THE RELATIONSHIP BETWEEN SERVANT LEADERSHIP AND STUDENT
ACHIEVEMENT IN SOUTHWEST VIRGINIA SCHOOLS

by

Christopher Thomas Stanley Crabtree

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

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February, 2014
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ABSTRACT

The purpose of this correlational study is to test the theory of servant leadership that relates the servant leadership characteristics of school principals to student achievement in Southwest Virginia schools. The primary independent variable was principals’ servant leadership characteristics as derived from a self-assessment survey (SASL). The dependent variable was student achievement as measured by students’ scores on the Virginia Department of Education Standard of Learning achievement tests in math and reading. Other variables tested were principal total experience in education, principal total experience in administration and principal education level. The data analysis chosen for this research is the Pearson Product-Moment Correlation Coefficient, which is more commonly known as either Pearson’s correlation or Pearson’s r. However, because 3 out of 6 variables failed normality tests, Spearman’s rho, a nonparametric test, was chosen as the best analysis for the monotonic data.

The results of analysis yielded a significant positive correlation of principal servant leadership characteristics and reading achievement scores. There were no other significant findings among other variables tested.

Keywords: servant leadership, principal leadership, student achievement, reading achievement, mathematics achievement, Standards of Learning.
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Finally, I would like to extend a word of encouragement to the fine, intelligent, and wonderfully created fellow students who the Lord has brought into my life through Liberty University. Believe and know this, the Lord will strengthen you and guide you if you put Him first in all things.
DEDICATION

This work I dedicate unto my children, Christopher Jonah and Abigail Mae. Thank you for being patient with me when I had homework and seemed too busy. I love you and hope this is an example for you to strive for what seems impossible; hope for what seems unachievable; dream big.

I am finished with homework now. Let’s go play.
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CHAPTER ONE: INTRODUCTION

High stakes testing and accountability measures have vastly increased the pressures to succeed in public education. The federal No Child Left Behind Act (NCLB) of 2002 has introduced and created a test-driven educational atmosphere. The pressures to succeed have sparked a renewed interest in the driving force behind student achievement. Researchers are seeking the central factor in the formula for successful learning. Several studies have identified instructional leadership provided by the principal as at least a causative influence to increased student achievement (DeBevoise, 1984; Lezotte, 1994; Hallinger, Bickman & Davis, 1996; Hallinger & Heck, 2000; Waters, Marzano, & McNulty, 2003). However, the extent of principal instructional leadership either directly or indirectly affecting student achievement remains undetermined and difficult to measure (Witziers, Bosker & Kruger, 2003, p. 398). Principals are becoming increasingly more accountable for the achievement scores of their students. If principals are to be held accountable for student achievement, research must be focused upon those behaviors that have an impact on student learning.

While the research base for principal leadership and student achievement is vast, this researcher proposes to take a closer look at the principal leadership behavior, more specifically, servant leadership behavior, to examine possible relationships with student achievement. This chapter will take a closer look at the aim of this study juxtaposed to current research regarding principal leadership and student achievement and will be divided in the following sections: (a) background; (b) problem statement; (c) purpose statement; (d) significance of the study; (e) research questions; (f) hypotheses; (g) identification of variables; (h) delimitations; and (i) definitions.
Background

The federal No Child Left Behind Act (NCLB) of 2002, which is the reauthorization of the Elementary and Secondary Education Act (ESEA), has at the very least brought attention to the need for accountability among educators for student achievement, progress and growth. Not since the famous “A Nation at Risk” report has any federal accountability measure achieved so much critical attention. According to Fuller, Wright, Gesicki, & King (2007): “the fact that student performance has generally reached a plateau raises the crucial question as to whether standards-based accountability is sufficient to advance more effective and equitable schools” (p. 275).

Nevertheless, the mandates of NCLB “to produce high levels of student performance and to staff schools with highly qualified (and skilled) teachers are perhaps the most challenging requirements in the history of education” (O’Donnell & White, 2005, p. 56). There are tremendous pressures “to make progress in student achievement or face specific sanctions” (Hurt, 2012, p. 71). Today’s principal must be willing to face these challenges head on, while at the same time embracing the role of instructional leader, facilities manager, business officer and behavior modifier.

In very similar fashion to the increase in accountability, a sharp increase in scrutiny has developed. This can be largely attributed to the political climate and the enormous burden of financing education. The demand for “bang for your buck” has been interpolated into the measure of quality education. This type of atmosphere was not as prevalent during the time of some of the early research on principals’ instructional behavior and student achievement (Andrews & Soder, 1987; Edmonds, 1979; Hallinger, Bickman & Davis, 1989; Heck, Larsen & Marcoulides, 1990; Johnson & Holdaway, 1991). During these times principals were largely

More current research suggests that principals are largely responsible for overall school climate (Griffith, 1999; Varner, 2007; McFarlane, 2010; Velasco, 2011; Rhoden, 2012) and even teacher self-efficacy (Nir & Kranot, 2006; Charf, 2009). According to Sebastian & Allensworth (2012): “School climate affects all classrooms and so may have the broadest reach across the many different classes in a school” (p. 645). While these studies are not centered on student achievement, a direct effect on school climate and teacher self-efficacy would lend to a more indirect effect on student achievement.

According to Bredeson (1996), “there is ample evidence in the literature that effective leadership can and does positively affect school and student outcomes” (p. 255). This positive effect has to be indirect in nature because the general tasks of instruction are mediated by teachers and other professionals, not the principal (Gentilucci & Muto, 2007, p. 220). Essentially, the most influence a principal can have on students is by “influencing the influencers, rather than influencing students themselves” (Gentilucci & Muto, 2007, p. 220).

According to Gentilucci & Muto (2007), “[I]f a causal relationship exists between principal leadership and student achievement, as some research suggests, it is important to identify with greater specificity those behaviors that exert the most powerful effect on achievement” (p. 221). The line between indirect and direct instructional leadership is not so clear, however. Principals who view themselves as active instructional leaders tend to actively engage in meaningful individual academic and leadership relationships with students (Gentilucci, 2004). Waters, Marzano & McNulty (2004) suggest that these individuals routinely visit
classrooms, engage in praising academic success, and are routinely visible throughout the school grounds.

If these types of behaviors are indicative of an effective instructional leader, it is quite possible that different types of leaders may exhibit these behaviors and have a stronger relationship with student achievement. This study seeks to examine possible relationships of principals’ servant leadership characteristics and student achievement.

**Problem Statement**

The context for this study is the determination of possible relationships between principals’ servant leadership characteristics and student achievement in reading and mathematics. This study is focused in Southwest Virginia schools; more specifically the K-12 schools of Region VII, which consist of 19 districts. All of the schools in these districts share very similar demographic and socioeconomic student populations. The problem is that these schools score very different on the Virginia Standards of Learning assessments in reading and mathematics despite similarities in most domains of demographics and socioeconomic status. There are many possible reasons for this disparity; however this researcher seeks to examine the servant leadership behaviors of the school principal for possible relationships.

Although servant leadership, as defined by Robert Greenleaf in 1970, is a newer development in leadership studies, the long term effect of servant leadership on the organization needs to be studied (Dierendonck, 2011, p. 1254). The servant leadership theory requires further testing of more “empirical” rather than “anecdotal” evidence (Sudhukar and Vinod, 2011, p. 465). This study seeks to add to the overall body of research regarding principal leadership behaviors and student achievement and, more specifically, principal servant leadership characteristics and student achievement.
Purpose Statement

The purpose of this correlational study is to test the theory of servant leadership and possible relationships of school principals’ servant leadership characteristics and student achievement in reading and mathematics, for southwest Virginia schools. The independent variable, servant leadership characteristics of principals, will be generally defined as the qualities of the principal that are identified on the Self-Assessment of Servant Leadership. The dependent variables, standardized achievement test for reading and mathematics, will be generally defined as the proficiency percentage of the students of the school for the corresponding Virginia Standards of Learning End-of-Course assessment.

Significance of the Study

This study seeks to add to the existing knowledge base concerning principal leadership and student achievement. More specifically, this study seeks to examine servant leadership characteristics of principals and possible relationships with student achievement. Cotton (2003) studied 81 research articles (post-1985) on principal effectiveness in relation to student achievement. She concluded the following:

Can the importance of the principal’s role in fostering student achievement be overstated? The principal does not affect student performance single-handedly, of course, or even directly. Yet the evidence clearly shows that, working with others in the ways outlined in this report, principals do have a profound and positive influence on student learning. The converse is also true: High-achieving schools whose principals do not lead in these ways are difficult to find (p. 74).

This study is important because very little research has been conducted concerning servant leadership and student achievement. This researcher is interested in adding to the overall body
of knowledge vis-à-vis principal effect on student achievement as well as helping to increase the current knowledge base regarding servant leadership and student achievement. If strong relationships are found, future work can be aimed at training principals in areas specific to servant leadership theory, specifically the common traits originated by Greenleaf (1970) and adapted by Spears (1995).

**Research Questions**

This study will examine the following research questions:

RQ1: Is there a relationship between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools?

RQ2: Is there a relationship between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools?

RQ3: Is there a relationship between principal total years of experience in education, principal total years of experience in administration, principal education level and student achievement in Southwest Virginia schools?

**Null Hypotheses**

The null hypotheses for this study are:

H01: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H02: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.
H03.1: There is no statistically significant relationship between principal total years of experience in education and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.2: There is no statistically significant relationship between principal total years of experience in education and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.3: There is no statistically significant relationship between principal total years of experience in administration and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.4: There is no statistically significant relationship between total years of experience in administration and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.5: There is no statistically significant relationship between principal education level and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.6: There is no statistically significant relationship between principal education level and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

**Research Plan**

The research design used in this study is non-experimental correlational research, which is widely used to discover relationships (Gall, et al 2007, p. 332). The primary independent variable was principals’ servant leadership characteristics as derived from a self-assessment survey. The dependent variable was student achievement as measured by students’ scores on the
Virginia Department of Education Standard of Learning achievement tests in math and reading. Other independent variables tested for possible relationships with student achievement were: principal total years of experience in education, principal total years in administration, and principal education level.

The instrumentation used in this survey research was the Self-Assessment of Servant Leadership survey (Taylor, 2002). This is a 24 item self-assessment measuring servant leadership characteristics of leaders. This survey was distributed to school principals from Southwest Virginia. The survey was administered online through an online survey provider. The achievement data used in the study was taken from public archival achievement scores published by the Virginia Department of Education. These scores were scaled scores taken from student achievement tests in each district. The scores can range from a possible 0 to a high of 600. The scaled score used in this study was an average of those students in the particular school used for research.

The data analysis chosen for this research is the Pearson Product-Moment Correlation Coefficient, which is more commonly known as either Pearson’s correlation or Pearson’s r. According to Gall et al. (2007), a correlational technique is best used “when both variables that we wish to correlate are expressed as continuous scores” (p. 347). Additionally, “product-moment correlation is the most widely used bivariate correlational technique because most educational measures yield continuous scores and because r has a small standard error” (p. 347).

Definition of key terms

*Authentic Leadership:* The actual development of the term authentic leadership was not developed until 1993 when R.W. Terry penned *Authentic Leadership: Courage in Action.* Further advance was shaped by George Bill in 2003 when he wrote Authentic Leadership:
Rediscovering the Secrets to Creating Lasting Value. According to Gardiner (2011): “authentic leadership rests on the belief that a resolute stance and confidence in one’s speech and action is indicative of strong leadership” (p. 100).

Jesus: The historical Jesus Christ of Nazareth.

Leadership: Wren (1995) defines leadership as an “effort of influence and the power to induce compliance” (p. 95).

NCLB: No Child Left Behind (2002): the reauthorization of the Elementary and Secondary Education Act (ESEA) signed into law by President George W. Bush.


Servant Leadership: According to Greenleaf (1970, p. 7): “The Servant-Leader is servant first. It begins with the natural feeling that one wants to serve. Then conscious choice brings one to aspire to lead.”

Transactional Leadership: Burns (1978) introduced transactional and transformational leadership in his book Leadership. “The key to the transactional style of leadership is the exchange between the superior and the subordinate” (Humphreys & Einstein, 2003, p. 85). The motivation of the transactional leader and follower tends to be material in origin.

Transformational Leadership: Transformational leadership was first devised as a theory by Robert Burns in 1978. This was born out of a shift in organizational needs from a “hierarchal bureaucratic” machine into a body in which the employees share in transforming the organization from the “inside out” (Patterson & Stone, 2005, p. 7). Bass & Avolio (1994) suggest that “transformational leadership is an expansion of transactional leadership” (p. 9).
*Self-Assessment of Servant Leadership survey (SASL):* Servant leadership instrument developed by Dr. Timothy Taylor in 2002. A 24 item self-assessment based on a Likert scale measuring servant leadership.
CHAPTER TWO: REVIEW OF THE LITERATURE

The literature reviewed in this chapter consists of outlining the development and organization of servant leadership. Additionally, this literature review intends to reveal research regarding servant leadership and the school principal. Furthermore, principal leadership and student achievement will be discussed in light of relevant literature. There are many research articles and dissertations that study servant leadership. There are also books that develop servant leadership theory, mainly by author Robert K. Greenleaf. Clearly, servant leadership is a relatively new and viable leadership theory among many historical leadership theories. This literature review will reveal a research gap concerning the relationship between the servant leadership of school principals and student achievement. Chapter two consists of the following sections: (a) theoretical framework, (b) servant leadership, (c) theoretical model of servant leadership, (d) servant leadership vs. transformational leadership, (e) empirical research in servant leadership, (f) conceptual framework and (g) summary.

Theoretical Framework

Throughout the years scholars have tried to find a clear model of leadership that would stand up to the pressures of direction and change that constantly bombard organizations. Whether the model is transactional, transformational, charismatic or authentic, the rationale for study is to find the ways leaders “approach the task of leading” (Savage-Austin & Honeycutt, 2011, p. 49).

In approaching the task of leadership, it is quite clear that leadership behavior has a great deal to do with leadership outcomes. If outcomes are all that is needed, then bullying and authoritarian leadership would be acceptable leadership models. Organizations can’t promote those types of leadership. What organizations are promoting is a type of leadership that is
“value-laden ….. under the terms transformational leadership, authentic leadership, spiritual leadership, and servant leadership” (Sendjaya, Sarros, & Santora, 2008, p. 402). Dierendonck (2010) has assessed that “leadership studies have clearly moved away from as strong focus on, most notably, transformational leadership toward a stronger emphasis on a shared, relational, and global perspective where especially the interaction between leader and follower are key elements” (p. 1229).

Rather than the Machiavellian, self-serving and rigid leadership that can be restricting and patronizing, agencies are moving toward “governance based on viewing individuals as pro-organizational, self-actualizing, and trustworthy” (Dierendonck, 2010, p. 1229). This particular shift is most notably intrinsic in the transformation from self-serving and fulfilling the needs of the leader and the organization, to selfless service and fulfilling the needs of the followers, who are integral to the organization.

21st century organizations have to find a way to gain competitive edge. Gone are the days that earning a profit are the only indicators of a successful business (Savage-Austin & Honeycutt, 2011, p. 50). Avolio & Gardner (2005) suggest “that today’s current challenges in finding this authentic leadership have precipitated a renewed focus on restoring confidence, hope, and optimism; being able to rapidly bounce back from catastrophic events and display resiliency; helping people in their search for meaning and connection by fostering a new self-awareness; and genuinely relating to all stakeholders” (p. 316).

Servant leadership may be the “people-centered” approach needed in today’s trying times (Dierendonck, 2010, p. 1230). Sendjaya, et al (2008) contends that the servant leadership approach is a “leadership approach that appears more relevant and timely in the present context than other value-laden leadership approaches” (p. 402). This theory is postulated against the
other theories that push the organization over the individual. It is clear that the need to research servant leadership is intensely positioned within the current needs of the organizational realm.

This need for research in servant leadership is also positioned in a greater extent it seems in the public school realm, where the organizational requirements naturally push the individual to the forefront. It is the goal of this literature review to find servant leadership as a viable leadership theory that warrants the current research regarding principals as servant leaders and possible relationships with student achievement in Southwest Virginia schools.

**Leadership theories.** As long as humans have existed, there has been a need for leadership. Whether it is tribes, clans, nations or neighborhoods, someone must be leading, and some must be following. Wren (1995) defines leadership as an “effort of influence and the power to induce compliance” (p. 95). Many variables that deal with leadership, such as work, organizations, systems, management, supervision and leadership style have been researched for decades.

Theories have evolved and ideals have changed as the body of research has grown to include and even welcome new theories of leadership that may have been rejected at one time. Historically, transactional, transformational, charismatic and authentic leadership theories have been irrepresible and resilient. Each of the aforementioned leadership theories will be briefly reviewed with the intention of forming a basis for servant leadership theory and a necessity for research regarding such.

**Historical leadership.** One of the major contributors to the early research in organizational management and leadership theory was Max Weber, a German sociologist. Weber’s research revealed the “parallels between the mechanization of industry and the proliferation of bureaucratic forms of organization” (Morgan, 1997, p. 17). His comparisons
were related to the progress of the industrial revolution, in which he found that “the bureaucratic form routinized the process of administration in the same manner that the machine routinized production” (Stone & Patterson, 2005, p. 2). Weber was concerned with the bureaucracy because of the lack of personality (Stone & Patterson, 2005, p. 2). His concerns were not effective in delaying or preventing what has been coined as “classic management theory” or “scientific management” (Stone & Patterson, 2005, p. 2).

The scientific management approach has been accused of being too impersonal because workers are viewed as instruments or just another cog in the machine (Stone & Patterson, 2005, p. 2). “The function of a leader under scientific management theory was to establish and enforce performance criteria to meet organizational goals; therefore, the focus of a leader was on the needs of the organization and not on the individual worker” (Stone & Patterson, 2005, p. 2).

It is clear that the goal of scientific management is centered on the efficiency of the process. Little thought is given to individual needs and strengths while much attention is given to the end result. With efficiency of the process and the end product being preeminent, clearly ethical considerations are not as influential.

According to Greenleaf (1970, p. 138), ethical considerations must be considered foremost in servant leadership. This sets servant leadership in somewhat of a contradiction with the scientific management approach. Under this type of early leadership, it is quite evident that authoritarian leadership style would be preferred and most effective.

**Transactional Leadership.** Burns (1978) introduced transactional and transformational leadership in his book *Leadership*. “The key to the transactional style of leadership is the exchange between the superior and the subordinate” (Humphreys & Einstein, 2003, p. 85). This transactional leadership looks much like the fears Max Weber had about the bureaucratic
process juxtaposed with the needs of the individual (Morgan, 1997, p. 17). Burns (1978) viewed transactional leadership in this particular way:

Such leadership occurs when one person takes the initiative in making contact with others for the purpose of an exchange of valued things. The exchange could be economic or political or psychological in nature; a swap of goods or of one good for money; a trading of votes between candidate and citizen or between legislators; hospitality to another person in exchange for willingness to listen to one’s troubles. Each person recognizes the other as a person. Their purposes are related, at least to the extent that the purposes stand within the bargaining process and can be advanced by maintaining that process. But beyond this the relationship does not go. The bargainers have no enduring purpose that holds them together; hence they may go their separate ways. A [L]eadership act took place, but it was not one which binds the leader and followers together in a mutual and continuing pursuit of higher purpose. (p. 19)

According to Humphreys & Einstein (2003) transactional leadership is the most prevalent leadership behavior practiced in today’s organizations. As noted in Humphreys and Einstein (2003), the research conducted by Avolio et al. (1988), Bass & Avolio (1990), Dubinsky et al. (1995), and Waldman et al. (1990) shows that the “active transactional leader behavior (contingent reward) has been positively correlated to follower attitudes and performance” (p. 85).

The problem with transactional leadership, however, is that it is “narrow in that it does not take the entire situation, employee or future of the organization in mind when offering rewards” (Patterson & Stone, 2005, p. 7). This focus on control, contingency upon rewards, and lack of values makes transactional leadership an effective, yet impersonal leadership concept.
This type of leadership is most effective as long as rewards are available. What happens when the rewards are not as tangible, for the leader or the follower? Is it possible to motivate leaders and followers by something more intrinsic than material rewards?

**Transformational Leadership.** Transformational leadership was first devised as a theory by Robert Burns in 1978. This was born out of a shift in organizational needs from a “hierarchal bureaucratic” machine into a body in which the employees share in transforming the organization from the “inside out” (Patterson & Stone, 2005, p. 7). Bass & Avolio (1994) suggest that “transformational leadership is an expansion of transactional leadership” (p. 9). Many view transformational leadership and transactional leadership on opposite ends of the leadership spectrum (Stone, Russell & Patterson, 2004, p. 349).

In essence, leaders fall somewhere in between transformational and transactional leadership. Burns (1978) posited that leaders had to be either transactional or transformational, but not both. Patterson and Stone (2005) suggest the behaviors of the transformational leader follow this line of thinking:

- As conceived by Burns (1978), the transformational leader asks followers to transcend their own self-interests for the good of the group, organization, or society; to consider their long-term needs to develop themselves, as opposed to their immediate needs; and to become more aware of what is really important. (p. 7)

Transformational leadership and transactional leadership differ greatly because transformational leadership is “more concerned about progress and development” (Patterson & Stone, 2005, p. 7). “With transformational leadership, the leader’s focus is directed toward the organization, but leader behavior builds follower commitment toward the organizational objectives through empowering followers to accomplish those objectives” (Patterson & Stone, 2005, p. 8).
Transactional leadership relies more on the give-and-take of rewards while transformational leadership focuses on defining the needs of the follower and providing for those needs within the context of the betterment of the organization (Patterson & Stone, 2005, p. 9).

According to Patterson and Stone (2005): “transformational leaders can develop a very powerful influence over followers (p. 9).” This influence originates from “deeply held personal value systems” that transformational leaders function out of (Humphreys & Einstein, 2003, p. 86). Burns (1978, p. 20) denotes these deeply held values as end values. They are not under negotiation or exchange, but are personal standards that, when expressed by the leader, can help transform their followers’ values (Burns, 1978, p. 20).

In summation, the transformational leader articulates “the vision in a clear and appealing manner, explains how to attain the vision, acts confidently and optimistically, expresses confidence in the followers, emphasizes values with symbolic actions, leads by example, and empowers follower to achieve the vision” (Yukl, 2002, as quoted in Stone, et al, 2004, p. 352). Stone, et al (2004) points out, however, that the key focus of the transformational leader is for the betterment of the organization, but that doesn’t necessarily translate into the betterment of the follower or employee (p. 351).

**Charismatic leadership.** Charismatic leadership was more clearly developed by House (1977). According to House (1977) charisma or charismatic leadership was “the term commonly used in the sociological and political science literature to describe leaders who by force of their personal abilities are capable of having profound and extraordinary effects on followers” (p. 189). According to Groves (2002) one of the main constructs of charismatic leadership is “that followers are inspired enthusiastically to give loyalty, commitment, and devotion to the leader and his or her mission (p. 11).”
Ultimately, according to Groves (2002), charismatic leadership is a leader centered philosophy and relies on the follower to “emulate the leader’s values, goals, and behavior (p. 11).” Additionally, Groves (2002) explains: “By clarifying or specifying a mission for the followers, charismatic leaders inspire self-confidence in followers and cause them to accept higher goals and have greater confidence in their ability to reach such goals (p.11).”

In summation, charismatic leadership is extremely dependent on follower motivation, which is similar to the transactional theory, in that follower’s needs must be met through intrinsic reward. Clearly, there is a level of performance to the charismatic leadership that the leader must adhere to, being a paragon for the all that the follower holds valuable.

**Authentic leadership.** Authenticity is the idea of being true, real or being original. In leadership studies, “leader authenticity is described today more broadly as leader resolve to take responsibility for personal freedom and organizational and communal obligations so that leaders could make choices that would help them construct their selves as a moral individuals” (Novicevic, Harvey, Buckley, Brown & Evans, 2006, p. 64).

Executive authenticity, the forerunner for authentic leadership, was originated by Chester Barnard in 1938 (Novicevic, et al, 2006, p. 64). The actual development of the term authentic leadership was not developed until 1993 when R.W. Terry penned *Authentic Leadership: Courage in Action*. Further advance was shaped by George Bill in 2003 when he wrote *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value*. According to Gardiner (2011): “authentic leadership rests on the belief that a resolute stance and confidence in one’s speech and action is indicative of strong leadership” (p. 100).

While a relatively new theory of leadership, there is a debate about the authenticity of authentic leadership, especially in regards to the abilities of the leaders. Gardiner (2011)
describes authentic leadership as “deeply problematic because it fails to take into account how social and historical circumstances affect a person’s ability to be a leader” (p. 99). Authentic leadership relies heavily on personality traits, which, according to Gardiner (2011, p. 99), “fails to convey a person’s uniqueness, and hence is a poor indicator of a person’s ability to enact authentic leadership.”

The main difference between servant leadership and authentic leadership lies in the approach of the leader to leading. The question of authenticity can only be determined by learning the motivation for the leadership.

**Servant leadership**

There is little doubt about the origin of servant leadership theory. Robert Greenleaf developed the term servant leader in 1970 in an essay he wrote drawing from experience in a storied career in private business. He then went on to write more essays, books and articles on servant leadership. The related literature suggests that servant leadership is identifiable by the “care that is taken to ensure that other people’s highest priority needs are being served” (Savage-Austin & Honeycutt, 2011, p. 50).

Serving the needs of the follower sounds great, but what does that look like? It is essential to study behaviors when trying to examine servant leadership characteristics. Washington, Sutton & Field (2006) established that it is not only the leadership qualities of the individual that qualify him, but also the perceptions of the follower. Greenleaf (1970) developed this theory from ideas he acquired from reading Herman Hesse’s *Journey to the East*. According to Sendjaya & Sarros (2002):

In this story we see a band of men on a mythical journey…The central figure of the story is Leo, who accompanies the party as the servant who does their menial chores, but who
also sustains them with his spirit and his song. He is a person of extraordinary presence. All goes well until Leo disappears. Then the group falls into disarray and the journey is abandoned. They cannot make it without the servant Leo. The narrator, one of the party, after some years of wandering, finds Leo and is taken into the Order that had sponsored the journey. There he discovers that Leo, whom he had known first as servant, was in fact the titular head of the Order, its guiding spirit, a great and noble leader. (p. 58)

Greenleaf (1970) was very clear about the basis of servant leadership as seen in Leo:

The servant-leader is servant first—as Leo was portrayed. It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. That person is sharply different from the one who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. For such it will be a later choice to serve—after leadership is established. The leader-first and the servant-first are two extreme types. Between them there are shadings and blends that are part of the infinite variety of human nature (p. 13).

Greenleaf (1970) casts for us here a clear distinction. The servant leader is careful of other people’s needs and priorities (p. 13). This is vastly different from a “leader-first” concept, bringing into question a constant of leadership research: motivation (p. 13). This initial initiative, or motivation, for the servant leader is not material possessions, desire for power or personal gain. It is quite simply the desire to serve. This is in stark contrast to much of what is called leadership today.

As Greenleaf (1970) postulated, the beginning of servant leadership is marked by initiative. Someone must decide that he clearly sees the path or direction. The inspiration to
follow must be proportionate to the servant leader’s initiative. As Greenleaf (1970) considered the initiative of the leader he postulated:

But the leader needs more than inspiration. A leader ventures to say: “I will go; come with me!” A leader initiates, provides the ideas and the structure, and takes the risk of failure along with the chance of success. A leader says: “I will go, follow me!” while knowing that the path is uncertain, even dangerous. One then trusts those who go with one’s leadership (p. 15).”

It is this desire and initiative, mixed with a clear goal which delineates a leader, and the servant leader is inherently interested in serving first and leading second.

**Jesus and servant leadership.** Although Greenleaf (1970) has been credited with the coining of the term of servant leadership, the original servant leader came along around 2000 years earlier. Jesus is the exemplar of servant leadership. Not only were his teachings laced with servant leadership themes, but his life revealed the definitive model of servant leadership. Jesus introduced a new kind of leadership that emphasized service and sacrifice that has been echoed for centuries. According to Sendjaya & Sarros (2002):

Ancient monarchs acknowledged that they were in the service of their country and their people – even if their actions were not consistent with this. Modern coronation ceremonies and inaugurations of heads of state all involve the acknowledgement of service to God, country, and the people. Politicians define their role in terms of public service. And service has always been at the core of leadership in the spiritual arena, symbolized at the highest level by Christ washing the feet of his disciples. (p. 58)
It is this service that is central to Jesus’s message, and it is evident in his lessons and his pattern. If results are correlated to leadership success, then it could be argued that Jesus was the most successful leader in human history.

The results rest in the amount of followers and the amount of influence Jesus has had on mankind. In just about 3 and ½ years of ministry, Jesus was able to make an impact on the world that is unmatched.

Clearly, there is a good argument that there is strength in servant leadership. This strength pans across lines of influence and contradicts the natural thought of authoritarianism as the strongest form of leadership. The vast influence that Jesus had on mankind, continuing to this day rests as an unprecedented mark for influence worldwide.

**What Jesus taught.** In the Gospel of Mark (Ch. 10) Jesus was teaching the disciples on various subjects. He had just had an encounter with the young ruler who could not give up his possessions and turn to Jesus. Jesus had also just given some hard words on how he would be delivered up for sacrifice as well. Just after this discourse, two disciples, James and John, came to Jesus seeking positions of power. They had obviously been blinded by the possibility of position and fame. James and John did not get the answer they sought from him. Instead, Jesus gave them these words in Mark 10:42-44 (KJV):

….Ye know that they which are accounted to rule over the Gentiles exercise lordship over them; and their great ones exercise authority upon them. But so shall it not be among you: but whosoever will be great among you, shall be your minister: And whosoever of you will be the chiefest, shall be servant of all.

He used two key words in the above retort: minister and servant. These words are very similar in meaning. “Contrary to the popular opinion of the day, Jesus taught that a leader’s greatness is
measured by a total commitment to serve fellow human beings” (Sendjaya & Sarros, 2002, p. 59). Greenleaf (1970) recognized this commitment in Jesus as well and describes one of the most influential occasions that servant leadership was displayed:

This is told dramatically in one of the great stories of the human spirit—the story of Jesus when confronted with the woman taken in adultery. In this story Jesus is seen as a man, like all of us, with extraordinary prophetic insight of the kind we all have to some degree. He is a leader; he has a goal—to bring more compassion into the lives of people....In this scene the woman is cast down before him by the mob that is challenging Jesus’ leadership. They cry, “The law says she shall be stoned. What do you say?” Jesus must make a decision; he must give the right answer, right in the situation, and one that sustains his leadership toward his goal. The situation is deliberately stressed by his challengers. What does he do? He sits there writing in the sand—a withdrawal device. In the pressure of the moment, having assessed the situation rationally, he assumes the attitude of withdrawal that will allow creative insight to function......He could have taken another course; he could have regaled the mob with rational arguments about the superiority of compassion over torture. A good logical argument can be made for it. What would the result have been had he taken that course? He did not choose to do that. He chose to withdraw and cut the stress—right in the event itself—in order to open his awareness to creative insight. And a great one came, one that has kept the story of the incident alive for two thousand years: “Let him who is without sin among you cast the first stone (p. 29).”

What Jesus modeled. Jesus not only taught servant leadership, but he set an example and a pattern for others to follow. In the Gospel of John (Ch. 13) Jesus presented one
of the most illustrative cases of serving to lead. In the first century, men and women walked just about everywhere they went. Their animals also walked loose in the streets and created quite a mess that men and women had to walk through. The shoes back then were open sandals and the custom was to wash feet when entering a home or when attending a dinner (Sendjaya & Sarros, 2002, p. 59). According to Ford (1991), one of the most demeaning jobs at that time was to be the servant who held the job of feet washer.

Jesus was sharing his final meal with his closest of followers. After supper was over, he rose from the table and proceeded to wash the disciples’ feet. His explanation of what he was doing indicated the greatness of character that he ultimately portrayed, and also what he required of his followers. When he was finished, he asked them if they knew what he had done to them. He then went on to explain: “Ye call me Master and Lord: and ye say well; for so I am. If I then, your Lord and Master, have washed your feet; ye also ought to wash one another’s feet. For I have given you an example, that ye should do as I have done to you” (John 13:12-15, KJV).

The account in John 13 enables us to see Jesus in a way that not only goes against our human nature, but shifts the paradigm of leadership strength from having the power of leadership position, to having the power to serve (Sendjaya & Sarros, 2002, p. 59).

Theoretical model of servant leadership

Greenleaf (1970) presents the paradoxical servant leadership theory in his essay, Servant as Leader, in a way that gives a good basis for the theoretical model:

The Servant-Leader is servant first. It begins with the natural feeling that one wants to serve. Then conscious choice brings one to aspire to lead. The difference manifests itself in the care taken by the servant: -first, to make sure that other people’s highest priority needs are being served. The best test is: do those
served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And what is the effect on the least privileged in society; will they benefit, or at least, not be further deprived?” (p. 7)

Taylor (2002) built upon the studies of Page & Wong (2000) and Greenleaf (1977) to develop a self-assessment survey that measures the likelihood that a leader will actually be a servant leader. Taylor (2002) was able to narrow the qualities measured on the survey to 24. However, in a synthesis study by Dierdendock (2010), 44 servant leadership characteristics were found.

Eventually, Spears (2004) synthesized Greenleaf’s works and developed 10 solid characteristics that are normally accepted among leadership researchers. These are “listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, growth, and building community” (Spears, 2004, p.7). These characteristics are what Greenleaf (1970) calls the foundation of servant leadership.

**Listening.** The first characteristic of servant leadership is listening. Crippen (2006) states that “effective leaders are great communicators and must be good listeners, to themselves (through their inner voice), as well as to others” (p. 13). Spears (2004) posited:

The servant-leader seeks to identify the will of a group and helps clarify that will. He or she seeks to listen receptively to what is being said. Listening, coupled with regular periods of reflection, is essential to the growth of the servant-leader. (p. 8)

According to Blanchard (1988), the best leadership behaviors consistently reveal that listening is one of the most important qualities. Greenleaf (1970) was very clear about how important the characteristic of listening was for a servant leader:
Most of us at one time or another, some of us a good deal of the time, would really like to communicate, really get through to a significant level of meaning in the hearer’s experience. It can be terribly important. The best test of whether we are communicating at this depth is to ask ourselves first: Are we really listening? Are we listening to the one we want to communicate to? Is our basic attitude, as we approach the confrontation, one of wanting to understand? Remember that great line from the prayer of St. Francis, “Lord, grant that I may not seek so much to be understood as to understand (p. 17).”

**Empathy.** The second characteristic of servant leadership is empathy, which is closely related to listening. The American Heritage Dictionary defines empathy as “the ability to identify with or understand another's situation or feelings.” According to Taylor (2002, p. 46) an “effective servant leader must be willing to stop, listen intently, and truly care about people.” Crippen (2006) states that a “good servant-leader strives to understand and empathizes with others” (p. 13).

This characteristic is indemnified by a unique interest in whom people really are, and that their intentions are essentially good (Spears, 2004, p. 8).

Greenleaf (1970) proposed:

The servant always accepts and empathizes, never rejects. The servant as leader always empathizes, always accepts the person but sometimes refuses to accept some of the person’s effort or performance as good enough (p. 20).

Greenleaf (1970) proposes that a servant leader can be empathetic without being passive in accepting mediocrity and substantial leadership can occur through empathy (p.20).

**Healing.** The third characteristic of servant leadership is healing. The American Heritage Dictionary defines healing as “to ease or relieve (emotional distress).” Greenleaf
(1970) revealed: “There is something subtle communicated to one who is being served and led if implicit in the compact between servant-leader and led is the understanding that the search for wholeness is something they share” (p. 8).

Servant leaders look for opportunities to help “make whole” people they come in contact with (Spears, 2004, p. 9). “Servant leaders must truly care about people and sincerely want them to grow and develop, not only to satisfy the needs of the organization but to help them grow as individuals” (Taylor, 2002, p. 48). Greenleaf (1970) explained:

Twelve ministers and theologians of all faiths and twelve psychiatrists of all faiths had convened for a two-day off-the-record seminar on the one-word theme of healing. The chairman, a psychiatrist, opened the seminar with this question: “We are all healers, whether ministers or doctors. Why are we in this business? What is our motivation?” They followed only ten minutes of intense discussion and they were all agreed, doctors and ministers, Catholics, Jews, and Protestants. “For our own healing,” they said. This is an interesting word, healing, with its meaning, “to make whole.” The example above suggests one really never makes it. It is always something sought. Perhaps, as with the minister and the doctor, the servant-leader might also acknowledge that his own healing is his motivation. There is something subtle communicated to one who is being served and led if, implicit in the compact between the servant-leader and led, is the understanding that the search for wholeness is something they share (p. 36).”

This desire to help heal is intrinsic to the belief that the interest of others is paramount in servant leadership theory.
**Awareness.** The fourth characteristic of servant leadership is awareness. The American Heritage Dictionary defines awareness as “having knowledge or discernment of something.” The servant leader is self-aware, and has a general awareness.

According to Crippen (2006): “One develops awareness through self-reflection, through listening to what others tell us about ourselves, through being continually open to learning, and by making the connection from what we know and believe to what we say or do” (p. 13).

Greenleaf (1970) noted:

> Awareness is not a giver of solace, it is just the opposite. It is a disturber and an awakener. Able leaders are usually sharply awake and reasonably disturbed. They are not seekers after solace. They have their own inner security (p. 20).

**Persuasion.** The fifth characteristic of servant leadership is persuasion. The American Heritage Dictionary defines persuasion as the act of causing someone “to accept a point of view or to undertake a course of action by means of argument, reasoning, or entreaty.” A leader without the ability to persuade others won’t be followed by many. Servant leaders rely on the power to convince rather than the power to coerce (Taylor, 2002, p. 49). Spears (2004) notes:

> This particular element offers one of the clearest distinction between the traditional authoritarian model and that of servant-leadership. The servant-leader is effective at building consensus within groups (p. 9).

Persuasion does not always mean some big protest or argument, but can occur one person at a time (Greenleaf, 1970, p. 29).

**Conceptualization.** The sixth characteristic of servant leadership is conceptualization. The American Heritage Dictionary defines conceptualization as forming “a general idea or understanding of something.” This characteristic is basic to most leadership theories. Some may
call it “casting a vision” or just “vision”. The ability to take ideas and make them into concrete plans is not a shared trait.

The servant leader looks outside the box when approached by organizational problems, difficulties and challenges (Spears, 2004, p. 9). Spears (2004) postulates: “Servant-leaders are called to seek a delicate balance between conceptual thinking and a day-to-day focused approach” (p. 9).

**Foresight.** The seventh characteristic of servant leadership is foresight. The American Heritage Dictionary defines foresight as “care in providing for the future.” Crippen (2006) states that foresight is “the ability to foresee or know the likely outcome of a situation” (p. 14). According to Spears (2004, p. 9): “Foresight is a characteristic that enables the servant-leader to understand the lessons from the past, the realities of the present, and the likely consequence of a decision for the future.” It seems there is little regarding empirical studies on foresight in leadership studies, though it warrants vigilant consideration (Spears, 2004, p. 9).

**Stewardship.** The eighth characteristic of servant leadership is stewardship. The American Heritage Dictionary defines stewardship as serving as the manager of “another’s property, finances, or other affairs.” Servant-leadership and stewardship are enjoined in the idea of service and self-sacrifice. Servant-leaders can be good stewards by being committed to serving the needs of others (Spears, 2004, p. 9). This stewardship also “emphasizes the use of openness and persuasion rather than control” (Taylor 2002, p. 51).

**Growth.** The ninth characteristic of servant leadership is growth. The American Heritage Dictionary defines growth as “full development.” Spears (2004) actually specifies this characteristic as “commitment to the growth of people” (p. 9). Servant-leaders invest in others in hopes that they will grow and develop into their full potential (Crippen, 2006, p. 14). Spears
(2004) notes that the “servant-leader recognizes the tremendous responsibility to do everything possible to nurture the growth of employees” (P. 9). According to Taylor (2004), the commitment to growth “involves a tremendous responsibility to do everything within the leader’s power to nurture both the professional and the personal growth of his or her employees” (p. 53).

**Building community.** The final characteristic of servant leadership is building community. Much has been lost in recent history regarding the sense of community in people’s lives. Just as a commitment to the growth of people is important, so is a commitment to build the community. Page & Wong (1998) advanced:

> In servant-leadership there is no such thing as “just a groundskeeper” or “just a secretary”. Everyone is part of a team working to the same end in which people play different roles at different times, according to their expertise and assignment, rather than their position or title (p. 9).

It is clear from the review of literature that these 10 constructs have not been tested extensively. Very little information is out concerning how solidified these characteristics are. Can these behaviors change based on demographics, geography or social construct? Will these behaviors be elicited by servant leaders from different geographic locations? Does servant leadership actually translate into better organizational performance? Is there a relationship between servant leadership and student achievement?

These are some of the questions that this study seeks to answer in hopes of providing a broader base of information concerning the theory of servant leadership. It is against the backdrop of school leadership and student achievement that this study seeks to resolve the aforementioned questions.
Servant leadership vs. transformational leadership

It would appear on the surface that servant-leadership might be interchangeable with transformational leadership. The characteristics that describe each leadership theory are certainly very similar. Wong & Davey (2007) report that servant-leadership is “participative leadership (McMahon, 1976) and shares some of the characteristics of transformational leadership” (p. 5). Also, Stone, et al (2004) explain:

Both transformational leadership and servant leadership emphasize the importance of appreciating and valuing people, listening, mentoring or teaching, and empowering followers. In fact, the theories are probably most similar in their emphasis upon individualized consideration and appreciation of followers. (p. 354)

Stone, et al (2004) postulate that the difference between servant leadership and transformational leadership is not in the characteristics or behaviors, but in what they call “leader focus” (p. 354). Stone, et al (2004) point out this difference in this way:

While transformational leaders and servant leader both show concern for their followers, the overriding focus of the servant leader is upon service to their followers. The transformational leader has a greater concern for getting followers to engage in and support organizational objectives. The extent to which the leader is able to shift the primary focus of his or her leadership from the organization to the follower is the distinguishing factor in determining whether the leader may be a transformational or servant leader. (p. 354)

It is important to note that this “leader focus” could be the only difference between a servant leader and transformational leader (Stone, et al, 2004, p. 354). In essence, the transformational leader builds follower commitment toward the betterment of the organization and the servant

This leader focus for the servant leader does not rest upon results, but is driven by the leader’s desire to serve (Stone, et al, 2004, p. 354). In essence, by serving and growing the worker, the organization will benefit, and results will occur, but that is not the focus for the servant leader.

**Empirical research in servant leadership**

In 1998, Page & Wong (2000) had reported that there were no quantitative measures of what servant leadership was and how it would achieve positive results (p. 75). This gap in the literature existed because of the “fear that of operationalizing servant leadership runs the risk of reductionism and trivialization of the concept” (p. 75).

Another possible problem with the measurement of servant leadership is the possibility of “not measuring up” to the collection of qualities that define servant leadership (Page & Wong, 2000, p. 76). Clearly, a real need exists to clarify and define a multidimensional measure to determine who might be a servant leader.

**Servant leadership measurement.** Because servant leadership is in its infancy in comparison to other leadership theories, the development of a measurement tool has been widespread and varied. Page & Wong (2000) first developed the Servant Leadership Profile (SLP) in 2000, and then revised it and presented the Revised Servant Leadership Profile (RSLP) in 2003 (Wong & Page, 2003).

Before Page & Wong (2000), Laub (1999) developed the Organizational Leadership Assessment (OLA) that measured leadership among six main areas that are very similar to servant leadership measures (Dierendonck & Nuijten, 2010, p. 250). Taylor (2002) adapted

These studies have provided an open door for more research on servant leadership. One of the newest measuring tools is the Servant Leadership Survey (Dierendonck & Nuijten, 2010). This survey is an eight dimensional, 30 item measure that builds upon all the previous construct measurement tools for measuring servant leadership. Instead of a leader based self-assessment, this survey is follower based, relying on the perceptions of the base. According to Dierendonck & Nuijten (2010):

The SLS is the first measure where the underlying factor structure was developed and confirmed across several field studies in two countries. It can be used in future studies to test the underlying premise of servant leadership theory. The SLS provides a clear picture of the key servant leadership qualities and shows where improvements can be made on the individual and organizational level: as such, it may also offer a valuable starting point for training and leadership development. (p. 249)

This survey was tested using eight samples and 1571 persons from 2 different countries, with diverse occupational backgrounds (Dierendonck & Nuijten, 2010, p. 249). Nevertheless, Dierendonck & Nuijten (2010) contend: “More and better insights grounded in empirically based findings are essential in order to alert organizations to the necessity of being open to the needs and wishes of employees, acknowledging their worth and achievements, but also of being stewards and making people feel responsible for their work” (p. 265).

**Servant leadership and education.** Leadership is certainly essential to the success or failure of any organization (Dolph & Grant, 2010, p. 1). The success of a school has shifted in the last 50
years from making sure that most of the students graduate to an almost single focus on student achievement.

According to Dolph & Grant (2010), “testing and test scores function as the primary criteria in evaluating the quality and rate of success or failure for school districts, individual schools, students, and school personnel, including administrators” (p. 3). There is little doubt that the No Child Left Behind Act (2002) pushed the accountability factor into a new dimension.

There have been plentiful studies regarding student achievement and the direct or indirect effect that leadership may have (McLeod, 2000; Palmour, 2000; Cotton, 2003; Prater, 2004; Marzano, Waters, & McNulty, 2005; Ross & Gray, 2006). The principal is a central figure in providing for the success and effectiveness of a school. This can be clearly seen in a 1977 U.S. Congressional Report (U.S. Congress, 1977):

In many ways the school principal is the most important and influential individual in any school. He or she is the person responsible for all activities that occur in and around the school building. It is the principal’s leadership that sets the tone of the school, the climate for teaching, the level of professionalism and morale of teachers, and the degree of concern for what students may or may not become. The principal is the main link between the community and the school, and the way he or she performs in this capacity largely determines the attitudes of parents and students about the school. If a school is a vibrant, innovative, child-centered place, if it has a reputation for excellence in teaching, if students are performing to the best of their ability, one can almost always point to the principal’s leadership as the key to success. (p. 56)

Though the principal is directly given this responsibility and accountability, there are certainly studies that support that the principal has no direct influence on student achievement (Hallinger
& Heck, 1996; Leithwood & Jantzi 1999; Witziers, Bosker, & Kruger, 2003). The mediating effects of principal leadership have been shown to have indirect effect, at least through teacher beliefs (Ross & Gray, 2006).

What about servant leadership and school achievement? If leadership behavior in general has no direct effect on student achievement, would a specific type of leadership behavior, such as servant leadership, have an effect on school achievement? According to Babb (2012) organizational servant leadership had no direct effect on school achievement in Pennsylvania middle schools. Babb (2012) did find, however, that “contextual variables had a far more profound impact upon student achievement than the organizational servant leadership or other variables studied” (p. 94).

The contextual variables that did have an impact on school achievement in Babb (2012) were student socioeconomic status, student ethnicity and principal tenure. Boyer (2012) also found no significant correlation between perceived principal servant leadership and student achievement, however, the sample size was too small to show significance. Boyer (2012) states that there was positive relationship between teachers’ perceived principal servant leadership and student achievement (p. 81).

Herndon (2007), however, reported that “relationships were found between the factors of elementary principal servant leadership, as measured by the Servant Leadership Assessment Instrument, and each of the factors of student achievement, as measured by Communication Arts MAP test scores and Mathematics MAP test scores, without controlling for enrollment and free and reduced lunch” (p. 183). Herndon (2007) also found that a significant relationship existed between a combination of servant leadership, school climate and student achievement.
The School Principal and Servant Leadership. Is servant leadership even a viable option for school leadership? Shouldn’t a principal be more of an organizational manager type? Brumley (2012) explains:

The time has come for the era of principal as boss to be swept away and a new construct of principal as servant leader to be ushered into the mindset of every aspiring principal, practicing principal, and principal preparation specialist in America. The principalship, as a noble vocation, is a moral obligation that requires a humanistic approach to leading the organization toward collective purposes. When correctly practiced, the principalship carries beauty that balances the science of relevant knowledge and the art of graceful implementation (p.17).

What makes the principalship so unique and adds relevance to the servant leadership theory as applied to educational leadership, is the fact that the principal is in a position of tremendous influence, not only of physical resources, but more importantly, human resources. In the case of a school leader, his job is to make humans better. He is charged and highly accountable for something that is not so easily measured.

Today’s school leader must face a vast amount of challenges and obstacles; maybe more now than ever before. These challenges that seem to rebut any learning or change that takes place, must be taken head on. This is very similar to the work of other moral agents of change, such as pastor, minister, or spiritual leaders. Brumley (2012) sees this parallel and explains:

More than any other educational group, principals have faced callings for change. These callings, however, have overwhelmingly been technical or programmatic instead of deeply rooted within a values structure for daily principal operation. These futile modifications have placed many principals in a leadership quagmire without a set of core
beliefs to serve as a guide. Without a core construct from which to operate, principals prove to be reactive and nonpurposeful; however, principals with an identified belief system and congruency toward their values find peace with their work and significance with their impact (p. 17).

What is the difference between a servant-leader principal and others? According to Brumley (2012):

Principals as servant leaders place the needs of others and the health of the organization above personal desires. Allowing oneself to be a servant to individuals and the organization requires a principal to release power and become vulnerable as the organization itself gains power and grows strong and meaningful (p. 17).

This is not to say that the school principal can only effectively decide to become servant-leader, but must find a way to form such skill and desire through careful diligence. According to Brumley (2012):

Principals seeking to become significant influences in the lives of stakeholders and in the overall success of schools must have an effective leadership praxis. In the context of the twenty-first century principalship, a leadership praxis is the ability to understand, articulate, and implement valued research, theory, and values into the year-to-year, day-to-day, and moment-to-moment decisions of the school principal. A servant-leader’s praxis appreciates the value of individuals and their contributions toward the overall health of the organization without favoritism (p. 19).

Today’s principal may seek to attain the philosophy of servant leadership as a valid leadership approach. To this end, the question that needs to be addressed is this: What relationship exists between a servant-leader principal and school/student outcomes?
Much of the current research suggests that principals are chiefly responsible for overall school climate (Griffith, 1999; Varner, 2007; McFarlane, 2010; Velasco, 2011; Rhoden, 2012) and even teacher self-efficacy (Nir & Kranot, 2006; Charf, 2009). According to Sebastian & Allensworth (2012): “School climate affects all classrooms and so may have the broadest reach across the many different classes in a school” (p. 645). While these studies are not centered on student achievement, a direct effect on school climate and teacher self-efficacy would lend to a more indirect effect on student achievement.

Additionally, according to Bredeson (1996), “there is ample evidence in the literature that effective leadership can and does positively affect school and student outcomes” (p. 255). This positive affect has to be indirect in nature because the general tasks of instruction are mediated by teachers and other professionals, not the principal (Gentilucci & Muto, 2007, p. 220). Fundamentally, the most influence a principal can have on students is by “influencing the influencers, rather than influencing students themselves” (Gentilucci & Muto, 2007, p. 220).

Agreeably, Gentilucci & Muto (2007) afford: “[I]f a causal relationship exists between principal leadership and student achievement, as some research suggests, it is important to identify with greater specificity those behaviors that exert the most powerful effect on achievement” (p. 221). Clearly, the distance between indirect and direct instructional leadership is not so great, however. Concurrently, principals who view themselves as active instructional leaders tend to actively engage in meaningful individual academic and leadership relationships with students (Gentilucci, 2004). Waters, Marzano & McNulty (2004) offer that these individuals routinely visit classrooms, engage in praising academic success, and are routinely visible throughout the school grounds.
If these types of behaviors are indicative of an effective instructional leader, it is quite possible that different types of leaders may exhibit these behaviors and have a stronger relationship with student achievement.

**Conceptual framework**

According to Miles and Huberman (1994) “a conceptual framework explains, either graphically or in narrative form, the main things to be studied—the key factors, concepts, or variables—and the presumed relationships among them” (p. 18). Figure 1 illustrates the key innovators in servant leadership theory that this research intends to build upon.

Under the overall banner of leadership, several theories have emerged over the years. Research regarding most of these theories has been quite extensive. As this literature review has shown, many of the qualities of effective leadership are shared among the many types that exist.

One of these leadership theories is the theory of servant leadership. Servant leadership was in existence before the term was coined by Robert K. Greenleaf (1970). However this study, as do many others, recognizes that Greenleaf is the main theorizer of servant leadership. Some years later, Spears (1996) adapted Greenleaf’s theory into definitive and tangible constructs. These 10 constructs formed the basis for many works to come in the late 1990s and early 2000s.

Eventually, Page & Wong (1999) developed a servant leadership measurement instrument from Spears’ work. This instrument was adapted and transformed into 12 servant leadership constructs. These constructs are generally accepted today as the standard relational characteristics of the servant leader.
Taylor (2002) streamlined Page & Wong’s self-assessment instrument into a reliable and concise measurement tool. It is purposed that this study will build upon those concepts. The figure below represents a visual model of the researcher’s conceptual framework for the study:
Figure 1 Conceptual framework for this study.
Summary

This literature review establishes that servant leadership is a valid leadership theory. It is also clear that more empirical studies need to be performed to test the theory, especially in the area of direct or indirect effect on student achievement. This study seeks to address the leadership behavior gap that presently exists in the related literature.
CHAPTER THREE: METHODOLOGY

Introduction

The context for this study is the determination of possible relationships between student achievement and the servant leadership behaviors of a school’s principal. The population of schools that will be used for this study is comprised of Southwest Virginia schools. The school districts to be used in this area are those within the Virginia Department of Education’s District VII. It should be noted that all of the schools in these counties share very similar demographic and socioeconomic student populations. The problem is the wide disparity among these schools in terms of the achievement scores on the Virginia Standards of Learning assessments. There are many possible reasons for this disparity; however, this research is solely intended to examine whether servant leadership behaviors of a school’s principal impact student achievement among the several schools within Southwest Virginia’s District VII.

Research Design

Although servant leadership, as defined by Greenleaf (1970) is a relatively new development in educational leadership studies, the long term effect of servant leadership on the organization has yet to be studied (Dierendonck, 2011). Servant leadership theory requires further testing and more “empirical” rather than “anecdotal” evidence (Sudhukar and Vinod, 2011, p. 465).

The research design used in this study is non-experimental correlational research, which is widely used to discover relationships (Gall, et al 2007, p. 332). The purpose of the current study is to test for possible relationships between the servant leadership behaviors of a principal and standardized achievement scores for southwest Virginia schools. The focal independent variable, which will be defined as the servant leadership characteristics of principals, will be
operationalized via the Self-Assessment of Servant Leadership (SASL) questionnaire. The dependent variable, which will be defined as standardized achievement test scores, will be operationalized as the performance of a school within the school district on third grade through eleventh grade reading and mathematics scores. Because of the geographic concentration of this study, the research participants will be chosen from a convenience sample of willing participants from school districts in Southwest Virginia. Every administrator in this area will be solicited for participation; in all, a total of 41 principals were amenable to filling out the survey and participating within the study.

This research project will use a non-experimental quantitative survey methodological design. Because it is the intent of this study to identify relationships between servant leadership behaviors of principals and student achievement, a correlational research analysis technique will be employed. According to Gall et al. (2007), “correlational research refers to studies in which the purpose is to discover relationships between variable through the use of correlational statistics” (p. 332). Given that this study will be collecting quantitative data via a survey, and because the concepts under investigation are measured on a continuous scale, the use of a correlational data analysis technique is appropriate (Ritchey, 2008)

**Participants and Setting**

The individuals who participated within this study were principals of schools from Southwest Virginia. These individuals were gathered as part of a convenience sampling strategy. According to Gall et al. (2007), sampling is “the process of selecting members of a research sample from a defined population, usually with the intent that the sample accurately represent that population” (652). Gall and his colleagues further articulate that convenience sampling can be used when the sample is conceptualized to “represent a particular population” (p. 176). In
this case, the particular population that was sampled included willing participants from all of the school districts in Southwest Virginia. Given that a sample of convenience was used, all data findings and generalizations will be limited to this particular location and population. Specifically, the results are generalizable to the principals and assistant principals from Southwest Virginia public K-12 schools. These schools consist of K-3 primary, K-8 elementary, middle schools, intermediate schools and high schools.

Instrumentation

The instrumentation will was used to gather data included the Self-Assessment of Servant Leadership survey, the data derived from Virginia Department of Education Standards of Learning Assessment from each school for reading and mathematics scores, and three questions designed to assess basic demographic information.

A principals’ level of servant leadership was measured via the self-report survey Self-Assessment of Servant Leadership (SASL). The SASL is a self-reporting measure developed by Dr. Tim Taylor in 2002. Dr. Taylor adapted the SASL from Page and Wong’s (1998) SASLP (Self-Assessment of Servant Leadership Profile). Page and Wong (1998) designed the SASLP out of a need to “develop conceptual framework for assessing servant-leadership, an area that is under-researched in the abundant literature on servant-leadership” (p. 1). Page and Wong (1998) first produced a 200 item descriptor, but then narrowed those down to a 100 item assessment. These descriptors were adapted from Spears (1998) ten servant leadership characteristics, which in include the following: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment and building community. Page and Wong (1998) developed a somewhat similar set of constructs for their servant leadership measure. Table 1 categorizes the qualities of servant leadership that Page and Wong
Page and Wong (1998) adapted from their research:

Table 1

Page and Wong’s Conceptual Framework for Measuring Servant Leadership

I. Character--Orientation Being- What kind of person is the leader?
Concerned with cultivating a servant's attitude, focusing on the leader's values, credibility and motive.
• Integrity
• Humility
• Servanthood

II. People-Orientation (Relating: How does the leader relate to others?)
Concerned with developing human resources, focusing on the leader's relationship with people and his/her commitment to develop others.
• Caring for others
• Empowering others
• Developing others

III. Task-Orientation (Doing: What does the leader do?)
Concerned with achieving productivity and success, focusing on the leader's tasks and skills necessary for success.
• Visioning
• Goal setting
• Leading

IV. Process-Orientation (Organizing: How does the leader impact organizational processes?)
Concerned with increasing the efficiency of the organization, focusing the leader’s ability to model and develop a flexible, efficient and open system.
• Modelling
• Team building
• Shared decision-making

Page and Wong (1998) essentially developed the 12 categories of servant leadership characteristics and proposed that those characteristics can be grouped into 4 main orientations. Page and Wong (1998) conducted a pilot study utilizing the SASLP and found that the Cronbach alpha reliability score for the measure was quite good at a level of .94. The instrument developed by Page and Wong (1998) was quickly used in a dissertation by Hamilton (1999), who
found an overall Cronbach alpha reliability was .77 (Valdes, 2009). In 2002 Dr. Timothy Taylor modified the SASLP by reducing the number of items to a 24 item survey called the Self-Assessment of Servant Leadership (SASL). Taylor (2002) successfully ran comparative analysis between the SASLP and the newer SASL and showed a positive correlation of .95.

Additionally, Taylor (2002) conducted analysis on both instruments which resulted in an alpha reliability score of .96 for the SASLP and .92 for the SASL. This modified instrument clearly agreed with the original instrument by maintaining the 12 areas of servant leadership (See Table 2). The final product is a 24 item self-assessment arranged on a Likert scale with excellent reliability history. Indeed, the current project found a Cronbach alpha reliability of .88 for the 24 item self-assessment.

Table 2 below compares the aforementioned alpha reliability coefficients for a good visual representation (Taylor, 2002, p. 82):
Table 2

*Comparison of Alpha Coefficients*

<table>
<thead>
<tr>
<th>Servant Leadership Characteristics</th>
<th>Page and Wong Alpha Coefficients</th>
<th>Hamilton Alpha Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity</td>
<td>.80</td>
<td>.79</td>
</tr>
<tr>
<td>Humility</td>
<td>.66</td>
<td>.65</td>
</tr>
<tr>
<td>Servant hood</td>
<td>.76</td>
<td>.76</td>
</tr>
<tr>
<td>Caring for others</td>
<td>.71</td>
<td>.71</td>
</tr>
<tr>
<td>Empowering others</td>
<td>.77</td>
<td>.77</td>
</tr>
<tr>
<td>Developing others</td>
<td>.92</td>
<td>.91</td>
</tr>
<tr>
<td>Visioning</td>
<td>.57</td>
<td>.60</td>
</tr>
<tr>
<td>Goal-setting</td>
<td>.77</td>
<td>.77</td>
</tr>
<tr>
<td>Leading</td>
<td>.84</td>
<td>.84</td>
</tr>
<tr>
<td>Modeling</td>
<td>.76</td>
<td>.76</td>
</tr>
<tr>
<td>Team-building</td>
<td>.82</td>
<td>.82</td>
</tr>
<tr>
<td>Shared Decision-making</td>
<td>.80</td>
<td>.80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>.94</strong></td>
<td><strong>.77</strong></td>
</tr>
</tbody>
</table>

The SASL scale was constructed by taking the scores of the 24 items in the scale, adding them together, and then dividing by the number of items present within the scale. Using this procedure allows the original measurement scale to be preserved while simultaneously creating a single measurement indicator out of 24 separate items. It should be noted that means were
substituted for missing items in the scale, a procedure (Ritchey, 2008) which allows all 41 cases within the dataset to be utilized.

The dependent variable used in this investigation, which is both reading and mathematics school achievement, was taken from the Virginia Standards of Learning reading and mathematics achievement assessments scores. The Virginia Department of Education publishes this data as an average scaled score for each school. These assessments are given to students in grades 3-8 and 9-12. The Virginia Department of Education provides this information for each school in each district. The score is acquired by taking an average of the scaled reading and mathematics scores for the Virginia Standards of Learning achievement test for the whole school. For example, if school A is a middle school then the total scaled score for each grade 5-8 will be averaged to give a score for that school.

The Virginia Department of Education, in following the guidelines set forth in No Child Left Behind legislation, provides this information as a way to demonstrate Adequate Yearly Progress. Essentially, this scaled score is a way to measure the achievement of the school and success in learning. The reading test was chosen because it is tested every year in Virginia, beginning with the 3rd grade through the 8th grade. The high schools in Virginia test in the 11th grade for reading as well. The high school scores could possibly contain only the 11th grade scores unless that high school contains 7th and/or 8th grade, which is a phenomenon that occurs frequently in rural schools. If that is the case, then the scaled score will be for the whole school including the lower grades. Mathematics was chosen to help strengthen the study. Mathematics assessments are given in grades 3 through 8 and at different levels in secondary schools. The score used will be the scaled score for that particular school.

The three other variables of interest used in this project are a principal’s total years of
experience, the number of years of experience a principal has in administration, and a principal’s education level. The question that asks a principal how many years of experience they have in both education was measured on a four-point scale. Responses were as follows: one to five years of experience; six to ten years of experience; eleven to twenty years of experience, and; more than twenty years of experience.

The question which assessed how many years a principal has been in administration was measured on a four point scale, with answers being as follows: one to five years; six to ten years; eleven to twenty years, and; more than twenty years. The final question asked respondents is they had a bachelor’s degree, a master’s degree, an education specialist degree, a doctorate of education, or a doctor of philosophy.

**Procedures**

Following approval from Liberty University’s IRB, superintendents from each district in the Virginia Department of Education’s Region VII were contacted for permission to conduct research in their district. After receiving approval to proceed, principals from all K-12 schools in the counties of the area commonly called “Southwest Virginia” were contacted regarding participation in the survey associated with this project. The survey was available on an online survey site known as Survey Monkey.

Principals were solicited via email and received information regarding the study and were instructed to complete informed consent by either digital signature or traditional signature. After receiving consent, an email was forwarded containing instructions on completing the survey, how the information will be used, and a link that allowed them to access the survey site. Once they accessed the survey site, they were directed to demographic questions, and then on to the SASL.
The researcher received all the data from the survey site with only a code designating the school and school system the principal represents. In all, forty-one principals participated. Once the principals that have agreed to participate and complete the survey, the code from the principal was matched up with the code for the school. The reading and mathematics achievement score data from the Virginia Department of Education website were then bundled into the final dataset.

**Research Questions**

This study will examine the following research questions:

RQ1: Is there a relationship between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools?

RQ2: Is there a relationship between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools?

RQ3: Is there a relationship between principal total years of experience in education, principal total years of experience in administration, principal education level and student achievement in Southwest Virginia schools?

**Null Hypotheses**

The null hypotheses for this study are:

H01: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H02: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.
H03.1: There is no statistically significant relationship between principal total years of experience in education and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.2: There is no statistically significant relationship between principal total years of experience in education and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.3: There is no statistically significant relationship between principal total years of experience in administration and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.4: There is no statistically significant relationship between total years of experience in administration and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.5: There is no statistically significant relationship between principal education level and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.6: There is no statistically significant relationship between principal education level and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

**Data Analysis**

The data analysis chosen for this research is the Pearson Product-Moment Correlation Coefficient, which is more commonly known as either Pearson’s correlation or Pearson’s r. According to Gall et al. (2007), a correlational technique is best used “when both variables that we wish to correlate are expressed as continuous scores” (p. 347). Additionally, “product-
moment correlation is the most widely used bivariate correlational technique because most educational measures yield continuous scores and because $r$ has a small standard error” (p. 347).

In this research project, the data collected through the online survey instrument and the Virginia SOL reading achievement scores were continuous data; hence, the use of a Pearson’s $r$ is justified. However, after initial tests for normality were failed, revealing a monotonic relationship instead of linearity, the nonparametric test Spearman’s rho was used to analyze possible relationships. All data were analyzed by using SPSS version 21. Each dependent variable was correlated against the several independent variables to see if possible relationships existed within the data.
CHAPTER FOUR: FINDINGS

The purpose of this study was to determine if a relationship exists between principal servant leadership and student achievement in Southwest Virginia schools. The research questions guiding this study were (a) Is there a relationship between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools? and (b) Is there a relationship between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools? Variables of interest were also explored for possible relationships.

The research questions exploring these variables of interest were (a) Is there a relationship between principal total years of experience in education and student achievement in reading in Southwest Virginia schools? (b) Is there a relationship between principal total years of experience in education and student achievement in mathematics in Southwest Virginia schools? (c) Is there a relationship between principal total years of experience in administration and student achievement in reading in Southwest Virginia schools? (d) Is there a relationship between principal total years of experience in administration and student achievement in mathematics in Southwest Virginia schools? (e) Is there a relationship between principal education level and student achievement in reading in Southwest Virginia Schools? (f) Is there a relationship between principal education level and student achievement in mathematics in Southwest Virginia Schools?

This chapter provides the results and findings of the data analysis conducted for (a) variables of interest, (b) descriptive statistics, (c) assumption testing, and (d) hypotheses testing. The conclusion of this chapter contains a summary of all findings and results. A 95% level of
significance was set for all correlation analyses. All descriptive, assumption and correlation analyses were conducted using SPSS statistical software version 21.

Permission for research was sought from superintendents at 19 school districts in Southwest Virginia; Virginia Department of Education’s Region VII. Of the 19 districts contacted, 13 district superintendents gave permission for research. This resulted in a 68.4% district participation rate. The 6 districts that chose not to participate resulted in 84 principals who could not be contacted for survey participation. The 13 districts from which permission was received resulted in 117 principals who were contacted by email to participate in the research. Of the 117 contacted, 41 principals participated in the survey. This resulted in a 35% survey return rate and a sample size of 41. All 41 surveys were completed online through Surveymonkey.com, an online survey site. All 41 participants answered every survey question, with no incomplete surveys.

The first three questions on the survey dealt with the variables of interest: (a) principal experience in education, (b) principal total years in administration, and (c) principal highest education level. The following figures represent the distribution of participants for each variable:
Figure 2 Principal experience in education.

It is clear that the majority of participants (52.5%) had ample experience in education. Very few participants (5%) had under 10 years of experience. Figure 3 below displays the principal total years in school administration:
The greatest number of respondents (36.59%) fell in the eleven to twenty years of experience in administration category. Very few (7.32%) participants had more than 20 years’ experience in education.
Table 2 contains the frequencies and percentages for three of the six variables used in the current investigation. The first demographic variable asked respondents to indicate how many years of experience they have in education. The majority of respondents (54 percent) stated that they had more than twenty years. Nearly half of the remaining respondents (42 percent) stated that they had between eleven and twenty years’ experience. Only five percent of the sample had less than ten years’ experience.
Table 3
Frequencies and Percentages for Demographic Variables Used in the Analyses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many years of experience do you have in education: Six to ten years</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>How many years of experience do you have in education: Eleven to twenty years</td>
<td>17</td>
<td>42%</td>
</tr>
<tr>
<td>How many years of experience do you have in education: More than twenty years</td>
<td>22</td>
<td>54%</td>
</tr>
<tr>
<td>How many years of experience do you have in administration: One to five years</td>
<td>9</td>
<td>22%</td>
</tr>
<tr>
<td>How many years of experience do you have in administration: Six to ten years</td>
<td>14</td>
<td>34%</td>
</tr>
<tr>
<td>How many years of experience do you have in administration: Eleven to twenty years</td>
<td>15</td>
<td>37%</td>
</tr>
<tr>
<td>How many years of experience do you have in administration: More than twenty years</td>
<td>3</td>
<td>7%</td>
</tr>
<tr>
<td>What is your highest level of education: Masters degree</td>
<td>24</td>
<td>59%</td>
</tr>
<tr>
<td>What is your highest level of education: Education specialist degree</td>
<td>10</td>
<td>24%</td>
</tr>
<tr>
<td>What is your highest level of education: Doctorate of education</td>
<td>7</td>
<td>17%</td>
</tr>
</tbody>
</table>

Note: n=41.

The second demographic question used in the current investigation asked respondents how many years of experience they have in administration. The majority of respondents (71 percent) stated that they had either six to ten years (34 percent) or eleven to twenty years (37 percent) of administrative experience. Approximately one in every five respondents (22 percent) had one to five years of administrative experience. Only seven percent of the sample had more than twenty years of experience.

The final demographic variable asked respondents to indicate their highest level of education. The majority (59 percent) noted that they had a master’s degree; one in every four (24 percent) stated that they held an education specialist degree. Only 17 percent of the sample held a doctorate of education.
Table 4
*Means and Standard Deviations for Content Variables Used in the Analyses*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Self-Assessment of Servant Leadership Scale</td>
<td>6.27</td>
<td>0.34</td>
</tr>
<tr>
<td>Average Scaled SOL Score, Mathematics</td>
<td>428.15</td>
<td>20.00</td>
</tr>
<tr>
<td>Average Scaled SOL Score, Reading</td>
<td>434.08</td>
<td>11.82</td>
</tr>
</tbody>
</table>

*Note: n=41.*

Table 3 contains the means and standard deviations for the three final variables used in the current research. The first variable is the average composite score for the Self-Assessment of Servant Leadership Scale. This scale was ranked on a seven-point Likert scale that ranged from ‘strongly disagree’ (which was coded as 1) to ‘strongly agree’ (which was coded as 7). The mean score of 6.27 suggests that, on average, most respondents agreed that they possessed a servant leadership style.

The second and third variables in Table 3 are the average scaled SOL scores in mathematics and reading. SOL scores can range from a low of zero to a high of 600. A score of 0-399 is failure; a score of 400-499 is pass-proficient; a score of 500-600 is pass-advanced. The mathematics average scaled score for the schools involved in this study fell in the lower end of the “pass-proficient” range. The average scaled score for reading fell in the lower end of the “pass-proficient” range as well. This data indicates, on average, most of the students in the districts tested passed the corresponding SOL test.

**Assumptions Testing**

In order to determine whether the use of the parametric Pearson Product-Moment Correlation Coefficient was appropriate for use, the assumptions associated with this statistical
A visual inspection of the normal plots revealed that all six variables used in the investigation possessed a linear trend line; that is to say, these variables did not exhibit nonlinear characteristics. An examination of the histograms for three of the six variables used in the investigation (years in education, years in administration, and highest degree earned) revealed non-normal distributions of data.

Figures 5 through 10 display the histograms for all six variables:
Figure 5 Principal years of experience.

Note: The variable that measures years in education (Shapiro-Wilk = .719, df = 41, p = .000) was statistically significant.
Figure 6  Principal years in administration.

Note: The variable that measures years in administration (Shapiro-Wilk = .870, df = 41, p = 0.000) was statistically significant.
Figure 7 Principal highest degree earned.

Note: The variable that measures highest degree earned (Shapiro-Wilk = .710, df = 41, p = .000) was statistically significant.
*Figure 8* SOL average scaled score in reading.

Note: The variable which measures reading scores (Shapiro-Wilk = .780, df = 41, p = .659) statistically nonsignificant with respect to the Shapiro-Wilk statistic.
Figure 9 SOL average scaled score in mathematics.

Note: The variable which measures mathematic scores (Shapiro-Wilk = .978, df = 41, p = .920) statistically nonsignificant with respect to the Shapiro-Wilk statistic.
Note: The variable which measures the servant leadership scale (Shapiro-Wilk = .968, \(df = 41\), \(p = .298\)) was statistically nonsignificant with respect to the Shapiro-Wilk statistic.
Homoscedasticity was evaluated by examining the plots to see if the data are evenly grouped around the best fit line in the chart (Szapkiw, n.d). A visual examination of the best fit line scatterplots resulted in evidence of heteroscedasticity in the distribution; in other words, relationships were not homoscedastic.

Because three of the six variables used in this investigation violated the assumptions associated with the Pearson’s correlation technique, and because homoscedasticity could not be confirmed within the data, it was decided to use Spearman’s rho correlation as the analysis technique. Spearman’s rho is a non-parametric correlational technique whose use is appropriate when one or more of the assumptions of the Pearson’s correlation is present (Green & Salkind, 2011; Szapkiw, n.d.).

**Correlational Analysis**

The data analysis chosen for this research is the Pearson Product-Moment Correlation Coefficient, which is more commonly known as either Pearson’s correlation or Pearson’s r. According to Gall et al. (2007), a correlational technique is best used “when both variables that we wish to correlate are expressed as continuous scores” (p. 347). Additionally, “product-moment correlation is the most widely used bivariate correlational technique because most educational measures yield continuous scores and because r has a small standard error” (p. 347). In this research project, the data collected through the online survey instrument and the Virginia SOL reading achievement scores were continuous data; hence, the use of a Pearson’s r is justified. However, because of the nonlinearity of the data, Spearman’s rho, a nonparametric test, was chosen to analyze the data. This is the preferred analysis for correlational data that does not meet the tests for normality. All data were analyzed by using SPSS version 21. Each dependent variable was correlated against the several independent variables to see if possible
relationships existed within the data.

Results

Additional results are broken down by each particular research question below.

RQ1: Is there a relationship between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools?
Results of the Spearman’s rho Correlation suggest that there is a weak to moderate correlation between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools ($r_s = .320, n= 41, p=.041$). Thus the evidence supports the idea that a principal’s servant leadership characteristics will be related to student achievement in reading. In other words, higher scores on the servant leadership scale lead to higher student achievement in reading.

RQ2: Is there a relationship between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools?
Results of the Spearman’s rho Correlation suggest that there is no correlation between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools ($r_s = .290, n= 41, p=.066$). Thus the evidence does not support the idea that a principal’s servant leadership characteristics will be related to student achievement in mathematics.

Table 5 below displays the servant leadership survey scores, mathematics achievement scores, and reading achievement scores for each school:
Table 5

*SASL scores and achievement scores for each school*

<table>
<thead>
<tr>
<th>School</th>
<th>SASL Total</th>
<th>Math (SS)</th>
<th>Reading (SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>145</td>
<td>428.0556</td>
<td>419.7556</td>
</tr>
<tr>
<td>2</td>
<td>141</td>
<td>426.6719</td>
<td>432.0594</td>
</tr>
<tr>
<td>3</td>
<td>142</td>
<td>416.1111</td>
<td>434.2273</td>
</tr>
<tr>
<td>4</td>
<td>148</td>
<td>465.1158</td>
<td>462.5376</td>
</tr>
<tr>
<td>5</td>
<td>164</td>
<td>417.9412</td>
<td>452.8028</td>
</tr>
<tr>
<td>6</td>
<td>159</td>
<td>414.6844</td>
<td>433.1848</td>
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<td>7</td>
<td>141</td>
<td>414.9355</td>
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<td>8</td>
<td>167</td>
<td>445.0476</td>
<td>437.6557</td>
</tr>
<tr>
<td>9</td>
<td>148</td>
<td>442.3279</td>
<td>448.6058</td>
</tr>
<tr>
<td>10</td>
<td>159</td>
<td>399.4021</td>
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<td>12</td>
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<td>13</td>
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<td>428.3231</td>
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<td>417.4221</td>
<td>440.9916</td>
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<td>160</td>
<td>469.1349</td>
<td>456.9537</td>
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<td>20</td>
<td>156</td>
<td>412.6682</td>
<td>426.9658</td>
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<tr>
<td>21</td>
<td>150</td>
<td>424.8902</td>
<td>452.5905</td>
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Note: n=41
RQ3: Is there a relationship between principal total years of experience in education, principal total years of experience in administration, principal education level and student achievement in Southwest Virginia schools?

Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in education and student achievement in reading in Southwest Virginia schools \((r_s = .068, n = 41, p = .672)\). Thus the evidence does not support the idea that a principal’s total years of experience in education will be related to student achievement in reading in Southwest Virginia schools.

Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in education and student achievement in mathematics in Southwest Virginia schools \((r_s = .021, n = 41, p = .898)\). Thus the evidence does not support the idea that a principal’s total years of experience in education will be related to student achievement in mathematics in Southwest Virginia schools.

Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in administration and student achievement in reading in Southwest Virginia schools \((r_s = .077, n = 41, p = .632)\). Thus the evidence does not support the idea that a principal’s tenure at a school will be related to student achievement in reading in Southwest Virginia schools.

Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in administration and student achievement in mathematics in Southwest Virginia schools \((r_s = .029, n = 41, p = .886)\). Thus the evidence does not support the idea that a principal’s total years of experience in administration will be related to student achievement in mathematics in Southwest Virginia schools.
Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s education level and student achievement in reading in Southwest Virginia schools ($r_s = .151, n = 41, p = .346$). Thus the evidence does not support the idea that a principal’s tenure at a school will be related to student achievement in reading in Southwest Virginia schools.

Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s education level and student achievement in mathematics in Southwest Virginia schools ($r_s = .181, n = 41, p = .257$). Thus the evidence does not support the idea that a principal’s tenure at a school will be related to student achievement in mathematics in Southwest Virginia schools.

**Conclusion and Summary**

Chapter 4 is the presentation of the findings. One of five variables yielded a statistically significant relationship with student achievement. Because the data failed normality testing, the researcher used a nonparametric test, Spearman’s rho, to test for statistical significance. Chapter 5 follows with the review of research methodology, summary of descriptive data, summary of research findings, conclusion, discussion of findings in light of the literature review found in Chapter 2, implication for further study, limitations and recommendations for further research.
CHAPTER 5: DISCUSSION OF FINDINGS AND CONCLUSIONS

Chapter Four presented the results of correlational analysis on possible relationships between principal servant leadership characteristics and student achievement. Chapter 4 also presented findings related to principal total years of experience, tenure at school, and experience in administration and education level. Chapter Five is organized into the following sections: (a) review of research methodology, (b) summary of descriptive data, (c) summary of the findings, (d) discussion of the findings in light of relevant literature, (e) limitations, (f) implications, and (g) recommendations for future research.

Review of Research Methodology

The following research questions guided this study:

RQ1: Is there a relationship between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools?

RQ2: Is there a relationship between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools?

RQ3: Is there a relationship between principal total years of experience in education, principal total years of experience in administration, principal education level and student achievement in Southwest Virginia schools?

Null Hypotheses

The null hypotheses for this study were:

H01: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.
H02: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.1: There is no statistically significant relationship between principal total years of experience in education and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.2: There is no statistically significant relationship between principal total years of experience in education and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.3: There is no statistically significant relationship between principal total years of experience in administration and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.4: There is no statistically significant relationship between total years of experience in administration and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

H03.5: There is no statistically significant relationship between principal education level and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

H03.6: There is no statistically significant relationship between principal education level and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.

Review of Research Design
The research design used in this study is non-experimental correlational research, which is widely used to discover relationships (Gall, et al 2007, p. 332). The primary independent variable was principals’ servant leadership characteristics as derived from a self-assessment survey. The dependent variable was student achievement as measured by students’ scores on the Virginia Department of Education Standard of Learning achievement tests in math and reading. Other independent variables tested for possible relationships with student achievement were: principal total years of experience in education, principal total years in administration, and principal education level.

**Review of Instrumentation**

The instrumentation used in this survey research was the Self-Assessment of Servant Leadership survey (Taylor, 2002). This is a 24 item self-assessment measuring servant leadership characteristics of leaders. This survey was distributed to school principals from Southwest Virginia. The survey was administered online through an online survey provider. The achievement data used in the study was taken from public archival achievement scores published by the Virginia Department of Education. These scores were scaled scores taken from student achievement tests in each district. The scores can range from a possible 0 to a high of 600. The scaled score used in this study was an average of those students in the particular school used for research.

**Review of Participants and Setting**

The setting of this project was Virginia Department of Education’s Region VII, commonly called Southwest Virginia. The participants were all the willing principals from the districts agreeing to participate. There are 19 districts and 13 consented to participation, yielding a 68.4% participation rate. Out of the 13 participating districts, 117 principals were extended an
opportunity to participate. The final sample yielded a convenience sample of 41 principals participating in the self-assessment survey. This resulted in a principal participation rate of 35%.

Review of Data Analysis

The data analysis chosen for this research is the Pearson Product-Moment Correlation Coefficient, which is more commonly known as either Pearson’s correlation or Pearson’s r. According to Gall et al. (2007), a correlational technique is best used “when both variables that we wish to correlate are expressed as continuous scores” (p. 347). Additionally, “product-moment correlation is the most widely used bivariate correlational technique because most educational measures yield continuous scores and because r has a small standard error” (p. 347). Because 3 out of 6 variables failed the assumptive and normality testing for this research, it was determined that Spearman’s rho, or Spearman’s rank order, would be the best analysis. The data was analyzed using SPSS version 21 software.

Summary of Descriptive Data

With regards to experience in the education field, the majority of respondents (54 percent) stated that they had more than twenty years. Nearly half of the remaining respondents (42 percent) stated that they had between eleven and twenty years’ experience. Only five percent of the sample had less than ten years’ experience.

Concerning years of experience in administration, the majority of respondents (71 percent) stated that they had either six to ten years (34 percent) or eleven to twenty years (37 percent) of administrative experience. Approximately one in every five respondents (22 percent) had one to five years of administrative experience. Only seven percent of the sample had more than twenty years of experience. As for the level of education of the sample, the majority (59 percent) noted that they had a master’s degree; one in every four (24 percent) stated that they
held an education specialist degree. Only 17 percent of the sample held a doctorate of education.

Our primary variables in this study were the SASL score and the average scaled SOL scores. The Self-Assessment of Servant Leadership Scale mean score of 6.27 suggests that, on average, most respondents agreed that they possessed a servant leadership style. The average scaled SOL scores in mathematics (428.15) and reading (432.08) indicates, on average, most of the students in the districts tested passed the corresponding SOL test.

**Summary of the Findings**

The null hypotheses were tested using Spearman’s rho on SPSS version 21 statistical software. The following summaries describe the findings for each null hypothesis.

H01: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools.

Results of the Spearman’s rho Correlation suggest that there is a correlation between principal servant leadership characteristics and student achievement in reading in Southwest Virginia schools ($r_s = .320$, $n= 41$, $p=.041$). Thus the evidence supports the idea that a principal’s servant leadership characteristics will be related to student achievement in reading. In other words, higher scores on the servant leadership scale are positively related to higher student achievement in reading. The null hypothesis is rejected. This result is similar to the findings of Pattison (2010) and Metzcar (2008), suggesting a moderate positive relationship between principal servant leadership and student achievement.

H02: There is no statistically significant relationship between principal servant leadership characteristics and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools.
Results of the Spearman’s rho Correlation suggest that there is no correlation between principal servant leadership characteristics and student achievement in mathematics in Southwest Virginia schools ($r_s = .290, n= 41, p=.066$). Thus the evidence does not support the idea that a principal’s servant leadership characteristics will be related to student achievement in mathematics. The null hypothesis was retained. This finding supports the findings of Dunn (2012), Cunningham (2008), Babb (2012), Zahn (2011), and Hannigan (2008).

H03.1: There is no statistically significant relationship between principal total years of experience in education and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools. Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in education and student achievement in reading in Southwest Virginia schools ($r_s = .068, n= 41, p=.672$). Thus the evidence does not support the idea that a principal’s total years of experience in education will be related to student achievement in reading in Southwest Virginia schools. The null hypothesis was retained.

H03.2: There is no statistically significant relationship between principal total years of experience in education and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools. Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in education and student achievement in mathematics in Southwest Virginia schools ($r_s = .021, n= 41, p=.898$). Thus the evidence does not support the idea that a principal’s total years of experience in education will be related to student achievement in mathematics in Southwest Virginia schools. The null hypothesis was retained.
H03.3: There is no statistically significant relationship between total years of experience in administration and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools. Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in administration and student achievement in reading in Southwest Virginia schools \((r_s = .077, n= 41, p=.632)\). Thus the evidence does not support the idea that a principal’s tenure at a school will be related to student achievement in reading in Southwest Virginia schools. The null hypothesis was retained.

H03.4: There is no statistically significant relationship between principal tenure at current school and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools. Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s total years of experience in administration and student achievement in mathematics in Southwest Virginia schools \((r_s = .029, n= 41, p=.886)\). Thus the evidence does not support the idea that a principal’s tenure at a school will be related to student achievement in mathematics in Southwest Virginia schools. The null hypothesis was retained.

H03.5: There is no statistically significant relationship between principal education level and student achievement in reading as measured on the Virginia Standards of Learning Reading Assessment in Southwest Virginia Schools. Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s education level and student achievement in reading in Southwest Virginia schools \((r_s = .151, n= 41, p=.346)\). Thus the evidence does not support the idea that a principal’s tenure at
a school will be related to student achievement in reading in Southwest Virginia schools. The null hypothesis was retained.

H03.6: There is no statistically significant relationship between principal education level and student achievement in mathematics as measured on the Virginia Standards of Learning Mathematics Assessment in Southwest Virginia Schools. Results of the Spearman’s rho Correlation suggest that there is no correlation between a principal’s education level and student achievement in mathematics in Southwest Virginia schools ($r_s = .181, n= 41, p = .257$). Thus the evidence does not support the idea that a principal’s tenure at a school will be related to student achievement in mathematics in Southwest Virginia schools. The null hypothesis was retained.

**Discussion of the Findings**

When taking a general view of the research involving principal leadership and student achievement, the findings of this study fall in line with previous studies. Because the research and results of principal leadership and student achievement are varied, one could only suspect that the results of this study would be varied. However this research is focused on principal’s servant leadership characteristics only, and excludes other general leadership theories such as transformational leadership, organizational leadership, authentic leadership and transactional leadership. Therefore the discussion of the findings will be focused primarily upon relevant literature and studies involving servant leadership theory. With this view in mind, it will be the goal of the researcher to provide a more broad application to principal leadership and student achievement that will be discussed in brief.

With regards to significant findings, this research revealed a moderate statistically significant relationship between servant leadership characteristics of school principals and
student achievement in reading, but not mathematics. Similar studies in principal servant leadership and student achievement have produced mixed results. While an overall servant leadership score was not significant, Pattison (2010) did find that principals in “higher-achieving” schools were perceived to have higher levels of humility and vision, which are two of the established constructs of servant leadership theory.

Similarly, Herndon (2007) found that the servant leadership factors of “Agapao love”, “empowerment”, “humility” were significantly positively correlated with the student achievement factor of “Communication Arts MAP scores” with bivariate correlation, but there were no factors of servant leadership that correlated with the student achievement variable of “Communication Arts MAP scores” when controlling for enrollment and free and reduced lunch (Table 41). The servant leadership factors of “Agapao love,” “empowerment,” and “humility” were significantly positively correlated with student achievement. However, there were no significant correlations with a total servant leadership score. Hanigan (2008) conducted a similar study regarding servant leadership as a predictor of college performance. The research revealed no statistically significant relationship with student achievement at the college level.

In another similar study, Metzcar (2008) found a significant positive relationship between student achievement and effective teaching. While effective teaching is not the same as student achievement, Metzcar (2008) defined effective teaching as National Board Certified Teachers. Although some research suggests possible relationships, such as Vandervoort, Amrein-Beardsley, and Berliner (2004) and Cavalluzzo (2004), further research needs to be conducted to determine the strength of the relationship between National Board Certified Teachers and student achievement.
While a moderate positive relationship of principal servant leadership with student achievement was reported in this study, principal total experience, experience in administration, tenure at school, and education level had no statistically significant relationship with student achievement. This result is in agreement with previous research such as Rhoden (2012), Pattison (2010), Babb (2012), and Magee (2012).

One of the main differences between this study and previous studies is that this study specifically looked at servant leadership characteristics and student achievement. As sort of a “snap shot” of what is presently occurring, this project is uniquely defined by the simplicity of the research into servant leadership theory. Also, this study did not seek to identify principals with regard to demographic status other than experience; therefore age, race and gender were excluded. Other similar studies involving servant leadership and school achievement such as Zahn (2008), Pattison (2010), Babb (2012) and Cunningham (2008) tested some sort of socioeconomic condition as well.

This research sought to look purely into possible servant leadership relationships without regard to socioeconomic conditions. Additionally, this study made no distinction between a “lower achieving school” and a “higher achieving school” as in previous studies such as Zahn (2008) and Pattison (2010). Boyer (2012) tested servant leadership theory for possible relationships with student achievement and found a positive correlation, however the sample size (n=9) was too small to detect statistical significance.

It appears that this study stands out among previous similar studies due to the moderate positive correlation of principals’ servant leadership characteristics and student achievement in reading. While a great deal of research exists regarding principal leadership and student achievement, very little research has been conducted regarding principal servant leadership and
student achievement, especially involving a more pure focus while ignoring school climate or other controlling variables. It appears that this research breaks new ground in servant leadership theory, or at the very least adds to the overall body of knowledge. While other studies have focused more on specific constructs of servant leadership, this exploration has sought to maintain the integrity of an overall score of a servant leader principal and possible relationship with student achievement.

Limitations

Every study has certain limitations and this research project is not without unique circumstances that limit the reach of significance. Therefore the limitations for this study need to be addressed. For example, the Self-Assessment of Servant Leadership survey is limited to the willingness of principals to be self-critical in making honest assessment about their leadership skills. Although self-report measures have been shown reliable (Taylor, 2002), such measures are still limited to the perceptions of the participant, and may be restricted by predetermined notions and fears of confidentiality.

This study was also limited by lack of random sampling. As stated in Chapter 3, this research used a convenience sample. The researcher felt that a convenience sample would be the best way to achieve a higher participation rate. Also, the study was limited to the geographic location of Southwest Virginia, which would make true random sampling an issue because of the low number of possible principals working in the region.

Another limitation of this study is related to application of results. Correlational research does not seek to prove causation, but rather to examine possible relationships and more specifically predictors (Gall, et al, 2007, p. 333). This research did not seek to discover causation, and therefore no controlling variables were used (Dale, 2012).
Implications

The implications of this study follow a mix of results regarding the broad research of principal leadership and student achievement. As Cotton (2003) reported, “principals do have a profound and positive influence on student learning (p.74).” However, the question remains as to why and how principals influence this learning. This study provides insight into one possibility for principal relationships with student achievement because a moderate positive relationship was determined from the data analysis. Principals who display servant leadership characteristics could have a more positive relationship on student achievement than principals who do not display those characteristics.

The difficulty in providing a more concrete inference from this research lies in the difference between the significance of principal servant leadership with reading achievement and not mathematics achievement. This lack of statistical significance in one variable but not the other cannot be explained very easy. There are many possible factors and determining which variable made the difference is certainly the factor that remains to be discovered. Nevertheless, whether direct or indirect, this study revealed a positive relationship between servant leadership characteristics and student achievement.

Furthermore, this study implicates the possibility for principals and school leaders to model the effective behaviors and constructs found in servant leadership and put them in action to make a difference where it counts. Regardless of personal opinion or debate, student achievement and accountability measures are not going away. In fact, it only makes sense that they will become increasingly more stringent. As this happens, school leaders will search for opportunities to implement what is most effective. This study shows that there is a positive
relationship that does exist, and it would be wise for school leaders to take notice of servant leadership as a validated approach to effective leadership.

**Recommendations for Future Research**

In light of the implications of this study, the following recommendations are made:

**Recommendation 1**

It is recommended that future research regarding principal servant leadership and student achievement be performed in a causal comparative model. Such research could give more insight into the effect of servant leader principals on student achievement. This could be accomplished by identifying two groups of principals: servant leaders and non-servant leaders. Each group could be analyzed based on student achievement scores over a set time period with achievement measures taken as pretest and posttest items. Such study could have many different options for controlling variables.

**Recommendation 2**

Future empirical research could be aimed at the more specific constructs of servant leadership. Using a more descriptive assessment instrument, such as Page and Wong’s (2000) Servant Leadership Profile, could lend more pragmatic definitions of specific factors leading to increased student outcomes. Which of the 12 constructs of servant leadership make the most difference on student outcomes? The difficulty with such an instrument is the amount of time required to complete a large assessment. Would such a large instrument result in fewer participants? If so, this research would have to be conducted with a large available population from which to draw the sample to ensure an adequate sample size and participation rate.

**Recommendation 3**
Another recommendation would focus research solely on the student perceptions. Do students recognize servant leadership characteristics in principals? What do principals do that students realize that increases learning? This would involve student centered surveys that may reveal more about the relationship that exists between servant leader principals and student achievement.

**Recommendation 4**

A final recommendation would be to execute a true experimental research project. This endeavor would involve providing some sort of servant leadership training to an experimental group of principals, while withholding such training from a control group of principals. Student achievement measurements could be made as pretest and posttest data.

**Conclusion**

This study addressed the relationship of principals’ servant leadership characteristics with student achievement. Indicated in preceding relevant literature was the idea that principals can influence, whether directly or indirectly, student achievement (Cotton, 2003).

Findings from this project suggest that principals who display servant leadership characteristics have a positive influence on student achievement. This is valuable information as principals and school systems must discover ways to address the demanding pressures of increasing student achievement. Principal training programs must address the significant influence of the instructional leader on the learning process. Facilities and building management, although of great importance, are not the only responsibility of today’s principal. The achievement accountability that a principal as instructional leader faces cannot be ignored. A principal who will display qualities associated with servant leadership can have a positive influence on the learning that takes place in his building. If a principal is to be held accountable
for the achievement of the students given to his charge, he must find a way to make an impact where it matters most.

A surprising finding from this study was that there was no significant relationship between a principal’s servant leadership score and his experience. This researcher was sure that a more experienced principal would either be (1) more self-critical and would score lower on the SASL or (2) would naturally develop the leadership characteristics of a servant leader and would score higher on the SASL. A nonsignificant result was a surprise and unexpected result.

The findings of this research add significantly to the body of knowledge of servant leadership theory, especially in the educational leadership realm. Principals, school districts and training programs can use this knowledge to develop the servant leadership characteristics of principals, which could also lead to increased student achievement. Further research could lead to specifics in principal training designed to better equip principals in areas that are more likely to have a positive relationship with student achievement. School districts could use instruments such as, or similar to, the SASL to detect areas of servant leadership that may be inadequate in a leader and arrange training programs to develop further the servant leadership skills of that individual.
REFERENCES


Humphreys, J. & Einstein, W. (2003). Nothing new under the sun:
transformational leadership from historical perspective. *Management Decision*. 41 (85-95).


Publications.


APPENDIX A: IRB APPROVAL

September 5, 2013

Christopher Crabtree
IRB Approval 1626.090513: The Relationship between Servant Leadership and Student Achievement in Southwest Virginia Schools

Dear Christopher,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

[Signature]

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

(434) 592-4054

Liberty University | Training Champions for Christ since 1971
APPENDIX B: SUPERINTENDENT PERMISSION EMAIL (SAMPLE)

Dear Superintendent:

I am requesting your support of a doctoral dissertation study I am conducting as a student at Liberty University. The purpose of this study will be to examine the correlation between principal’s servant leadership characteristics with student achievement in Southwest Virginia Schools (Region VII).

To complete this study, principals with at least one year experience in your division will be asked to participate by completing an online self-assessment survey, about 10 minutes in length; and 2013 English Reading Standards of Learning scores and Mathematics Standards of Learning scores will be obtained from the Virginia Department of Education Schools Report Cards.

Confidentiality will be maintained at all times through this process with results being anonymous and not connected to individuals or schools. Sample copies of the surveys to be utilized are attached for your review.

I am more than willing to discuss this further if you have any questions or concerns and would appreciate any assistance you can provide.

If you would, please respond (reply) to this email expressing approval to conduct this research with your schools. Thank you for your help in this project.

Sincerely,

Chris Crabtree
Liberty University
Congratulations! Your superintendent has given me permission to invite you to participate in a doctoral dissertation research study I am conducting as a student at Liberty University. The purpose of this study is to examine the correlation between principal’s servant leadership and student achievement.

This will be a 3 step process:

1. **Download the attached pdf.** This is the consent form stating the purpose, risk, benefits and directions for your participation. If you consent to this study, please type your name and date in the form fields at the bottom of the file.

2. **Save the attachment to your desktop and send it back to me as an attachment in an email reply.**

3. **You will receive another email later on with a link to the online survey** (This may take a while due to consent form verification). Once you complete the survey, your participation is complete.

All complete survey respondents names will be placed in a **drawing for a $100 Amazon.com gift card.**

Thank you in advance for your participation,

Sincerely,

Chris Crabtree
Doctoral Candidate
Liberty University
APPENDIX D: PRINCIPAL CONSENT FORM (SAMPLE)

CONSENT FORM

THE RELATIONSHIP BETWEEN SERVANT LEADERSHIP AND STUDENT ACHIEVEMENT IN SOUTHWEST VIRGINIA SCHOOLS
Chris Crabtree, Ed.S.
Liberty University
School of Education

Congratulations! You are invited to be in a research study of servant leadership characteristics of school principals. You were selected as a possible participant because you are a principal with at least one year experience in Southwest Virginia and your superintendent has given me permission to conduct this study in your district. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Chris Crabtree, doctoral candidate at Liberty University School of Education.

Background Information:

The purpose of this study is to study the relationship between servant leadership characteristics of school principals and student achievement. The Self-Assessment of Servant Leadership is a survey tool that measures a level of servant leadership. Student achievement is measured by scores on the Virginia Standard of Learning achievement tests in mathematics and reading. This study will measure possible relationships between the two.

Procedures:

You are being asked to participate in a short online self–assessment survey that will take approximately 10 minutes to complete. The first part of the survey will ask a few questions about your experience and education level. The second part of the survey is a self-assessment. The survey will ask you to assess some of your leadership characteristics. This is a self-assessment, which means you must answer the questions in the most honest way that you can about yourself. Each question will have 7 possible answers arranged in a scale with a “1” being strongly disagree and a “7” being strongly agree. It is possible that your answer could be anywhere along the scale, based upon how you assess yourself regarding the answer.

If you agree to be in this study, I would ask you to do the following things:

- Please type your name and date in the signature fields at the bottom of this document (highlighted in green).
- Save this file on your desktop and send it as an attachment back to me in an email reply (You should also print a copy for your own records).
- Once you have replied with your consent, you will receive a follow up email with a link to the survey. Click on this link, it will take you to the online survey hosted by
www.surveymonkey.com. You will be further instructed on what to do once you reach the survey. This should take less than 10 minutes.

Risks and Benefits of being in the Study:

This study poses no known and at most minimal risk to you as a participant; no more than what would be encountered in everyday life.

The benefits to participation include providing information that could lead to school principals improving their leadership abilities as they relate to student achievement in reading and mathematics. You would also be providing information that may be valuable to the recruitment and retention of effective administrators.

Compensation:

Your participation will enter you in a drawing for a $100 Amazon.com gift card. This drawing will be held after all completed surveys have been returned. Only complete and accurate surveys will be considered for the drawing. If you happen to be the winner, you will be notified by email.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records. Any sort of report that may be published as a result of this study will not include any names or identifying information.

The data collected from this study will be kept confidential in a number of ways. The data will be coded to ensure that your name is suppressed from any results. Your school name will also be encoded and suppressed. This information will be kept separate and locked in a lock box to make sure that no one can access this information. Computer files used to store data will be password protected and saved on separate laptops. These laptops will only be accessed by this researcher.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or your current employer in Southwest Virginia. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:
The researcher conducting this study is Chris Crabtree. You may ask any questions you have now by contacting Chris Crabtree at XXX-XXX-XXXX. If you have questions later, **you are encouraged** to contact him at XXX-XXX-XXXX or XXXXXXXXXXXX. You may also contact the faculty advisor for this research, Dr. Clarence Holland at XXXXXXXXXXXX.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24502 or email at irb@liberty.edu

**Statement of Consent:**

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in this study.

Signature: ___________________________ Date: __________________

Signature: ___________________________ Date: __________________

Principal Investigator

**IRB Code Numbers:** 1626.090513

**IRB Expiration Date:** September 5th, 2014
APPENDIX E: TARGET POPULATION MAP

Target Population

The target population will be the willing participants (K-12 Principals with at least 1 year experience) from Southwest Virginia public K-12 schools, specifically Region VII as designated by the Virginia Department of Education. Figure 1 details the region.

Virginia’s Education Regions, Region VII (Southwest Virginia)

Figure 1. Commonwealth of Virginia Department of Education Superintendent’s Regions. (n.d.). Note: Copyright Virginia Department of Education. Source: http://www.doe.virginia.gov/directories/va_region_map.pdf