; this individual supervises the team and must have the credentials of a scorer but also has participated in a two-day training course. According the hierarchical order, the scoring director, for each site, content and grade area, is responsible for training the team leaders and scorers.

In order to provide the necessary information for test scoring, the answer booklets are scanned into an electronic imaging system, which allows the scorer to read the responses to the CRs online. This online scoring system assists by maintaining a database
of actual student responses and the scores associated with those given responses (MSDE, 2008).

During the scoring process, the application of the anchor, training, qualifying and validity sets are used to train scorers and evaluate scorer reliability during the process. The anchor/guide sets include a few examples of each score point on the rubric and are usually arranged in ascending or descending order; the anchor sets usually contain “clean” papers/responses that illustrate and demonstrate the characteristics of a solid score. The reader/scorer may use the anchor sets provided to score the live responses (MSDE, 2008).

By contrast, the training sets are comprised of ten (10) randomly ordered papers that reflect a broader range of student responses including “clean” paper, papers with characteristics of two adjacent scores, and paper that show readers unusual, creative, or atypical approaches to answering the given question. The purpose of these training sets is to provide the scorers/readers a vast knowledge base given the standards of the particular state (MSDE, 2008).

Throughout the testing process, MSDE applies the use of the Item Response Theory (IRT) to equate tests, which refers to the process of adjusting test forms to determine test difficulty. This adjustment process assures the equivalence of assessment and performance standards over time and across different test administrations that use alternate test forms. Although there are various methods to equate tests, Maryland uses “common item equating” which uses a set of anchor items in each test form. When possible all relevant test item formats are represented in the common core of anchor items.
As for the statistical analysis of the assessment tool, Maryland has used classical item analyses and item response theory to provide data for every test item on each test form variation. Analyses are reviewed on test item difficulty, item discrimination, differential item functioning, and distracter analysis. Each section is reviewed to determine if a given question is suitable for the operational test forms. Item difficulty reviews the percent of test-takers who answer an item correctly; if an item is too easy, then all test-takers answer correctly. Items that can be revised or rewritten are considered but those that flawed are useless (MSDE, 2008).
CHAPTER Three: Methodology

Purpose of the Study

The purpose of this study was to identify and analyze the leadership styles of Maryland’s middle schools principals that oversee schools that have met or not met their Annual Measurable Objectives (AMO). Additionally, to determine which leadership style is dominant among middle school principals leading these schools, the researcher employed the Multifactor Leadership Questionnaire. The survey provided each principal with a score from 0 to 48 for transactional leadership, a score from 0 to 80 for transformational leadership, and a score from 0 to 16 for laissez-faire leadership. Furthermore, the researcher ascertained whether leadership styles differ based on the principals’ self-identifying characteristics of: age, gender, totals years of experience as principal, and years of experience in education.

Rationale

Federal policy emphasizes effective instructional leadership for school improvement and reform. This dynamic places increased pressures on school leaders to perform at their highest abilities. Policymakers look toward school-based leadership as a means of positively influencing student achievement and closing the achievement gap. Educational research supports the notion that effective instructional leadership contributes to student achievement (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008). The academic literature is brimming with studies that support the notion that instructional leadership has a proven influence on student achievement (Goddard & Miller, 2010). Marzano, et al., (2005) concluded in a
meta-analysis that principal leadership was a significant factor in student achievement. Additionally, a meta-analysis conducted by Leithwood and Jantzi (2005) maintained that transformational leadership was considerably and implicitly related to student outcomes and student engagement. It should be pointed out that a meta-analysis authored by Robinson, et al., (2008) singled out instructional and transformational leadership as having sway on student learning; the authors also noted that instructional leadership had a larger impact on student learning than transformational leadership. Thus, a study of the leadership styles of middle school principals would contribute to the body of knowledge on educational leadership. Results from this study could assist school-based leaders’ efforts at increasing their effectiveness.

Conceptual framework

The research literature in the field of educational leadership has buttressed the concept that leaders have an impact on workplace outcomes. Consequently, researchers have concluded that school-based leadership can have an impact on school achievement (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008). However, the findings of this research support the idea that variations in the types of school-based leadership styles may contribute to variations in school achievement. Moreover, the notion that leaders influence their followers’ perceptions of the work environment and impact motivation has been well established in the business literature (Barker, 2001; Goleman, 2000; Goleman et al., 2002; McClelland & Burnham, 2003; Litwin & Stringer, 1968). During the 1960s, research conducted out of Harvard University by McClelland, Litwin and Stringer established connections between the
leadership styles used by managers, workplace organizational climate and motivation (Litwin & Stinger, 1968). Testing the relationship between managers’ leadership styles, workplace climate and motivation, the study conducted by Litwin and Stringer found that a manager’s leadership style has predictable effects on workplace climate, which affects subordinates’ job performances (Litwin & Stinger, 1968). Barker (2001) used the well-established theories of organizational climate and motivation, developed by Litwin and Stringer, to describe how school leaders motivated staff and students. He concluded that Litwin and Stringers’s framework for understanding motivation and organizational climate was applicable to the school environment.

The work of Litwin, Stringer and McClelland supported Daniel Goleman’s work on emotional intelligence. Goleman, a research psychologist, has written extensively on how effective leadership is dependent on aspects of emotional intelligence (Goleman, et al., 2002). Leaders that exhibit high emotional intelligence are able to motivate individuals by speaking authentically and/or relating his or her personal experiences or values to their staff. Goleman speaks of effective leaders creating resonance through their speech or actions, which promotes a personal connection with their followers (Goleman, et al., 2002).

Correlations between emotional intelligence and effective leadership have been found in resent research studies (Higgs & Aitken, 2003; Scott-Ladd & Chan, 2004). Gardner and Stough (2002) executed survey research that uncovered a strong relationship (r=0.68) between transformational leadership and elevated emotional intelligence. In their research, Gardner and Stough (2002) surveyed 110 senior-level leaders using The Swinburne University Emotional Intelligence Test (SUEIT) to determine the participants’
emotional intelligence. To assess the participants’ leadership styles, the researchers employed the Multifactor Leadership Questionnaire (MLQ Form 5X). In research conducted by Bass, Avolio, Jung and Berson (2003) on transformational and transactional leadership in high stress environments, the researchers found that a combination of both leadership styles proved to be a predictor of organizational effectiveness. A review of the academic literature supports the notion that differences in leaders’ behaviors relate to differences in their followers work outputs (Barker, 2001; Bass & Avolio, 1994; Goleman, 2000; Goleman et al., 2002; McClelland & Burnham, 2003; Litwin & Stringer, 1968) and educational research has supported the notion that effective leadership positively influences student achievement (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008).

Research Questions
This study was guided by the following research questions:

Research Question 1:

Are the three leadership styles identified by the Multifactor Leadership Questionnaire (MLQ) different among middle school principals that have met AMO and middle school principal that have not met AMO?

Research Question 2:

To what degree do any differences in leadership styles found for principals in schools with differing AMO status remain after controlling for principals’ characteristics including gender, age, years in education, and years as a principal?
Study Design and Procedures

This *ex post facto* study identified and analyzed the leadership styles of middle schools principals. In other words, the research determined whether differences existed among the leadership styles of principals that have met AMO in the aggregate group and principals that have not met AMO in the aggregate group. Additionally, the research established whether any differences exist in leadership styles found for principals in schools with differing AMO status after controlling for the demographic characteristics of the principals: a) age; b) gender; c) total years of experience as principal; d) total years of experience as an educator. Because of the nature of *ex post facto* research, this study attempted to determine antecedents from pre-identifiable effects. Therefore, the variables in this study were not manipulated. Consequently, determining causal inferences between the variables was not appropriate in this study.

The dependent variables of this research study were the individuals’ (middle school principal) leadership styles, as measured by the Multifactor Leadership Questionnaire (MLQ Form 5X short). The survey provided each principal with a score from 0 to 48 for transactional leadership, a score from 0 to 80 for transformational leadership, and a score from 0 to 16 for laissez-faire leadership. This study’s independent variable was the accountability data that is associated with the principal and his or her specific school. In other words, the study analyzed principals’ leadership styles within the context of students’ achievement data (AMO met or not met status) that was collected and published by the Maryland State Department of Education for the school years: 2011-12 and 2012-13.
Procedures

Approximately 200 middle school principals were contacted via email and invited to participate in this study by completing a self-rating scale developed by researchers, Bruce Avolio and Bernard Bass called Multifactor Leadership Questionnaire (Form 5X-Short); principals’ participation was voluntary.

Participants responded to 45 questions, asking them to rate their leadership behavior using a 5-point Likert-type scale. The survey (MLQ) measured the extent to which each leader uses transformational leadership, transactional leadership, and laissez-faire leadership. The survey was estimated to take 10-15 minutes to be completed by participants. Based on the participants’ responses, a score from 0 to 48 was assigned for transactional leadership; a score from 0 to 80 was assigned for transformational leadership; and a score from 0 to 16 was assigned for laissez-faire leadership.

Next, these participants’ leadership styles were analyzed within the content of their school AMO status. For the purposes of this study, AMO was considered met for schools that attained their AMO target in both reading and mathematics for the consecutive school years of 2011-12 and 2012-13. The schools’ met or not met status was collected via the public website: www.mdreportcard.org. This information was publicized by the Maryland State Department of Education and it is updated annually.

Selection of participants

A non-probability selection of study participants was used in this study. The participants were middle school principals. There are 24 school districts in Maryland with 231 middle schools; of the 24 districts 22 districts allowed principals to participate in the study. Principals whom were assigned to the same middle schools during the consecutive
school years of 2011-12 to 2012-13 and that had met or not met established AMO for those years were invited to participate in the study by completing the survey questionnaire and returning it as instructed. Communication with the study’s participants was conducted through email and the Survey Monkey website. To be eligible for participation in the study, individuals must have been current or former Maryland middle school principals that served within that capacity consecutively from 2011-12 school year to the 2012-13 school year. Principals that did not lead their respective schools during both the 2011-12 and 2012-13 school years were not asked to participate in the study.

While 200 middle school principals were invited, 154 principals were eligible to participate under their school districts’ policies on research participation. Of the 154 middle school principals able to participate in the study, 43 principals chose to respond. Consequently, the response rate for principals invited was 43/200 (21.5%); and, the response rate for those eligible for participation was 43/154 (27.9%). The sample size was divided into two groups: principals with AMO met status and principals with AMO not met status. Among the 43 principals that responded, 20 fell into the met group and 23 fell into the not met group.
Table 1 provides a demographic description of the study’s participants.

Table 1:  
*Participant Demographics (Frequencies)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Group</th>
<th></th>
<th>AMO Met</th>
<th></th>
<th>AMO Not Met</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>40.4</td>
<td>8</td>
<td>44.4</td>
<td>9</td>
<td>39.1</td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>59.5</td>
<td>11</td>
<td>57.8</td>
<td>14</td>
<td>60.9</td>
</tr>
<tr>
<td>Age Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 - 39</td>
<td>9</td>
<td>20.9</td>
<td>4</td>
<td>20</td>
<td>5</td>
<td>21.7</td>
</tr>
<tr>
<td>40 - 49</td>
<td>17</td>
<td>39.5</td>
<td>9</td>
<td>45</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td>50 - 59</td>
<td>13</td>
<td>30.2</td>
<td>4</td>
<td>20</td>
<td>9</td>
<td>39.1</td>
</tr>
<tr>
<td>60 – 60+</td>
<td>4</td>
<td>9.3</td>
<td>3</td>
<td>15</td>
<td>1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Note: One principal in the Not Met group did not indicate gender.

Instrumentation

The Multifactor Leadership Questionnaire (MLQ Form 5X), developed by Bruce J. Avolio and Bernard M. Bass, has been widely used in scholarly research to measure individuals’ range of leadership styles since 1995 (Avolio & Bass, 2004). This instrument was selected because it was designed to measure the degree to which leaders rely upon each of three leadership styles: transformational, transactional and laissez-faire leadership (Avolio & Bass, 2004). The three leadership styles are composed of nine first-order factors (Antonakis, Avolio & Sivasubramaniam, 2003). Included in the transformational leadership style are: idealized influence (attributes), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individual consideration. Transactional leadership style includes three first-order factors: contingent reward, management-by-exception (active) and management-by-exception (passive). Laissez-
faire is a first-order factor, characterized by a lack of active leadership (Antonakis, et al., 2003).

Writing in The Twelfth Mental Measurements Yearbook, Kirnan and Snyder (1995), observed that the MLQ could be used to measure “all levels of leadership” (p. 651). In their evaluation of the MLQ, Kirnan and Snyder (1995), concluded, “the MLQ stands apart from other measures of leadership in its sound psychometric properties” (p. 654). In The seventeenth Mental Measurements Yearbook, Fleenor and Sheehan (2007) noted that many studies have shown the MLQ to be a valid measurement of leadership style.

The MLQ (Form 5X) is a 45-item survey that prompted participants to respond to leadership behaviors using a 5-point Likert-type scale. Respondent were asked decide the degree to which the listed leadership behaviors closely matches their own behavior by selecting from one of the five choices: Not at all, Once in a while, Sometimes, Fairly often and Frequently, if not always, a score from 0-4 was assessed for each item. Based on the participants’ responses, a score ranging from 0 to 80 was assigned for transformational leadership; a score from 0 to 48 was assigned for transactional leadership; and a score ranging from 0 to 16 was assigned for laissez-faire leadership.

Scores for the three broad leadership styles were calculated following the procedures as reported by Stanley (2004) and using a chart from the MLQ Manual that corresponds the nine MLQ factors to the three broad styles. This correspondence between the factors and the broader indexes is based on Bass and Avolio’s Full Range of Leadership theoretical model as articulated in the MLQ Manual and in numerous published studies. Unfortunately, neither Stanley (2004) nor the MLQ Manual reports psychometric analysis of the broad leadership scales. The small sample size for the current study does
not provide sufficient statistical power to perform either factor analyses of the nine factors nor internal consistency estimates across the items that would comprise the broader indexes. However, as reported in the MLQ manual, the reliabilities for the U.S. sample (N = 3,755) self-ratings across the 9 first-order factors ranged from .60 - .76, with a median value of .64 (Avolio & Bass, 2004).

Each leadership style encompasses a distinctive type of leadership behavior. The three leadership styles are described below:

a) Transformational leadership is characterized by leadership behaviors that seek to motivate and inspire its followers by nurturing their desire to contribute to a shared mission or goal. Transformational leaders establish themselves as mentors or role models by gaining the trust of their followers. Additionally, transformational leaders communicate the goals or expected outcomes of the organization so that their followers feel a part of the organization’s success (Bass, 1985; Burns, 1978).

b) Transactional leadership is characterized by more traditional management behavior that seeks to create exchange relationships with followers. Transactional leaders clarify subordinates’ roles and responsibilities in the organization and provide subordinates with rewards for meeting objectives, while exacting corrective actions when subordinates fail to meet objectives (Burns, 1978).

c) Laissez-faire leadership is generally perceived as a lack of leadership and failure to manage. Laissez-faire leadership is marked with absences and inaction during important decision-making opportunities (Avolio, Bass & Jung, 1990).
Data Collection

This study required the collection of data related to middle school principals’ leadership styles for the purpose of analysis within the context of student achievement (AMO status). Middle school principals were eligible to participate in the study because 1) they led their respective schools for both the 2011-12 school year and the 2012-13 school year; and 2) they were employed by one of the 24 school districts in Maryland during term of data collection. The researcher determined which principals were eligible to participate in the study by cross-referencing their information in the Maryland State Department of Education Maryland Directory of Public Education. Following approval by the University of Maryland Institutional Review Board, granted October 21, 2014, all eligible participants were emailed recruitment letters on October 26, 2014. The recruitment letter informed the readers of the nature of the research and requested voluntary participation in the study by clicking on a link that directed them to a Survey Monkey website. Once on the Survey Monkey website, individuals provided their consent to participate in the research by completing the MLQ survey. On November 5, 2014, a second reminder email was sent to eligible participants that had not responded to the first email. The second email followed the same format as the first. The last reminder email was sent on December 7, 2014 to eligible participants who had not responded to the first two emails. This email followed the same format as the first and second (See Appendix C for copies of all recruitment letters). Data collection ended on December 21, 2014, which had resulted in 43 principals providing the researcher with completed surveys questionnaires. To protect the confidentiality of the participants, the MLQ survey was scored by the researcher and the demographic information was coded. The schools’
met or not met status was collected via the public website: www.mdreportcard.org. This information was publicized by the Maryland State Department of Education and it is updated annually. Given that the AMO data was made public by Maryland State Department of Education, no special permission was necessary to use the data.

Human subjects and confidentiality

Research and data collection procedures were strictly adhered to the guidelines set by University of Maryland, College Park Institutional Review Board. Participants of the study were made aware of the nature of the research and were notified that participation was voluntary. Participants’ identifying information was kept confidential by the researcher. Given that the AMO data was made public by Maryland State Department of Education, no special permission was sought to use the data. However, this information was coded by the researcher to maintain confidentiality.

Data Analysis

The Statistical Package for Social Science (SPSS) was used to organize and analyze the data. Descriptive statistics were employed to summarize and organize the independent and dependent variables. Central tendency and frequency statistics were determined for the sample. The researcher scored participants’ responses to the MLQ. Based on the participants’ responses, a score from 0 to 48 was assigned for transactional leadership; a score from 0 to 80 was assigned for transformational leadership; and a score from 0 to 16 was assigned for laissez-faire leadership.

To assess the differences among leadership styles on the basis of the achievement outcomes (AMO met or not met status), the sample was separated into two groups. Group 1 was composed of participants whose AMO status was not met. Thus, Group 2 was
composed of participants whose AMO status was met. To assess research question one: Are the three leadership styles identified by the Multifactor Leadership Questionnaire (MLQ) different among middle school principals that have met AMO and middle school principal that have not met AMO? a multivariate analysis of variance (MANOVA) with no covariates was employed. According to McMillan (2008), in cases where two or more dependent variables are being studied simultaneously, it is appropriate to use a multivariate statistical procedure (p. 264-265). Multivariate effect was determined with the use of the Wilks’ Lambda, with statistical significances set at p < .05. Research question 2: To what degree do any differences in leadership styles found for principals in schools with differing AMO status remain after controlling for principals’ characteristics including gender, age, years in education, and years as a principal; the researcher employed a multivariate analysis of variances (MANOVA) with the four characteristics as covariates.
CHAPTER Four: Research Findings

Purpose

The purpose of this research was to investigate the differences in middle school principals’ leadership styles in relationship to students’ academic achievement. Specifically, the researcher analyzed the leadership styles of Maryland’s middle schools principals that oversee schools that have met or not met their Annual Measurable Objectives (AMO) in the aggregated categories. Moreover, the researcher sought to determine which leadership style is dominant among middle school principals leading these schools by employing MLQ (Form 5X).

This research was based on the premise that specific leadership behaviors have been found to impact students’ academic outcomes. Indeed, the academic literature supports the view that school-based leadership influences student achievement (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008).

Profile of Study’s Participants

There were 154 middle school principals eligible to participate in the research. Of this sample group, 43 principals elected to participate. The participants consisted of 40.4% males and 59.5% females. Participants were asked to self-identify into one of four age ranges: 30-39, 40-49, 50-59, 60 and older. An itemization of participants’ age ranges are as follows: 9 participants selected 30-39; 17 participants selected 40-49; 13 participants selected 50-59 and 4 participants selected 60 and older. The participants’ average years of experience, as a principal were 9.3 years. Likewise, the participants’ average years in the education profession was 21.4 years.
Table 2 provides a description of the study’s participants’ educational experience.

Table 2:  
Participants’ Educational experience (Means and Standard Deviations)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Group</th>
<th>AMO Met</th>
<th>AMO Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Range</td>
</tr>
<tr>
<td>Years in Educ.</td>
<td>21.44</td>
<td>6.57</td>
<td>10-35</td>
</tr>
<tr>
<td>Years as Principal</td>
<td>9.3</td>
<td>4.0</td>
<td>4-18</td>
</tr>
</tbody>
</table>

Description of MLQ Scores

Table 3 describes the MLQ scores, which reflects the total score for each style. The table shows the mean, standard deviation and range for the total group, as well as those score differentiated by AMO met status. Notably, the possible scores for transactional leadership range from 0 to 48, scores for transformational leadership range from 0 to 80, and scores for laissez-faire leadership range from 0 to 16. Calculating and reporting the MLQ leadership style scores as total scores is consistent with past research that uses the MLQ survey.

In the Total Group, the mean score for Transformational Leadership was 63.72, with the possible score for this leadership style ranging from 0 to 80. Therefore, principals gained about 80 percent of the possible points in this category. In reviewing data for Transactional Leadership, the mean score was 21.95, with the possible score for this leadership style ranging from 0 to 48. In this category, principals on average gained less than half the possible points for this leadership style, suggesting that, on average, principals utilize transactional leadership behaviors less often than transformational
leadership. As to Laissez-faire leadership, the mean score was 2.47, with the possible score for this leadership style ranging from 0 to 16. The mean score for this style of leadership indicated that principals relied on this style of leadership the least, with an average score of only about 15% of the total points.

Pertaining to the AMO Met Group, the mean score for Transformational Leadership was 61.7, which indicates little difference between the mean score for the Total Group and the AMO Met Group. Additionally, principals in the AMO Met group gained 77 percent of the possible points in this category. Interestingly, the mean score for Transactional Leadership was 23.75, which was slightly above the mean for the Not Met Group. The mean score for the Laissez-faire leadership style for the AMO Met group was 2.5. Here again, principals were less inclined to use this leadership style.

Data pertaining to the AMO Not Met Group differed only slightly from the Met Group. The mean score for Transformational Leadership was 65.48, which is slightly higher than 61.7, the mean of the Met Group. The mean score for Transactional Leadership was 20.39 for the AMO Not Met Group. Here in, the AMO Not Met group, the mean score for Transactional Leadership was the lowest of the three groups. For Laissez-faire Leadership, the mean score was 2.43; this mean is slightly lower than the mean score for Laissez-faire Leadership in the AMO Met Group. Table 3, shows the descriptive statistics for principals’ MLQ leadership scores.
Table 3:

**Descriptive Statistics MLQ Scores (Means and Standard Deviations)**

<table>
<thead>
<tr>
<th>MLQ Scores</th>
<th>Total Group</th>
<th></th>
<th></th>
<th>AMO Met</th>
<th></th>
<th></th>
<th>AMO Not Met</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Range</td>
<td>Mean</td>
<td>S.D.</td>
<td>Range</td>
<td>Mean</td>
<td>S.D.</td>
<td>Range</td>
</tr>
<tr>
<td>Transformational</td>
<td>63.72</td>
<td>6.9</td>
<td>47-76</td>
<td>61.7</td>
<td>7.07</td>
<td>47-72</td>
<td>65.48</td>
<td>6.4</td>
<td>54-76</td>
</tr>
<tr>
<td>Transactional</td>
<td>21.95</td>
<td>5.8</td>
<td>11-32</td>
<td>23.75</td>
<td>4.7</td>
<td>11-30</td>
<td>20.39</td>
<td>6.3</td>
<td>13-32</td>
</tr>
<tr>
<td>Laissez-Faire</td>
<td>2.47</td>
<td>1.96</td>
<td>0-7</td>
<td>2.5</td>
<td>1.8</td>
<td>0-7</td>
<td>2.43</td>
<td>2.15</td>
<td>0-7</td>
</tr>
</tbody>
</table>

Findings of Research Questions

Research Question 1: Are the three leadership styles identified by the Multifactor Leadership Questionnaire (MLQ) different among middle school principals that have met AMO and middle school principal that have not met AMO? To address research question 1, a multivariate analysis of variance (MANOVA) with no covariates approach was used. According to McMillan (2008), in cases where two or more dependent variables are being studied simultaneously, it is appropriate to use a multivariate statistical procedure (p. 264-265). Multivariate effect was determined with the use of the Wilks’ Lambda, with statistical significances set at p < .05. Wilks’ Lambda is known to interpret the degree to which the variance in the dependent variable is explained by the model effect (McMillan, 2008). As seen in Table 4, the Wilks’ Lambda statistic indicated that AMO met or not met status explained a significant proportion of the variance in the three leadership styles taken as a group. The results of the Wilks’ Lambda (.776) provided that a multivariate effect was present with the three principals’ leadership styles in relationship to the variance of AMO met status. In other words, the result of the Wilks’
Lambda show AMO status accounts for 22.4% of the variability in leadership styles taken as a group. Table 4 shows the results of the Wilks’ Lambda as statistically significant at .018.

Table 4

*Multivariate Test of Leadership Effects on AMO Status*

<table>
<thead>
<tr>
<th>Wilks' Lambda</th>
<th>Hypothesis</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>.776</td>
<td>3.76</td>
<td>3</td>
<td>39</td>
<td>.018</td>
<td>.224</td>
<td></td>
</tr>
</tbody>
</table>

To address whether AMO status accounted for the variance for each of the three leadership styles taken separately, a statistical test of between-subjects effects was conducted with three separate ANOVAs. The goal was to establish whether any of the three leadership styles would possess a univariate effect in relationship to AMO status, with statistical significances determined at p < .05. As seen in Table 5, taken individually, none of the three leadership styles were determined to be statistically significant at the .05 level. Table 5 shows the p-value for the effect of transformational leadership at p=.073, which approached significance. Consequently, it can be said with reasonable confidence that AMO status accounts for 7.6% on the variance in transformational leadership. Likewise, at p=.057, transactional leadership approached the level of significance. Here again, it should be noted that AMO status accounts for 5.7% of the variance in transactional leadership style. Intriguingly, Table 5 shows that laissez-fair leadership had virtually no effect on the variable of AMO status, with p=.915. Notably, Table 5 shows that AMO outcomes accounted for about the same amount of variance in principals’ transformational and transactional leadership styles, and laissez-
faire accounts for nearly none of the variance. Below, Table 5 shows results for the univariate test between groups.

Table 5  
**Univariate (Between Groups) ANOVAs**

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Sq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>152.712</td>
<td>1</td>
<td>152.712</td>
<td>3.377</td>
<td>.073</td>
<td>.076</td>
</tr>
<tr>
<td>Transactional</td>
<td>120.679</td>
<td>1</td>
<td>120.679</td>
<td>3.850</td>
<td>.057</td>
<td>.086</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>.046</td>
<td>1</td>
<td>.046</td>
<td>.011</td>
<td>.915</td>
<td>.000</td>
</tr>
</tbody>
</table>

Research Question 2: To what degree do any differences in leadership styles found for principals in schools with differing AMO status remain after controlling for principals’ characteristics including gender, age, years in education, and years as a principal? To address research question 2, a multivariate analysis of variance (MANOVA) with covariates approach was used. Multivariate effect was determined with the use of the Wilks’ Lambda, with statistical significances set at p < .05. As seen in table 6, the Wilks’ Lambda statistic determined that the multivariate effect of leadership style on AMO continued to be statistically significant and accounted for about the same amount of variance when controlling for principals’ characteristics including gender, age, years in education, and years as a principal. None of the principals’ characteristics could be observed to account for a significant degree of the variance in leadership style. Below, Table 6 shows results for the univariate test of covariates, gender, age, years of experience as principal and years of experience in education.
Table 6

Multivariate Test of Covariates effect on AMO Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wilks' Lambda</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.935</td>
<td>.787</td>
<td>3</td>
<td>34</td>
<td>.510</td>
<td>.065</td>
</tr>
<tr>
<td>Age</td>
<td>.917</td>
<td>1.021</td>
<td>3</td>
<td>34</td>
<td>.396</td>
<td>.083</td>
</tr>
<tr>
<td>Yrs. Prin.</td>
<td>.963</td>
<td>.441</td>
<td>3</td>
<td>34</td>
<td>.725</td>
<td>.037</td>
</tr>
<tr>
<td>Yrs. In Ed.</td>
<td>.961</td>
<td>.461</td>
<td>3</td>
<td>34</td>
<td>.712</td>
<td>.039</td>
</tr>
<tr>
<td>AMO met</td>
<td>.788</td>
<td>3.057</td>
<td>3</td>
<td>34</td>
<td>.041</td>
<td>.212</td>
</tr>
</tbody>
</table>

Summary of Study’s Findings

As previously stated, purpose of this research was to investigate the differences in middle school principals’ leadership styles in relationship to students’ academic achievement. The research was based on the grounds that specific leadership behaviors have found to impact students’ academic outcomes, which is a tenet supported by academic literature (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008).

Of the 154 principals eligible to participate in the study, 43 elected to participate. Most of the study’s participants were over the age of 40 and the average years of experience as a principal for this group was 9.3 years. Furthermore, the sample group was composed of 40.4% males and 59.5% females.

The Total Group mean score for transformational leadership was 63.72, and for transactional leadership the mean score was 21.95. As to laissez-faire leadership, the
The mean score was 2.47. For the AMO Met Group, the mean score for transformational leadership was 61.7; the mean score for transactional leadership was 23.75; and the mean score for the laissez-faire leadership style for the AMO Met group was 2.5. In the AMO Not Met Group, mean score for transformational leadership was 65.48. The mean score for transactional Leadership was 20.39; and the laissez-faire Leadership mean score was 2.43.

The results of the Wilks’ Lambda (.776) showed that a multivariate effect was present with AMO met status on the variance of the three principals’ leadership styles. The results of the Wilks’ Lambda show that AMO outcomes accounted for 22.4% of the variability of leadership styles.

The univariate analysis showed that taken individually, none of the three leadership styles were determined to be statistically significant at the .05 level. However, both Transformational and Transactional Leadership approached significance. Therefore, it can be assumed cautiously that AMO status accounted for 7.6% of the variance on transformational leadership; and AMO status accounted for 5.7% of the variance in transactional leadership style. Additionally, the Wilks’ Lambda statistic determined the multivariate effect of leadership style on AMO continued to be statistically significant and accounted for about the same amount of variance when controlling for principals’ characteristics including gender, age, years in education, and years as a principal.
CHAPTER Five: Summary, Conclusions, Discussion, and Recommendations

Summary

Contained within Chapter five is a summary of the study, which includes the purpose and significance of the study and a brief review of the literature. Additionally, this chapter will review the data collection and analysis procedures, as well as the study’s findings. Chapter V will end with the limitations of the study and a discussion of the study’s conclusions and recommendations based on an analysis of the study’s data.

As accountability efforts in education have increased, there has been an increased interest in effective instructional leadership. Officials have looked toward school-based leadership as a means to improve student achievement and to close the achievement gap (P.L. 107-110; the reauthorization of the Elementary and Secondary Education Act [ESEA] signed into law in January of 2002). Likewise, federal policymakers view school-based leadership as fundamental to leading school reforms that increase student achievement and close the achievement gap (U.S. Department of Education, 2010).

The purpose of this research was to investigate the differences in middle school principals’ leadership styles in relationship to students’ academic achievement. Particularly, the study analyzed the leadership styles of middle schools principals that headed schools that have met or not met their Annual Measurable Objectives (AMO). Employing the MLQ survey, the researcher examined principals’ leadership styles, which provided the participants scores from 0 to 48 for transactional leadership, scores from 0 to 80 for transformational leadership, and scores from 0 to 16 for laissez-faire leadership. Moreover, the study examined whether differences that were found in leadership styles of principals in schools with differing AMO status remain after controlling for principals’
self-identifying characteristics of: age, gender, totals years of experience as principal, years of experience in education.

This study’s premise was grounded in the abundant research on leaders’ influences on organizational outcomes. Indeed, the academic literature supports the notion that differences in leaders’ behaviors relate to differences in their followers’ work outputs (Barker, 2001; Bass & Avolio, 1994; Goleman, 2000; Goleman et al., 2002; McClelland & Burnham, 2003; Litwin & Stringer, 1968) and educational research has supported the notion that effective leadership positively influences student achievement (Akpan & Archibong, 2012; Baker, 2001; Goddard & Miller, 2010; Gulcan, 2012; Leithwood & Jantzi, 2005; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008).

Consequently, the research was guided by the following research questions:

Research Question 1:

Are the three leadership styles identified by the Multifactor Leadership Questionnaire (MLQ) different among middle school principals that have met AMO and middle school principal that have not met AMO?

Research Question 2:

To what degree do any differences in leadership styles found for principals in schools with differing AMO status remain after controlling for principals’ characteristics including gender, age, years in education, and years as a principal?

Of 154 principals eligible to participate in the study, 43 principals elected to participate by completing the MLQ survey questionnaire. This tool consisted of 45 questions, asking participants to rate their leadership behavior using a 5-point Likert-type
scale. The survey (MLQ) measured the extent to which each leader uses transformational leadership, transactional leadership, and laissez-faire leadership.

To assess the differences among leadership styles on the basis of the achievement outcomes, the sample was separated into two groups and a multivariate analysis of variance (MANOVA) with no covariates employed, which determined whether a multivariate effect was present. To assess research question 2, the researcher employed a multivariate analysis of variances (MANOVA) with the four characteristics as covariates.

The results of the Wilks’ Lambda (.776) showed that a multivariate effect was present with AMO met status on the variance of the three principals’ leadership styles. The results of the Wilks’ Lambda show that AMO status significantly accounted for 22.4% of the variability of leadership styles.

The univariate analysis showed that taken individually, none of the three leadership styles were determined to be statistically significant at the .05 level. However, both transformational and transactional leadership approached significance. Therefore, it can be said with reasonable confidence that AMO status accounts for 7.6% of the variance of transformational leadership; and AMO status accounts for 5.7% of the variance of transactional leadership. Additionally, the Wilks’ Lambda statistic determined that the multivariate effect of leadership on AMO continued to be statistically significant and account for about the same amount of variance when controlling for principals’ characteristics including gender, age, years in education, and years as a principal.
Conclusions and Discussion

In this section, the research findings are discussed within context of the academic literature on leadership. The generalizations made by the researcher are grounded in the findings of the study and supported by the study’s conceptual framework.

1. Support for Conceptual Framework. Underpinning this study was a conceptual framework that postulated that organizational leaders have an impact on the outcomes of the organization. Furthermore, it is understood that differences in organizational outcomes are subject to the specific behaviors of the leader (Barker, 2001; Bass & Avolio, 1994; Goleman, 2000; Goleman et al., 2002; McClelland & Burnham, 2003; Litwin & Stringer, 1968). As previous chapters explained, researchers have identified certain types of leadership behaviors or leadership styles as having a greater impact on the effectiveness of organizations (Barker, 2001; Bass & Avolio, 1994; Goleman, 2000; Goleman et al., 2002; McClelland & Burnham, 2003; Leithwood & Jantzi, 2005; Litwin & Stringer, 1968; Marks & Printy, 2003; Marzano & Walters, 2005; Robinson, et al., 2008). It should be highlighted that the notion that leadership styles influence organizational outcomes was supported by research conducted in both the business and educational realms. This alignment of the research, serves to strengthen this study’s conceptual framework; and, thus it supports the study’s conclusions. Based on what is known about leaders’ impact on organizational outcomes, this study was designed to explore the degree to which research-based leadership practices or leadership styles have on specific student academic indicators. More specifically, the study set out to find the degree to which
principals’ leadership styles impact students’ achievement. To accomplish this task, the study aimed to identify leadership styles in principals that were known to be related to either positive or negative organizational outcomes. As such, transformational, transactional and laissez-faire leadership styles were singled out for investigation and these specific leadership styles were analyzed within the content of AMO status. Consequently, it was found that AMO status accounts for 22.4% of the variability in principals’ leadership styles. Notably, this study’s findings served to support the established educational leadership research.

Accordingly, a meta-analysis conducted by Marzano, Waters and McNulty (2005) concluded that school-based leadership is a significant factor in increasing student achievement. In research conducted on transformational and instructional leadership, Goddard and Miller (2010) found that principals’ application of transformational and instructional leadership is important for improving instruction. Certainly, there is a breadth of academic literature that support the tenets articulated in this research study. Taken as a whole, the findings herein contribute to a rich discourse in educational leadership.

2. Effects of Specific Leadership Styles. Research question one asked: are the three leadership styles identified by the Multifactor Leadership Questionnaire (MLQ) different among middle school principals that have met AMO and middle school principals that have not met AMO? The findings of the study support the notion that differences in leadership styles do exist among principals that have met or have not met their students’ achievement indicator (AMO). Significantly, AMO status explains 22.4% of the variability in principals’ leadership styles. This
finding has strong support in the academic literature. Mark and Printy (2003) not only found that principals’ leadership behaviors impact students’ academic outcomes, but also principals are most effective when they vary their leadership styles. Interestingly, the idea that leadership style flexibility may enhance effectiveness was illuminated by the findings of this research. While the univariate analysis showed that none of the three leadership styles were determined to be statistically significant at the .05 level, when analyzed individually, the analysis showed that both transformational and transactional leadership approached significance. Notably, AMO status accounts for 7.6% of the variability on transformational leadership; and AMO status accounts for 5.7% of the variability on transactional leadership. This finding is more relevant when one considers that laissez-faire leadership style explained nearly none of the variability in student achievement outcomes. Given that laissez-faire leadership is characterized by inactivity, passive and avoidant decision-making, the results found in this study do not greatly differ from established leadership theory. It should be noted that this study’s participants reported low usage of the laissez-faire leadership style. While the highest possible score for laissez-faire leadership was 16, the highest laissez-faire leadership score attained by the study’s participants was 7. Additionally, the mean for both met and not met groups was 1.8 and 2.4, respectively. By contrast, the highest reported score for transformational leadership style was 76, which was much closer to the maximum score of 80, indicted much higher usage of this leadership style. However, when considering the differences found in leadership style, it must be acknowledged
that principal in the AMO Met Group used transformational leadership less than transactional leadership. Furthermore, principals in the AMO Not Met Group used transformational leadership more often than the principal in the AMO Met Group. Indeed, this finding does not differ greatly from established research on transformational and transitional research. In a study testing the predictive performance of Army units by assessing transformational and transactional leadership, Bass, Avolio, Jung and Berson (2003) stated, “It looks fair to say that it took both active transaction and transformational leadership to be successful in this performance context. Being a passive leader waiting for problems to arise and then correcting them was obviously counterproductive in terms of predicting unit performance (p. 215).” Recognizably, the study on Army unit effectiveness may not have a strong generalizability to the everyday school workplace environments; however, two things are worth noting: a) the above study tested the effectiveness of leadership styles in high stress environments, which can exist in low-performing school settings; and more importantly 2) laissez-faire leadership had no impact on the units’ effectiveness, which is consistent with the findings of this research study. Still, there is a plethora of research that supports the tenet that transformational leadership influences academic outcomes. Research conducted by Deal and Peterson (1999) found that transformational leadership was related to schools that exhibit positive and productive environments. Moreover, examining instructional and transformational leadership, Robinson, et al., (2008) found that both instructional and transformational leadership contributed to an increase in students’ learning outcomes. Given recent research that reveals a strong
relationship between transformational leadership and academic outcomes, one may wonder why such a strong relationship was not found by this study. It is conceivable that professional best practices (instructional leadership behaviors) are practiced by principals in a manner consistent with transactional leadership style, especially in schools that are underperforming. Indeed, transformational and transactional can be considered broad leadership styles that allow for more specific leadership behaviors and practices, such as instructional leadership, to fall within its umbra.

3. Effects of Principals’ Characteristics. Research question two asked: To what degree do any differences in leadership styles found for principals in schools with a differing AMO status remain after controlling for principals’ characteristics including gender, age, years in education, and years as a principal? To isolate the impact leadership styles had on student outcomes, it was prudent for the varying characteristics of the principals to be tested. With this question, the researcher asked, what is the likelihood that leadership styles were associated with confounding variables? Is it conceivable that the gender of the principal played a role in leadership style? The results of the multivariate analysis, Wilks’ Lambda (.935) found that gender had nearly no association with leadership style. The statistical analysis on the variable age obtained similar results. Comparably, the results of the multivariate analysis, Wilks’ Lambda (.917) found that age, too, had nearly no association. While it could be argued that principals’ gender and age should not have factored into principals’ leadership styles, it was more reasonable to believe that principals’ years of experience as a principal or years of experience
in education could have been associated with differing leadership styles. However, the multivariate analysis did not yield evidence of such an association. With a Wilks’ Lambda of 0.963, principals’ years of experience as a principal showed no significant statistical effect on leadership style. Moreover, similar results were uncovered when this analysis was conducted on principals’ experience in education. The results of the multivariate analysis found that principals’ years of experience in education explained no variability in principals’ leadership styles. Moreover, these results confirmed that multivariate effect of leadership on AMO continued to be statistically significant and account for about the same amount of variance when controlling for principals’ characteristics including gender, age, years in education, and years as a principal. These results are supported by recent research in the area of educational leadership styles. In 2008, D. Litton conducted a dissertation study on the managerial styles of superintendents in Texas; she concluded that no relationship existed among age, gender, years of experience and Texas academic indicators. Taken in context, AMO status can be reasonably assumed to be the precipitating factor explaining the variability of principals’ leadership styles.

Recommendations

The recommendations enumerated are based on the findings and conclusions of this study.

Professional Practice

1. School districts should consider assessing principals’ leadership style and develop professional learning activities that promote greater use of effective leadership
behaviors. While the findings of this current research imply that principals should not overlook the value of transactional leadership style, the academic literature supports the sense that transformational and transactional leadership styles are effective in leading schools to desirable academic outcomes. These leadership styles require that the school leader be proactive and results-driven. Principals that have a greater understanding of their dominant leadership styles could leverage these talents to maximize the development of productive and positive learning environments.

2. The commercial market for leadership development tools is vast. School districts should take advantage of programs designed to help leaders recognize their leadership styles, traits or strengths. Current school leaders would be able to use these programs to enhance their leadership practices. Additionally, school districts should use assessments of leadership styles, traits or strengths as a part of the hiring practice.

3. Supported by this study is the notion that leaders are effective when they use a variety of leadership styles. Additionally, the literature supports the notion that transformational and transactional leadership are effective styles of leadership. A major component of transformational leadership is shared leadership. Transformational leaders are able to nurture a shared sense of mission in their followers. However, school-based hierarchical structures are often not conducive to effective development of shared leadership. Principals and district leadership should evaluate the school-based hierarchical structures for the purpose of creating greater opportunities for shared leadership. A good start for this
evaluation would be to examine the duties and responsibilities of the schools’ department heads. Often the responsibilities of the schools’ department heads are focused on managing inventory. In a shared leadership approach, the department heads’ primary focus would be supporting quality instruction and developing high impact professional learning for teachers within the given department. Moreover, this structure could facilitate the creation of learning communities within the distinctive departments.

Further study

1. The present research did not investigate the relationship between leadership style and emotional intelligence, however, research by Gardner and Stough (2002) found a strong relationship between transformational leadership and elevated emotional intelligence. Building on the research of emotional intelligence and leadership, further research could analyze both of these constructs within the context of increases in student achievement.

2. A vulnerability of this study is its reliance on self-rating data that was used to determine principals’ leadership styles. Inherent in any self-rating instrument is the possibility of social desirability bias. To mitigate the impact of social desirability bias, future studies could utilize a multi-rater survey instrument, which is designed to measure individuals’ leadership styles with data collected by the given leader and his or her subordinates.
3. A study of principals’ leadership styles and its impact on student achievement on a national level would provide further insight and greater generalizability. It would be prudent for such as study to isolate which leadership style has a greater impact on student achievement. A larger study on the impact of leadership style on student achievement might incorporate a statistical logistic regression, which would provide future studies with greater predictive power. Furthermore, this topic would benefit from a study that analyzes principals’ leadership styles within the context of student achievement by contrasting low-performing and high-performing schools.

4. Developing research that evaluated the separate components of transformational and transactional leadership and assess which components have a predictable outcome on increases in student achievement would add to the depth of knowledge in the area of educational leadership and be helpful in isolating the most effective leadership behaviors.

Limitations of the Study

This study was limited to middle school principals that are employed during the 2014-2015 school year. The research questionnaire was distributed to a sample group of 200 participants within the twenty-four Maryland school districts. However, two districts denied research participation from principals. Participation in this study was strictly voluntary; thus the data collected for the study was limited to individuals that chose to respond to the questionnaire. The results of this study may only generalize schools and
districts that have similar demographics and characteristics as schools and districts in the state of Maryland.

When considering the findings of this research, it must be acknowledged that the principals’ leadership styles were ascertained with a self-rating instrument (MLQ Form 5X). Inherent in any self-rating instrument is the possibility of social desirability bias. Therefore, it is conceivable that some principals may have responded to the survey instrument in a manner that reflected their view of best leadership practices, and not necessarily their current leadership behaviors.

Because of the nature of ex post facto research, this study attempted to determine antecedents from known effects. Therefore, the subjects’ leadership styles, which are the independent variables, were not manipulated by the study. Consequently, determining causal inferences between the variables was not appropriate. Generalizations of the study’s findings are limited by the nonrandomized sample group. For the purposes of this study, schools meeting the state mandated achievement goals, AMO, were deemed a valid indicator of academic success. Nevertheless, it must be acknowledged that AMO is a blunt measurement of student achievement. It is not sensitive to subtle changes in students’ academic growth; the limitation of AMO as a measure of student achievement could be seen as reducing the findings’ statistical relationships.
Appendix A: Invitation Letter to Principal to Participate in the Study

Dear Principal,

You are receiving this email because you are a middle school principal in Maryland and you have been selected to participate in a research study.

I am inviting you to participate in a research study to examine the leadership styles and practices of middle school principals. This study will serve as the basis of my doctoral dissertation at the University of Maryland, College Park. I hope that findings from this research will inform college professors, administrators, and policymakers about principals’ leadership styles.

This study will be conducted through a 10-15 minute survey that you can complete via this survey monkey website. Please go to the link in this email and complete the brief survey on leadership styles. Participation in this study is completely voluntary, and all participant information shared will remain confidential. There are no foreseeable risks in this study. Your responses to the survey will be kept confidential and you will remain anonymous. If you wish to complete the survey, please click the link below:

[---Insert link---]

If you have any questions, please contact me at Karim_Shortridge@hcpss.org. My advisor for this research is Dr. William O. Strein, and he can be contacted at strein@umd.edu.

Thank you,

Karim Shortridge
Appendix B: Online Consent Form

Introductory Page for Survey

Q1 I am inviting you to participate in this research project because you were or currently are a middle school principal. The purpose of this research project is to examine the leadership styles and practices of middle school principals.

You will be asked to fill out an online survey, which will take approximately 10-15 minutes.

There are no direct benefits from participating in this research. In the future, however, it may lead to better-informed policy decisions. There are no known risks to participants.

Any potential loss of confidentiality will be minimized by storing all data on a password-protected website and on password-protected computers during data analysis. Only Karim Shortridge, the investigator, and William Strein, D.Ed., his research adviser, will have access to the collected data.

If a report or article is written about this research project, your identity will be protected to the maximum extent possible. Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

Upon completing the entire survey, you will have the opportunity to submit your email address to be entered into a drawing to receive one of two $75 gift certificates to Amazon.com. The drawing will take place after all responses have been collected, approximately a month after the beginning of the survey. Winners will be notified and receive their prize via the provided email address.

If you have questions, concerns, or complaints, please contact the investigator or the research adviser:

Karim Shortridge
School Educational Leadership Ed.D Student University of Maryland, College Park
Karim_Shortridge@hcpss.org

William Strein, Ed.D. Research Adviser
University of Maryland, College Park strein@umd.edu

This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects. If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:
Q2 I am at least 18 years of age, I have read the consent information, and I voluntarily agree to participate.
☐ Yes
☐ No
If No Is Selected, Then respondent Skips To End of Survey without completing any items
Appendix C: Permission for Use of Multifactor Leadership Questionnaire

To whom it may concern,

This letter is to grant permission for Karim Shortridge to use the following copyright material:

Instrument: *Multifactor Leadership Questionnaire*

Authors: *Bruce Avolio and Bernard Bass*

Copyright: *1995 by Bruce Avolio and Bernard Bass*

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

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Appendix D: Sample of Multifactor Leadership Questionnaire

Multifactor Leadership Questionnaire
Leader Form

My Name: ____________________________ Date: __________
Organization ID #: __________________ Leader ID #: ______________

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.**

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word “others” may mean your peers, clients, direct reports, supervisors, and/or all of these individuals.

Use the following rating scale:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Frequently, if not always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. I provide others with assistance in exchange for their efforts
2. I re-examine critical assumptions to question whether they are appropriate
3. I fail to interfere until problems become serious
4. I focus attention on irregularities, mistakes, exceptions, and deviations from standards
5. I avoid getting involved when important issues arise

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