

ELEMENTARY PRINCIPAL LEADERSHIP
BEHAVIORS AND TEACHER TRUST: AN
EXAMINATION OF TRANSFORMATIONAL,
TRANSACTIONAL AND SERVANT LEADERSHIP

By

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Abstract: The high stakes accountability environment in which schools currently operate demands leadership behaviors that produce enhanced student outcomes. However, school principals are often caught in a complex web of competing stakeholder demands within large bureaucratic systems. Specifically, principals must fulfill high stakes accountability mandates while also cultivating an environment that enhances stakeholder morale while maintaining the health, safety and well-being of students and faculty. This study explores the influence of transformational, transactional, and servant leadership behaviors on collective faculty trust within a high-stakes mandated testing environment using the theoretical framework of Self-Determination Theory. Additionally, this study will explore the relationship between principal leadership behavior and collective faculty trust in colleagues and collective faculty trust in the principal to gain a better understanding of leadership behavior outcomes.

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CHAPTER I

INTRODUCTION TO PROBLEM

The federal government's No Child Left Behind legislation and resulting individual state legislation have resulted in a climate of high-stakes accountability as a means to compel schools to achieve system wide reform. According to policy makers, enhanced accountability requirements help to solidify a promise for widespread, systemic reform that will lead to enhanced student outcomes. Leithwood and Earl (2009) identify two assumed consequences that result from calls for greater school accountability; "(a) better alignment between public aspirations and the purposes schools strive to achieve and (b) improved performance on the part of schools, typically defined by traditional achievement criteria" (p.1).

Despite perceived benefits of mandated high-stakes accountability, the existing high-stakes accountability environment has caused the role of the principal to become increasingly complex. Much of this added complexity can be attributed to the principal's emergence as the "chief learning officer" who is held "accountable for individual student achievement" (Green, 2013, p. 1). The growing role of the principal, considered to be at the "nexus of accountability and school improvement" (Hallinger, 2007, p. 222), is commonsensical when considering "the principal is in the middle of the relationship between teachers and external

ideas and people” (Fullan, 2009, p. 55). Principals’ roles are designed as intermediators, but Hallinger (2007) suggests that school reform policies have placed principals in a position within school reform with continually increasing expectations that principals will produce expected student outcomes while functioning as a central agent of educational change. As a result of the focus on principal leadership in the current policy environment, the principal has become targeted as the agent of change to achieve mandated accountability measures and as the vital mediator between the school’s internal and external stakeholders (Fullan, 2009).

However, as school leaders become caught up in trying to achieve mandated accountability reforms, tensions emerge. For example, accountability reforms often overlook essential leadership functions necessary for organizational wellbeing. Leithwood, Harris, and Hopkins (2008) identify two central tenants of leadership: to “help improve employee performance” and to support performance as “a function of employees’ beliefs, values, motivations, skills and knowledge and the conditions in which they work” (p. 29). Specifically, leadership behaviors required to fulfill obligations of “heavy-handed, top down reform measures” may be very different than leadership behaviors required to build the morale, motivation, and expertise of teachers to meet accountability demands. Therefore, leadership behaviors must be employed effectively so that both stakeholder needs and organizational goals are adequately met.

The tensions that exist within the role of the principal are currently exacerbated by the fact that virtually all 50 states have passed some type of standards-based accountability policy or legislation (Hoy & Miskel, 2008). These mandates require schools to produce test based student outcomes within the traditional hierarchical framework of public school systems. Contrary to policy demands, research suggests that more distributed leadership

styles may be more effective approaches to reaching educational goals (Bass, Avolio, Jung, & Berson, 2003). However, the majority of accountability reform policies are externally driven, top-down measures from the federal government, or state level agencies that “diminish the latitude that principals and other actors need to exercise influence”(Marks & Nance, 2007, p.6). Fullan (2014) states, “the irony is that as the change expectations heighten [accountability], the principalship itself has become overloaded in a way that makes it impossible to fulfill the promise of widespread, sustained reform” (p. 56). Numerous stakeholders and their conflicting spheres of influence, therefore, are impinging on the principal’s ability to exercise discretionary authority, thus compromising their ability to exercise true leadership behaviors that lead to enhanced educational outcomes (Marks & Nance, 2007).

Problem

As the education climate in the United States evolves to be more standards and outcome focused, there must be continual research on the changing role of the principal in this increasingly complex system. Little is known in high-stakes accountability policy environment about principal behavior (specifically, servant leadership) that actually leads to the enhancement of a normative school conditions such as collective faculty trust. Specifically, little is known about the effects of transformational, transactional, and servant leadership styles in high stakes accountability policy environments on collective faculty trust.

Purpose

Twenty-first century school leaders must establish themselves as individuals who can walk with purpose in two worlds, that of implementation of policy and that of leading individuals within a school building. Leithwood, Louis, Anderson, and Wahlstrom (2004)

argue that these school leaders need to be equipped with “large repertoires of practices and the capacity to choose from that repertoire as needed, not leaders trained in the delivery of one ‘ideal’ set of practices” (p.10). Much research has been conducted exploring various leadership styles and responsibilities on the success of the school leader (Waters, Marzano & McNulty, 2003). Leithwood et al. (2004) term these studies “leadership by adjective” (p. 6) and argue that one must be cautious in this approach because there is the potential that adjectives may “mask the more important underlying themes common to successful leadership, regardless of the style being advocated” (Leithwood et al., 2004, p. 5). Leithwood (2001), in his review of empirical and theoretical literature, concludes that there is a need for more empirical studies “of productive leadership practices in accountability policy contexts” (p. 229). This research seeks to identify leadership behaviors that “help the organization set a defensible set of directions and influence members to move in those directions” (Leithwood et al., 2004, p. 6) within the confines of a high-stakes political environment.

The purpose of this study was to examine principal leadership behaviors that lead to enhanced collective faculty trust. There is a need for greater clarity in the current “debate over how school leadership is conceptualized and enacted” (Cranston, 2013, p. 129). Leithwood et al. (2004) suggest that “evidence about the nature and influence of those practices is not yet sufficiently fine-grained” (p. 14) enough to fully understand how school leadership is utilized systematically to reach selected organizational goals. Specifically, this study explored the influence of transformational, transactional, and servant leadership behaviors on collective faculty trust within a high-stakes mandated testing environment. Additionally, this study explored the relationship between principal leadership behavior and

collective faculty trust in colleagues and collective faculty trust in the principal to gain a better understanding of whether leadership behavior can influence different levels of trust.

Research Questions

This study addresses the following research questions:

Primary Research Questions:

Does principal leadership behavior (servant, transformational, transactional) influence collective faculty trust?

Sub-questions:

1. Does principal leadership behavior (servant, transformational, transactional) influence collective faculty trust in colleagues?
2. Does principal leadership behavior (servant, transformational, transactional) influence collective faculty trust in the principal?

The conceptual framework of Self-Determination Theory (Ryan & Deci, 2001) is used to explain the theoretical relationship between leadership behavior and collective faculty trust because it provides a framework to understand teacher motivation to reach educational goals when their basic psychological needs of autonomy, competence, and relatedness are met.

From this conceptual framework, the following hypotheses are advanced:

1. H₀₁: Principal leadership behavior positively contributes to collective faculty trust.
2. H₀₂: Principal leadership behavior positively contributes to collective faculty trust in colleagues.
3. H₀₃: Principal leadership behavior positively contributes to collective faculty trust in the principal

Relevance of the Study

Further study is needed to understand the influence of different types of leadership behaviors on normative school condition such as, collective faculty trust with in the current high stakes accountability environment. Specifically, little is known about the effects of transformational, transactional, and servant leadership styles in high stakes accountability policy environments on collective faculty trust or if these leadership styles influence teacher motivation to persevere in meeting educational goals. This study will explore the relationship between transformational, transactional, and servant leadership behaviors and collective faculty trust within a high-stakes mandated testing environment. Additionally, this study will explore the relationship between collective faculty trust in colleagues and collective faculty trust in the principal to gain a better understanding of trust and leadership. Finally, this study will establish a foundation for further exploration of the relationship between principal leadership behavior, collective faculty trust, and student outcomes.

This study can inform the discipline of educational leadership and future leadership program development by providing a better understanding of leadership styles that lead to enhanced student outcomes in the current high-stakes policy environment. Current administrative structures may actually inhibit the enhanced outcomes that policies are meant to enforce. Additionally, understanding whether leadership styles work through collective faculty trust, thereby enhancing normative conditions of schools, can lead to a better understanding for implementation of policy mandates. Finally, because little research exists on the construct of servant leadership, this study will contribute to the understanding of servant leadership, the influence of servant leadership on collective faculty trust, and the influence of servant leadership on the normative conditions of schools.

Definition of Terms

The following terms will be used operationally in this study. It is acknowledged that in different contexts, these terms may carry different meaning; therefore, this section will provide a common understanding of terms used within the topic of this study.

Collective Trust. “A stable group property rooted in the shared perceptions and affect about the trustworthiness of another group or individual that emerges over time out of multiple social exchanges within the group” (Forsyth, Adams, & Hoy, 2011, p. 22).

Servant leadership. The idea that a leader’s focus should be on the motivation and well-being of the follower. Through shared decision making, service to others and personal development leadership and followers can ascend to a higher plane of motivation (Spears, 2001; Stone, Russell, & Patterson, 2003; Taylor, Martin, Hutchinson, & Jinks, 2007)

Transactional Leadership. Leader and follower motivation towards a joint purpose is focused on the exchange of valued things (economic, political, and psychological) between leaders and followers (Burns, 1978; Northouse, 2013)

Transformational Leadership. A leader who, “recognizes and exploits an existing need or demand of a potential follower” (Burns, 1978, p. 4) by “raising follower’ levels of consciousness about the importance and value” (Northouse, 2013, p. 190) of organizational goals. This should result in a mutual beneficial relationship that elevates the “followers to leaders and may convert leaders into moral agents” (Burns, 1978, p. 4)

Trust. “A state in which individuals and groups are willing to make themselves vulnerable to others and take risks with confidence that others will respond to their actions in positive ways, that is, with benevolence, reliability, competence, honesty, and openness” (Forsyth et al., 2011, p. 19-20).

Assumptions

The following regression assumptions are made regarding this study:

- Teacher-level data were collected and measured without error.
- Level one errors are independent and normally distributed with a common variance.
- Residuals are uncorrelated and have constant variance.
- Observations across teachers are independent.

Limitations

Limitations were present in this study. The first limitation addresses the generalizability of the results. Because data was collected from urban schools in one district, results should only be generalized to faculty in that district and other urban districts with similar characteristics. A second limitation is based on the subjectivity of survey research. Survey responses can be susceptible to misunderstanding or misinterpretation of the survey statements by the respondent. Finally, because this study was conducted in a large, urban district where teachers experience a multitude of demands on their time, response rate was a primary consideration. Because the original intent of this study was to analyze this data in a multi-level model, it was important to collect responses from as many teachers as possible in as many schools within the district as possible.

Summary

Chapter I introduced the significance of principal leadership and established how this study will contribute to the extant literature on principal leadership behaviors and collective faculty trust. The statement of problem was provided, and limitations of understandings of principal leadership behaviors in high-stakes accountability environments were introduced. Chapter I also provided the purpose and significance of the research for schools, primary research questions, definition of terms, and limitations of the study.

Chapter II of the study provides a review of the literature on transformational/transactional and servant principal leadership behaviors. Included in the chapter are limitations on the ability of principals to exercise true leadership in light of high stakes accountability mandates that place the nexus of responsibility for enhanced outcomes on the role of the principal. The current hierarchical structure of leadership was addressed as well as the importance of principal leadership to enhance teacher motivation to persevere in meeting educational goals. Collective trust was introduced as the dependent variable for the study. Collective trust is used as a normative condition in schools that emerges out of frequent interactions between stakeholders in a building. The use of collective trust allowed the researcher to gain a better understanding of the effect of leadership behavior on the culture and climate of schools, which could, potentially, influence student outcomes. Furthermore, self-determination theory is discussed as the conceptual framework to discuss the potential relationship between collective faculty trust and leadership behaviors. Self-determination theory will be used for this purpose because it can help to explain why teachers persist in their efforts to reach achievement goals in positive school cultures/climates. Specifically, SDT emphasizes meeting of teacher psychological needs of

competence, autonomy and relatedness as a source of motivation for pursuing educational goals.

Chapter III describes the research methodology. This quantitative study relied on a survey instrument to obtain data. The survey was constructed from three existing surveys. Each component (servant leadership, transformational/transactional, and trust) of the survey is discussed. Discussion of study instrumentation focuses on each survey components development, reliability and validity.

Chapter IV presents an analysis of the data. Justification for use of multiple regression is presented. Included in this chapter is a detailed description of the survey participants and survey data. A discussion of the survey data allows for a comprehensive understanding of each variable leading to the justification in using multiple regression for data analysis.

Chapter V provides a discussion of findings regarding each research question in addition to addressing study limitations, implications and suggestions for further research.

CHAPTER II

LITERATURE REVIEW

A review of the literature will provide: (a) a brief overview of the historical development of role of the school principal, (b) current principal roles and responsibilities, (c) school leadership and student outcomes, (d) leadership behaviors (transactional, transformational, and servant leadership), and (e) discussion of trust and Self-Determination Theory.

School Leadership

The role of the principal can best be understood by examining its historical context. According to Ryan and Cooper (2012), teachers and administrators are “part of a long-lived, progressive and inspirational human endeavor” (p. 316) with a historical context that allows current educators to understand traditions and culture that continue to guide and shape the profession. It was not until the 1840s, during the Common School movement (Fraser, 2007), that an organized school system came into existence in the United States. At that time, reformers such as Horace Mann and Henry Barnard sought to provide opportunities for all children to attend school. Common-school advocates worked diligently to establish free public education accessible to all children supported by public

funds. As a result, public support for school accountability grew, and local school boards and state governments gained increased oversight of public education.

However, the emergence of school leadership as a role separate from that of teaching did not start to emerge until after the Civil War. Education leadership truly began to take form with its own defining knowledge base at the turn of the twentieth century and into the 1930's (Murphy, 1995). Perpetuating this development in the early 1900s was the passage of compulsory school attendance laws for elementary age children in all states (Rothbard, 1979), leading to the expansion of administrative roles as need for oversight and accountability increased.

The growth of industry and large scale manufacturing at the turn of the 20th century led to the development of production efficiency management models, and the emergence of these models further influenced the developing role of the principal. The school principal's role developed during this early part of the 1900s' as Frederick Taylor's principals of scientific management emerged as the "cornerstone of work design" (Morgan, 2006, p. 23). According to Morgan (2006), Frederick Taylor's scientific management was based on five basic principles: responsibilities of the organization of work shifted to the manager, the use of scientific methods (time and motion studies), selection of the best person for each specific job, workers trained in efficiency, and the idea that worker performance must be monitored. During the first half of the twentieth century, this managerial style thrived in factories and soon was absorbed by other sectors, including education. This movement was coupled with K-12 schooling's drive to create a "'one best system,' in which superintendent CEOs were expected to exercise administrative control over schools and teachers" (Mehta, 2013, p.

23). This development of K-12 education ultimately led to the current model of school organizations with the remaining objective that, “administrative authority flows downward through an increasingly layered hierarchical structure” (Mehta, 2013, p. 23).

The Influence of Past Practices on Current Reform

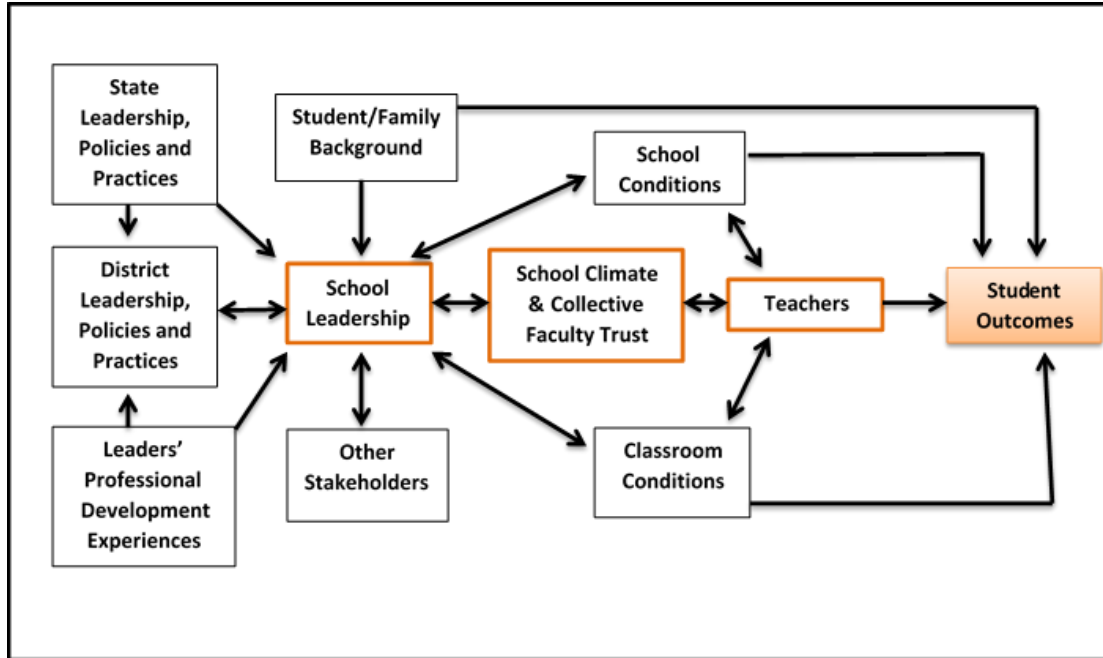
The current structure of public education represents a bureaucratic hierarchy that has not always led to enhanced educational practices. Braun, Gable, and Kite (2011) argue that the inertia of past practices keeps the principal leadership role from evolving. As a result, “principals occupy a middle management position where their authority to command is severely limited” (Hallinger, 2003, p. 335). Similarly, Mehta (2013) argues that, the principal’s role is currently stuck within a large bureaucratic system that can produce a “compliance mentality” (p. 8) rather than supporting the opportunity to exercise true leadership behaviors that promote sustained growth. In fact, in this current policy environment, the principal’s ability to exercise true leadership is often severely limited in the bureaucratic hierarchy of public education. Fullan (2014) explains the problematic nature of this organizational structure by stating, “hierarchical leadership can never influence the masses on any scale” (p. 55). Due to the hierarchical system of schools, principals often must meet the demands of district administrators and teachers while bowing to the more powerful actor (Datnow, 2000, p. 365).

The Principalship

In addition to hierarchical structures influencing the role of the principal, the role of the principal is also becoming increasingly complex. School reform policies are demanding greater involvement from school leadership, therefore, placing principals at

the “nexus of accountability and school improvement with an increasingly explicit expectation that they will function” (Hallinger, 2007, p. 222) as central agents of educational change (Fullan, 2014; Louis & Robinson, 2012; Marks & Nance, 2007; Murphy, 1994; Starr, 2011). Murphy (1994) contends that greater expectations are being added to the role of the principal while few responsibilities are being removed. Murphy (1994) adds that as the role becomes more unclear, political and social demands for sophistication of the position are on the rise. Fullan (2009) amplifies Murphy’s argument by stating “the irony is that, as the change expectations heighten [accountability], the principalship itself has become overloaded in a way that makes it impossible to fulfill the promise of widespread, sustained reform” (p. 56). Starr (2011) describes the school organization and the role of the principal as units that must meet the needs of “their numerous stakeholders with competing interest and conflicting ideologies, constant policy change and political intervention” (p. 646). Figure 1, adapted from Leithwood and Louis (2012), graphically supports the idea that the principal is at the center of a complex web of interactions within a school and plays a significant role in influencing various components of the school organization.

Figure 1: School Leadership and Student Learning



Adapted from: Leithwood, K., & Louis, K. S. (2012). Linking leadership to student learning. John Wiley & Sons. p. xxvii

As demonstrated in Figure 1, the burden of the principalship is caught in a political environment where numerous stakeholders and their “conflicting spheres of influence [are] impinging on principals’” ability “to exercise discretionary authority thus compromise[ing] their ability to influence local policy” (Marks & Nance, 2007, p. 8).

According to Marks and Nance (2007), conflicting spheres of influence come from three major groups. The first sphere of influence is built within the duties and responsibilities expected within the role of the school principal (Marks & Nance, 2007). Responsibilities inherent with the role of the principal include compliance with both district policy and the local school board directives, as well as, playing a fundamental role in a school’s everyday operations (Finnigan, 2010). Secondly, principals have an obligation to address the needs of the community, parent groups, and teaching professionals. Finally, principals must navigate the influence of various federal and state

policies (Marks & Nance, 2007). These policies have the potential to “create opportunities for action” (Marks & Nance, 2007, p. 9), where principals can participate in decision-making as a primary agent of change and impact local policy. On the other hand, policies have the potential to create an additional layer of complexity to the role of the principal if conflicts in values and priorities emerge between policy actors (Marks & Nance, 2007). The present day school leader must balance this complex web of competing priorities, demands, and inconsistent messages that emerge with multiple spheres of influence across various stakeholder groups.

How a school leader chooses to manage competing spheres of influence can be an indicator of leader effectiveness. Hallinger (2007) warns that a “principal’s effectiveness is attained by finding the correct balance among these roles for a given school context” (p. 222). Day, Harris, and Hadfield’s (2010) case study on the perspectives of principals and other education stakeholders revealed that successful principals are “constantly and consistently managing several simultaneously competing sets of tension successfully” (p. 52). Yet, with increased mandates from internal and external stakeholders, principals are increasingly losing the ability to “exercise influence in the ways they best see fit” (Marks & Nance, 2007, p. 4). As a result of increased calls for school accountability within current reform movements and state and federal legislation over the past two decades, principals’ roles and responsibility have “ballooned” to where they are responsible for more than traditional job duties such as school budgets, student/teacher/building safety, and communication with students, parents, teachers, and the community (Cooley & Shen, 2003, Hoppey & McLeskey, 2010; Fullan, 2014). Principals must promote school success, empower teacher motivation and capacity, and build trust between leaders and

followers while also being faced with meeting the demands of legislation that could, potentially, involve rigid sanctions if accountability and reform goals are not adequately met (Daly, 2009).

The most notable and far reaching external mandates placed on the school organization has been the reauthorization of the Elementary & Secondary Education Act also known as No Child Left Behind Act (NCLB) of 2002. In many states, compliance with NCLB requirements or maintenance of waivers status has led to the passage of individual state policies focused on school reform, remediation and accountability. According to Finnigan (2010), there seems to be two basic assumptions embedded in recent school policy and legislation: first, negative sanctions and public reporting will incentivize and motivate individuals toward the desired outcome and focus efforts on student achievement, and second, “organizational context, including the leadership of principals, allocation of resources, and school culture, will facilitate these goals” (p. 162). These assumptions suggest that teacher motivation comes from external rewards and consequences to be delivered by the critical agent of change, the principal. The “strong arm” of external mandates encourages antiquated leadership (like that of Fredrick Taylor’s scientific management), over more modern, empirically supported, school based models of leadership (transformational, instructional, distributed, servant) further emphasizing the conflicting nature of the principalship.

Principals must navigate competing areas of interest if school reform is to be effective. However, what Louis and Robinson (2012) fail to address is the reality that the demands of the accountability policy/system take precedence over the internal sense-making schema, even if a principal understands the goals/values of the accountability

system. The school principal is at the nexus of school reform policy, even though, by definition, it is just a middle management position, he/she is caught at a crossroads where responsibility for enhancing teacher capacity and motivation, student outcomes, and school accountability all balance on leadership capacity of one individual. Therefore, Louis and Robinson's (2012) emphasis on understanding principal interpretation of accountability policy is important. Louis and Robinson (2012) lend credence to the idea that principals are significant change agents in schools, and their perception of accountability ultimately leads to the interpretation and implementation of accountability policy.

School Leadership and Student Outcomes

Despite the fact that the principal role has become overburdened, the value of principal leadership and influence is well documented. School leaders are second only to classroom teachers as a school factor that contributes to student learning. (Leithwood et al., 2004; Leithwood & Louis, 2012). Within the literature, it has been found that leadership effects are the greatest when there is the greatest need or in schools that are considered to have more difficult circumstances (Leithwood et al., 2004). Leithwood et al. (2004) adds to this idea by pointing out that "there are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader" (p. 5). They acknowledge that other factors contribute to school turnaround but "leadership is the catalyst" (p. 5). Furthermore, Green (2013) explains that within the current climate of education reform, principals have emerged as the "chief learning officer" who is held "accountable for individual student achievement" (p. 1).

Studies have found that principals positively impact student achievement. While Leithwood et al. (2004) cite studies by Hallinger and Heck from the 1990's showing that "leadership explains only three to five percent of the variation in student learning across schools, this is actually about one quarter of the total variations (10 to 20 percent) explained by all school-level variables" (p. 21). A later report by Leithwood, Harris, and Hopkins (2008) found similar results, but they found even stronger principal influence on student learning. Their results suggest that five to seven percent of the variation in student learning across schools can be explained by principal leadership (Leithwood et al., 2008). One of the conclusions of this later report was that, based on existing evidence, "leadership has a very significant effect on the quality of school organization and on pupil learning" (p. 29). Furthermore, Robinson, Lloyd, and Rowe's (2008) meta-analysis of school leadership literature finds that the impact of school leaders on student outcomes tends to be indirect and usually mediated through the teacher. Fullan (2014) supports this claim but stresses "principals affect student learning indirectly but nonetheless explicitly" (p. 57). Robinson, Lloyd, and Rowe (2008) conclude that effective principals are essential for any school as "quality of school leadership as a key to continued organizational learning and improvement" (p. 636). However, direct or indirect effects still seem to be linked to leadership behavior based on the understanding that, "the closer educational leaders get to the core business of teaching and learning, the more likely they are to have a positive impact on student outcomes" (Robinson et al., 2008, p. 30).

There is some debate in the literature concerning whether leader behavior influences student outcomes directly or indirectly. Leadership studies in and outside of school organizations have revealed that direct experiences between the leader and

organization members can positively influence member capacities and motivation when the leader provides “intellectual stimulation, individualized support, and appropriate models of best practice and beliefs considered fundamental to the organization (Leithwood et al., 2004, p. 9). Within a school organization, principals have been found to positively influence members through establishing a culture of trust (Louis & Wahlstrom, 2012), increasing and empowering teacher capacity for curriculum and instruction (Cranston, 2013; Fullan, 2009; Wahlstrom & Louis, 2008), and interpreting and buffering teachers from policy demands (Finnigan, 2010). Waters & Cameron’s (2007) meta-analysis of 69 studies on school leadership found a “statistically significant positive correlation between school-level leadership and student achievement” (p. 3) leading them to conclude, “leadership makes a difference” (p. 3). In contrast, Leithwood, Steinbach, and Jantzi (2002) argue that “recent quantitative evidence suggest that principal effects may be considerably smaller than reformers imagine” (p. 95). Conflicting evidence that exists concerning principal leader effects on student outcomes is often concerned with the directness of leadership behavior and student outcomes.

Fullan (2014) explores this indirect effect through the analysis of the work of four researchers; Viviane Robinson, Helen Timperley, Ken Leithwood, and Tony Bryk, to better understand the role of the principal and the relationship of the principal to student outcomes. A primary theme Fullan (2014) identified in each of the researcher’s work is the idea that principals who impact student learning are those that work to build relational trust with teachers, focus on enhancing teacher motivation, and help to build professional capacity. Therefore, the influence on student outcomes is emerging through a principal’s ability or inability to “shape the school’s internal processes, climate, relationships and

resources” (Finnigan, 2010, p. 162). Leithwood et al., (2004) state that there is “much to learn about which forms of leadership are most likely to foster student learning and how such successful forms of leadership, often exercised at a distance from students, eventually makes a contribution to their learning” (p. 17). Therefore, principals are important factors to consider when studying student outcomes; however, the process or mechanism by which their influence is greatest is unclear.

School Leadership Behaviors

The literature on school leadership behaviors is well developed. Leithwood and Louis (2012) argue that school leadership is a powerful force in school effectiveness. Currently, Leithwood and Louis (2012) recognize 5 types of studies emerging in the field of school leadership, outlined in Table 1.

As Table 1 indicates, education leadership research over the past 15 years covers a range of leadership issues, practices/behaviors and impacts/outcomes. However, Leithwood and Jantzi (2006) argue that, “the nature of effective school leadership still remains much more of a black box than we might like to think” (p. 202). With the exception of two studies, by Hallinger and Heck (1996, 1998), Leithwood and Jantzi (2006) maintain that even the most “robust efforts to assess school leader effects [on schools] do not distinguish among forms of leadership” (p. 202).

An additional body of literature on school leadership should also be considered in addition to the 5 areas addressed by Leithwood and Louis (2012). A category could be added exploring leadership and policy. Some argue that policies only have a modest impact on leader behaviors (Leithwood & Louis, 2012) while other research indicates

that the growing prevalence of high-stakes accountability at the federal, state and local level is taking a toll on current leadership behaviors (Marks & Nance, 2007; Shipps & White, 2009).

Table 1. Leithwood and Louis (2012) 5 Types of School Leadership Studies

Type of Study	Major Findings	Studies/Research
Qualitative Case Studies	Complex pictures of leadership in various educational settings	Spillane, Diamond, Burch, Hallett, Jita, and Zolmmers (2002) Starr (2011) Day, Harris, and Hatfield (2001)
Large-scale Quantitative Studies of Leadership effects on School and Student Achievement	Many longitudinal reports primarily supports idea of weak, but significant, links between leadership and student achievement.	Hallinger and Heck (1996) Leithwood and Jantzi (2006)
Effects of Specific Leadership Practices	Also large-scale quantitative studies that work to identify specific school level leadership practices and the contribution of those practices to student learning	Marzano, Waters, and McNulty (2003) Robinson, Lloyd, and Rowe (2008)
Leadership effects on student engagement	leadership behavior on student engagement is a strong predictor of student learning, mostly positive effects reported	Leithwood and Jantzi (1999) Leithwood, Louis, Anderson, and Wahlstrom (2004)
Leadership Succession	Rapid leadership succession or unplanned leadership succession can have negative effects on school performance	Fink and Brayman (2006)

Principal Leadership Behaviors

Transformational/Transactional Leadership Behaviors

Few studies successfully separate these two leadership behaviors; therefore, it is essential that a discussion of both exist to help conceptualize each type of leadership behavior. Many scholars believe that both transformational and transactional behaviors are necessary for effective leadership; however, leaders must understand the influence of each type of leadership behavior so that organizational goals are met. For example, Heinitz, Liepmann, and Felfe (2005) assume that “transformational leadership builds upon transactional leadership and is difficult to imagine without it” (p. 183). According to Heinitz et al., (2005), the transactional leader can be characterized as “operating within existing structures and systems. Clarifying demands as well as the promised reward in case the goals are met is one of this type of leader’s most outstanding behaviors” (p. 182). Whereas, “the transformational leader is characterized as a person who aspires to enlarge the scope of his/her employees through adequate leadership... [Where] chances and risks are presented and used for development” (Heinitz et al., 2005, p. 182) and reactions to change include processes that are actively designed by the transformational leader. The following is a thorough review of how transactional and transformational leadership are conceptualized in the literature; however, it is important to remember that many researchers believe that these behaviors are not mutually exclusive and that both are necessary for reaching educational goals.

Transactional leadership.

Transactional leadership is a leadership style primarily based on bureaucratic authority, task completion, contingent rewards and, follower compliance (Northouse, 2013; Van Dierendonck & Nuijten, 2011). Transactional leadership tends to exist in organizations that maintain hierarchal bureaucracies and assess leader and follower effectiveness on quantitative performance measures (Van Dierendonck & Nuijten, 2011). In contrast to transformational leadership, according to transactional leadership theory, follower motivation primarily relies on a system of rewards and punishments (Bass, et al., 2003; Friedman, 2007; Stone, Russell & Patterson, 2003) in exchange for follower acceptance and compliance with leader expectations (Van Dierendonck & Nuijten, 2011). Within the confines of a traditionally hierarchical bureaucratic organization, such as a school, it is easy for leaders to fall into the model of transactional leadership. However, Avolio and Bass (1999) argue that “transactional models of leadership simply do not go far enough in building trust and developing the motivation to achieve the full potential of one’s workforce”(p. 460). Furthermore, Van Dierendonck and Nuijten (2011) indicate that transactional leadership is not as effective at promoting trust and satisfaction among workers as compared to transformational leadership.

Transformational leadership.

Transformational and transactional leadership theories emerged as significant leadership approaches with James MacGregor Burns (1978) publication of *Leadership*. The purpose of Burn’s work was to set apart the two leadership styles (Northouse, 2013). The primary difference between the two approaches is the source of follower motivation.

Transactional leadership is focused on the exchanges that happen between leaders and followers (Northouse, 2013). In contrast, “transformational leadership is the process where by a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower” (Northouse, 2013, p. 186). Leithwood and Jantzi (2006) add “all transformational approaches to leadership emphasize emotions and values” of the leader to foster “capacity development and higher levels of personal commitment to organizational goals” on the part of the follower (Leithwood & Jantzi, 2006, p. 204).

Bernard Bass (1985) worked to further conceptualize transformational and transactional leadership through the identification of seven leadership factors. These factors include: charisma, inspiration, intellectual stimulation, individualized consideration, and contingent reward, management-by-exception active and management-by-exception passive (Avolio, Bass, & Jung, 1999; Northouse, 2013). It should be noted that some researchers view charismatic and inspirational factors as “not empirically distinguishable,” therefore creating a body of literature where transformational leadership only includes six factors (Avolio et al., 1999; Forsyth et al., 2011). According to Bass (1985), the first four of the factors are attributed to transformational leadership, with contingent reward and management-by-exception belonging to transactional leadership. In much of the literature on transformational/transactional leadership charisma and inspiration are identified as idealized influence and inspirational motivation, respectively. These are a result of how the leadership factors are labeled in the Multifactor Leadership Questionnaire, which is

the most commonly used instrument in evaluation of transformational and transactional leadership.

The counterbalance to authoritative leadership came in Burns' (1978) counterpoint of an exploration of transformational leadership. He saw transformational leadership as the "process where by a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower" (Northouse, 2013, p. 186). Even though transformational leadership first emerged in the 1970's as a theory, it did not gain a foothold in the "educational community [until] the 1990's as part of a general reaction against the top-down policy-driven changes that dominated in the 1980's" (Hallinger, 2003, p. 335). The persistence of transformational leadership in education leadership literature may be in resistance to current top-down reforms such as the 2001 passage of No Child Left Behind. Hallinger (2003) explains, "transformational leadership focuses on stimulating change through bottom-up participation" (p. 338). This idea maybe much more attractive to many in the education profession given the difficulty in obtaining externally specified student outcomes, as required by NCLB and other state policies. Furthermore, given the problem that "the role of the principal in this reform era continues to demand more than is reasonably possible" (Cooley & Shen, 2003, p. 12), perhaps the ability to spread out organizational accountability to multiple persons is appealing.

Transformational leadership is more than a distributive model of leadership. Stone, Russell & Patterson (2003) describe transformational leaders as those that "transform the personal values of followers to support the vision and goals of the organization by fostering an environment where relationships can be formed and by

establishing a climate of trust in which visions can be shared.” (p. 2). There are typically four behaviors, derived from Bass’s (1985) seven leadership factors that are continually applied to transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Northouse, 2013; Hallinger, 2003; Stone et al., 2003). The popularity of this model in the literature can be seen in the multitude of perspectives in which it has been studied. For example, Leithwood and Jantzi (2006) explored transformational school leadership within school reform from the perspective of teacher motivation and capacity. Leithwood (2001) explained transformational leadership in the context of accountability policies through a literature review.

Though widely accepted in practice, this model is not without criticism. Transformational leadership is often disparaged for its vagueness (Northouse, 2013) and aspects of heroic leadership. On the other hand, Day, Harris, and Hadfield (2010) contend that it has the flexibility school leaders require to be able to develop positive school cultures and trusting relationships between teachers, students and parents while allowing the leader to be driven by his/her own individual moral values and beliefs. Furthermore, through the study of these faults, an evolution of the model has occurred. To many;

Transformational leadership enhances the development of followers, challenging them to think in ways in which they are not accustomed to thinking, inspiring them to accomplish beyond what they felt was possible, and motivating them to do so by keeping in mind the values and high moral standards that guide their performance (Bass, Avolio, Jung, & Berson, 2003, p. 215).

In contrast, others believe that this development of followers through challenges and inspiration can come at a cost if used incorrectly. For example, Adolf Hitler is cited as being a transformational leader (Northouse, 2013). However, proponents of the positive aspects of transformational leadership claim that the morals and values that guided Hitler's performance do not qualify him as an authentic transformational leader (Northouse, 2013). Northouse (2013) gives credit to Bass (1998) for coining the term "pseudotransformational" as a way to define the inauthentic use of transformational leadership. Thus, the theory has not fully addressed the emergence of the possibility of a leader's positive influence on followers versus the possibility of a leader's negative influence on followers.

Effects of Transformational Leadership

Positive results of transformational leadership are cited in the literature. Leithwood and Jantzi (2006) utilized teacher survey data to study transformational leadership on teachers' motivation, efficacy and classroom practices. Within this study, only transformational leadership was discussed and examined; their use of only transformational leadership could be explained by the understanding that it is a leadership practice "useful in almost all organizational circumstances" (Leithwood, 2001, p. 218). Leithwood and Jantzi's (2006) quantitative study found a strong relationship between transformational leadership and teacher motivation. However, the relationship between teacher capacities and leadership was weak but still significant. Though their model was able to explain "25% to 35% of the variation in teacher classroom practices" (Leithwood & Jantzi, 2006, p. 223), it failed "to explain any of the variation in student achievement gains" (Leithwood & Jantzi, 2006, p. 23). Therefore, they concluded that the influence of

transformational leaderships on teacher motivation and capacities is important, but more research is needed to understand the “potency of leadership for increasing student learning” (Leithwood & Jantzi, 2006, p. 223).

Transformational/Transactional Leadership and School Reform

The significance of understanding both transformational and transactional leadership emerges when exploring education accountability and reform. Recent legislation across all 50 states and actions by the federal government have pushed public schools into an arena where task completion is paramount in establishing school efficacy. Additionally, compliance to reform policy is ensured through a number of externally placed rewards or punishments. As a result, “many school leaders report accountability forcing them into management roles and abandoning many leadership roles” (Cranston, 2013, p. 135). These management roles are in alignment with transactional leadership. For example, due to external pressure, the school leader must specify “the standards for compliance, as well as what constitutes ineffective performance, and punishment” (or consequences) for followers who are out of compliance with those standards (Bass et al., 2003, p. 208).

Because of the high-stakes policy environment in which leaders must now operate, it is important to understand which types of leadership behavior, transformational or transactional, lead to desired outcomes. Beyond the educational context, Bass et al. (2003) explored both these leadership styles within light infantry units. Bass et al. (2003) found that both transformational and transactional leadership styles had benefits given the various demands on light infantry units. This idea supports

the claim by Forsyth et al. (2011) that transactional and transformational leadership styles are beginning to be thought of as supplemental to one another as opposed to the originally proposed idea of being mutually exclusive. Day et al. (2001) found in their case study of principals in the United Kingdom that:

principals were both transactional- ensuring that systems were maintained and developed, targets were formulated and met, and that their schools ran smoothly- and transformative- building on esteem, competence, autonomy and achievement...raising “the level of human conduct and ethical aspirations of both the leader and the led (p. 47).

Others also recognize the need to move away from examining transactional and transformational leadership as exclusive, opposing forces of leadership. For example, Friedman’s (2007) case study explored transformational leadership within the context of a transactional framework with the goal of developing a more distributive and democratic leadership within school reform efforts. Even within this literature, Leithwood (2001) notes, “transformational leadership practices ought to be considered a necessary, but not sufficient, part of an effective school leader’s repertoire” (p. 217).

Servant Leadership

A developing theory of leadership that has gained attention in the literature is the theory of servant leadership. Servant leadership first appeared in the writings of Robert Greenleaf (1970). Greenleaf advocated that leaders put the follower first by empathizing with them and nurturing them in effort to empower followers to “develop their full personal capacities” (Northouse, 2013, p. 219). Chen, Chen, and Li (2013) describe

servant leadership as “a spiritual, guiding, helping others to grow, and ‘humanistic-based’ leadership style of leading by values and beliefs” (p. 419). In the literature, servant leadership often described by words such as, “altruism,” “self-sacrifice,” “spiritual,” “integrity,” “caring for others,” and “authentic” (Barbuto & Wheeler, 2006; Chen, Chen, & Li, 2011).

Many characteristics of servant leadership have been perceived as almost synonymous with transformational leadership. Therefore, emphasis is often placed on the point at which the two models diverge. For example, “servant leadership focus[es] on moral development, service and enhancement of common good” (Barbuto & Wheeler, 2006, p. 302). Whereas, transformational leadership focuses on the organization and achieving organizational goals through the follower. Parolini (2007) was the first to empirically investigate the theoretical differences between servant and transformational leadership. Based on Parolini’s (2007) research Parolini, Patterson, and Winston (2009) have determined that there are five distinctions between servant and transformational leadership: moral, focus, motive & mission, development and influence (Table 2).

Table 2
Distinction Between Servant and Transformational Leadership

Distinction	Discriminant Items	Servant Leadership	Transformational Leadership
Moral	I believe this leader focuses more of his or her benevolence and good will toward the_____.	Individual	Organization
Focus	I believe this leader's allegiance and focus is primarily toward the_____.	Individual	Organization
Motive& Mission	I believe this leader creates an internal environment that is more_____.	Constant	Changing
Development	I believe this leader's first inclination is to first_____.	Serve	Lead
Influence	I believe this leader influences me through more_____ means.	Unconventional	Customary

Adapted from: Parolini, Patterson & Winston (2009)

The hallmark of servant leadership is that follower achievement and the meeting of organizational goals is a byproduct of follower success; the focus is always on the follower (Stone & Russell, 2003; Stone et al., 2004). As a result of the emergence of servant leadership from transformational leadership, some view servant leadership as just an extension of transformational leadership or even a complementary model to other forms of leadership (Spears, 1998; Taylor et al., 2007). The need to differentiate servant leadership from other forms of leadership has led to an emphasis in the literature to fully

conceptualize servant leadership through empirical research (Parolini, 2007; Parolini, Patterson & Winston, 2009).

Targeted research on the conceptualization of and the creation of an empirical body of evidence surrounding servant leadership over the past 40 years has allowed for further development of a theory of servant leadership. The academic discussion over the conceptualization of servant leadership has been a continual process since the initial writings of Greenleaf (Van Dierendonck & Nuijten, 2010). However, it has yet to produce any real consensus in the literature. Robert Greenleaf never fully articulated “a concise conceptual definition of servant leadership” (Van Dierendonck & Nuijten, 2011, p. 250). Larry Spears (1998, 2002) argues that through a review of Greenleaf’s writings 10 characteristics or major attributes of servant leadership emerge: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community. While these 10 characteristics are widely accepted and utilized by various researchers as starting points in research on servant leadership (Barbuto & Wheeler, 2006; Northouse, 2013; Russell & Stone, 2002; Van Dierendonck & Nuijten, 2011), the characteristics themselves are still rather fluid within the literature. Throughout the literature, authors acknowledge the work of Spears (1998, 2002); however, they conclude that his work is by no means exhaustive (Russell & Stone, 2002).

Russell and Stone (2002) rely heavily on the work of Spears (1998) and other prominent authors in the field. Russell and Stone (2002) conducted a meta-analysis of the literature to create their own servant leader attributes. They conclude that there are not 10 characteristics; instead, servant leadership must be viewed by its functional attributes

and accompanying attributes. Functional attributes are those attributes that have a repetitive presence in the literature. Functional attributes are identified as vision, honesty, integrity, trust, service, modeling pioneering, appreciation of others and empowerment (Russell & Stone, 2002). In contrast, “accompanying attributes appear to supplement and augment the functional attributes. They are not secondary in nature; rather they are complementary and, in some cases, prerequisites to effective servant leadership” (Russell & Stone, 2002, p. 147). Russell and Stone (2002) identified 11 accompanying attributes: communication, credibility, competence, stewardship, visibility, influence, persuasion, listening, encouragement, teaching and delegation (Russell & Stone, 2002). Other authors over the past decade have worked toward fully conceptualizing servant leadership (Barbuto & Wheeler, 2006; Van Dierendonck & Nuijten, 2011), yet, Russell and Stone (2002) are the only authors to differentiate between functional and accompanying attributes.

Barbuto and Wheeler (2006) argued that, “despite several conceptual papers on the topic of servant leadership, there is no consensus concerning a construct for empirical research” (p. 304). Through a review of the literature, Barbuto and Wheeler (2006) identify 11 relevant characteristics in an effort to develop an instrument that could capture servant leadership and therefore clarify its constructs. The 11 characteristics are: calling, listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, growth and community building (Barbuto & Wheeler, 2006). These characteristics represent all 10 of Spears’ characteristics (2002) but with the addition of “calling.” Calling describes the leader’s “desire to serve and willingness to sacrifice self-interest for the benefit of others” (p. 305). Barbuto and Wheeler (2006) argue that

“calling” is an essential component of servant leadership and a defining characteristic that sets it apart from transformational leadership. Yet, another study by Van Dierendonck and Nuijten (2010) argue that there are only eight characteristics of servant leadership: empowerment, accountability, standing back, humility, authenticity, courage, interpersonal acceptance, and stewardship. Additionally, Patterson (2003) identifies seven characteristics: love, humility, altruism, visionary for followers, trust, service, and empowerment of followers. Out of the literature from Spears (1998, 2002), Russell and Stone (2002), Barbuto and Wheeler (2006), Van Dierendonck and Nuijten (2011) and Patterson (2003) forty-five characteristics of servant leadership emerge. Of these, 14 are repeated in two or more of the studies leaving 31 unique characteristics of servant leadership. Interestingly, Joseph and Winston’s (2005) review of literature published prior to 2002 yielded 20 distinguishable attributes.

Conceptualizing and operationalizing servant leadership are important because servant leadership only “becomes evident through a particular set of leader attributes and behaviors” (Joseph & Winston, 2005, p. 10). These attributes and behaviors must be identified consistently in the literature to promote continued scholarship on servant leadership. The conflict in the literature over characteristics that should be attributed to this model arises in the debate over which characteristics should be combined and which are stand-alone principles. Difficulty in accepting one commonly accepted set of characteristics makes it difficult to fully operationalize servant leadership. Also, failure to fully conceptualize this model in the literature, in addition to low volumes of empirical research, have held the model back from developing into a fully conceptualized leadership theory.

Servant Leadership and Schools

Educational leadership is currently structured in the United States to fit within the framework of a hierarchical system. Taylor et al. (2007) explores the idea that servant leadership is of itself not hierarchical because servant-led organizations are ones where clear leader-follower relationships break down, and the focus becomes follower praise and empowerment, where self-esteem is nurtured. Because of the breakdown of the hierarchical structure required in servant leadership, the education profession would have difficulty accepting and implementing this leadership style within its rigid framework of hierarchical management. Yet, Taylor et al. (2007) conclude that “servant leader partnership does not actually eliminate the idea of hierarchy; it simply eliminates the leader’s need to use an unusual amount of power and control” (p. 405-406).

Taylor et al. (2007) utilized the Self-Assessment of Servant Leadership Profile (SASLP) and the Leadership Practices Inventory (LPI) to quantitatively explore servant leadership. This study was done through the use of principals as the unit of measurement whose self-perceived scores and teacher perceived scores on the LPI were compared with a normative data set of business managers. This study was built off the work of Barry Posner and James Kouzes who have developed five different factors of effective leadership; challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart. Taylor et al. (2007), found that principals who were self-perceived and non-self-perceived servant leaders had followers who scored them higher than the normative mean on all five leadership factors. According to Taylor et al. (2007), “one possible reason for this result is that education is often perceived to be a compassionate profession that deals with children rather than the

bottom line” (p. 412). It is well established in the literature that servant leadership works through followers to meet organizational goals (Page & Wong, 2000). Within a school, these goals are often student-centered goals that are accomplished through increased teacher efficacy, autonomy, trust and capacity. If the principal supports accomplishment of these goals, the result may be that others perceive the principal as exhibiting servant leadership behaviors even if the principal does not perceive these attributes within him/herself.

According to Taylor et al. (2007), “servant leadership is an action-oriented state of mind that compels leaders to provide followers with what the followers need in order that the followers might be able to do what needs to be done” (p. 405). For example, in current educational systems, for a principal to practice servant leadership, he/she would need to understand and meet teacher needs in order to build teacher capacity for enhanced student outcomes. Even though follower development is often “assumed” as a necessary process for reaching student outcome goals, little latitude or autonomy is granted to principals to exercise the type of leadership that will result in follower development. In contrast, current education policy mandates have shifted schools’ organizational goals to those of being defined by student outcomes leaving both educational leaders and teachers feeling the pressure for performance with little time or resources for development. Instead, principals are forced to focus primarily on these externally placed ridged sanctions for fear of punitive action by State governments if established student outcome targets are not met.

In sum, Taylor et al. (2007) establish a baseline for understanding servant leadership through principal behaviors in an internal, closed system of a school.

However, the study fails to address the external context in which schools and principals must operate. Even though servant leadership may be a natural occurrence within school leaders due to the compassionate nature of the profession (Taylor et al., 2007), new understandings are beginning to emerge that these characteristics may assist a school leader in managing the multitude of demands and organizational goals of the profession. Therefore, further study is needed to understand the influence of servant leadership behaviors on follower in complex settings.

Summary of Leadership

This study explored three types of leadership behavior that are established in the literature to varying degrees. Transformational and transactional leadership were chosen because of their prevalence in the literature. There is a large amount of work, in a variety of organizations, exploring the effects of transformational/transactional leadership. These two leadership behaviors originally emerged in the literature as being diametrically opposed, differing greatly in their function, characteristic and source of follower motivation (Table 3). However, recent research is indicating that these leadership behaviors should be viewed as complementary, each needing components of the other to achieve leadership success.

Servant leadership shares a similar date of origin with transformational/transactional leadership but lacks the empirical research support of transformational/transactional leadership. Additionally, servant leadership has struggled to gain legitimacy as a serious contender in leadership studies as an effective leadership model. Servant leadership goes beyond sharing leadership with the followers (distributive

leadership) to intensely focusing on the well-being of the follower for the development of personal capacity of both the leader and follower (Table 3). This altruistic form of leadership has yet to gain a strong foothold in organizations beyond those that are religiously/spiritually focused. Servant leadership also struggles to be clearly conceptualized as a result of over 30 unique characteristics identified in the literature.

Table 3

Summary of Leadership Behaviors: Transactional, Transformational and Servant

	Function	Characteristics	Source of Follower Motivation	Leading Authors
Transactional Leadership	Tends to exist in organizations that maintain hierarchal bureaucracies and assess leader and follower effectiveness on quantitative performance measures (Van Dierendonck & Nuijten, 2011)	Bureaucratic authority Task completion Contingent reward Follow compliance (Avolio & Bass,1997)	Follower receives rewards or punishments based on exchanges or transactions between leader and follower resulting in follower compliance with leader expectations (Friedman, 2007; Stone, Russell & Patterson, 2003)	James MacGregor Burns (1978) Bernard Bass (1985) Avolio & Bass (1997; 1999; 2003)
Transformational Leadership	Most effective in organizations going through change	Charisma Inspirational Intellectual stimulation Individualized consideration (Avolio & Bass,1997)	Emphasis on emotions and values of leader to foster higher levels of personal commitment to organizational goals (Leithwood & Jantzi, 2006)	James MacGregor Burns (1978) Bernard Bass (1985) Avolio & Bass (1997; 1999; 2003)
Servant Leadership	The intense leader focus on follower well-being and personal development leads many to think of servant leadership as having religious or spiritual leadership traits	Stewardship Humility Authenticity Courage Forgiveness Accountability Standing Back Empowerment (Van Dierendonck & Nuijten, 2011)	Leader always puts the follower first by empathizing with them in effort to develop full personal capacity of each follower	Robert Greenleaf (1970) Spears (2002) Van Dierendonck & Nuijten (2011)

Collective Faculty Trust as a Normative Condition of Schools

Literature on leadership in schools offers a critical gaze on the ultimate outcome of any schooling organization: student achievement. Current research indicates that effects of principal leadership on student outcomes are indirect. However, there is another body of work emerging “that has included mediating variables” which are reporting “significant effects” (Barnett & McCormick, 2004, p. 407). Studies have looked at various mediating variables between leadership and student outcomes such as school culture, school structure, and school vision and goals (Barnett & McCormick, 2004). One such mediating variable often used to study various school outcomes is that of trust. Trust is has been linked to greater risk-taking among teachers and increased teacher motivation (Finnigan, 2010). Findings also indicate that trust has positive effects on organization members’ attitudes, behaviors and performances (Van Maele, Van Houtte, & Forsyth, 2014). Furthermore, Tschannen-Moran argues (2003) that “among teachers and their principals, all aspects of trust have been shown to carry significant importance” (p. 166) indicating that trust between principals and teachers does influence various components of the organization.

Trust in schools has been linked to greater teacher efficacy, enhanced teacher job satisfaction and retention, the facilitation of achieving educational outcomes and higher levels of cooperation (Dirks & Ferrin, 2001; Tschannen-Moran & Gareis, 2015; Van Maele & Van Houtte, 2015). Furthermore, “school leaders who create bonds of trust can help inspire teachers to move to higher levels of effort and achievement and can better work together in the service of solving the challenging problems of schooling” (Tschannen-Moran & Gareis, 2015, p. 68). Principals, whose behaviors can be directly

(principal-teacher) or indirectly (teacher-teacher) related to trust are significant contributors to a schools climate of trust (Van Maele & Van Houtte, 2015) and must be intentional with their actions as to not negatively influence this collective group phenomenon.

Finnigan (2010) explored the work of Bryk and Schneider (2002) who looked at relational trust in schools. From Finnigan's (2010) analysis of their work, it was found that trust in schools is "the interplay among respect, competence, personal regard, and integrity" (p. 167). These factors align with the five facets of trust, "benevolence, predictability/reliability, competence, honesty and openness" (Hoy, Gage, & Tarter, 2006, p. 240). When these traits are utilized through supportive principal behavior (Louis & Wahlstrom, 2012) they have been found to reduce "uncertainty and vulnerability in contexts involving external pressures and demands" (Finnigan, 2010, p. 167). Van Maele et al. (2014) recognize that over the past two decades there has been a growth in trust research within the literature that can be applied to schools specifically in areas dealing with organizational trust. However, Van Maele et al. (2014) point out that trust is a "content-specific phenomenon" (p. 2). Therefore, when singling out school or educational trust literature, three main themes emerge: conceptual foundation of trust, antecedents of trust, and consequences of trust (Van Maele et al., 2014). This study is interested in the consequences of trust within schools.

Individual Trust vs. Collective Trust

Trust is a multidimensional construct (Joseph & Winston, 2005); however, within schools it is often explored as either collective teacher trust or individual trust. These two

constructs are distinctly different. Interpersonal trust, or individual trust, refers to the trust that an individual has for another person in a situation where risk is involved (Forsyth et al., 2011). In contrast, collective trust refers to an organizational property that is distinct, yet complementary, to interpersonal trust. It is an organizational property that results from multiple exchanges among members of a group (Forsyth et al., 2011). Collective trust is defined as “a stable group property rooted in the shared perceptions and affect about the trustworthiness of another group or individual that emerges over time out of multiple social exchanges within the group” (Forsyth et al., 2011, p. 22). In other words, it is a normative condition in schools that emerges out of frequent interactions between stakeholders in a building. Because the purpose of this study is to gain a better understanding of the effect of leadership behaviors, collective trust, as an organizational property, will be considered. In other words, in contrast to collective trust, studying individual relationships between faculty members and the principal would provide only an understanding of the psychological relationships of individual teachers and the principal, providing limited information on the organizational culture of the school. In contrast, understanding teacher perceptions of trust as a social construction will provide an understanding of the influence of principal leadership behavior on the organizational culture of the school, thereby offering insight into the learning environment that could potentially lead to enhanced student outcomes.

Principal Leadership Behavior and Trust

Trust and Transformational Leadership

Transformational leaders are those identified by behaviors that promote the needs of the follower to persist in the achievement of an organizational goal and/or vision. Therefore, leading trust scholar Megan Tschannen-Moran (2003) states that these leaders “must have the trust of their followers in order to be effective” (p. 167). Going further, she explains that “trust [is] a byproduct or even an element of transformational leadership, drawing connections to the idealized influence aspect of transformation leadership behaviors” (p. 173). With this foundation scholars have been able to link transformational leadership and trust in the literature, primarily when exploring the construct of organizational citizenship.

Forsyth et al. (2011) cite a Tschannen-Moran’s (2003) study in which she explored transformational leadership, organizational citizenship and collective faculty trust. Tschannen-Moran found that there was a strong relationship between transformational leadership and faculty trust. Podsakoff, MacKenzie, Moorman, and Fetter (1990) also found not only was there a relationship between faculty trust and transformational leadership but that trust could be used to mediate a relationship between transformational leadership and organizational citizenship (Forsyth et al., 2011). Additional studies have found that transformational leadership can affect organizational variables such as employee job satisfaction, organizational mindfulness and organizational citizen behaviors, not directly but indirectly through trust. (Forsyth et al.,

2011; Hoy et al., 2006). These findings may be a result of similar behaviors found between trust and transformational leadership. Forsyth et al. (2011) explain:

Whitener, Brodt, Korsgaard, and Werner (1998) identify behaviors (behavioral consistency, behavioral integrity, sharing and delegation of control, communication, and demonstration of concern) that closely parallel the antecedents of perceived trustworthiness (honesty, openness, reliability, benevolence, and competence). Fortuitously, these behaviors are also consistent with transformational leadership (identifying and articulating a vision, providing an appropriate model, fostering the acceptance of group goals, high performance expectations, providing individualized support, and intellectual stimulation) (p. 164).

Trust and Transactional Leadership

Transactional leadership, built from exchanges between leader and follower does not appear to initially be based on facets of trust in the same way as transformational leadership. This perception may be due to the concept of exchanges inherent in transactional leadership where “there is no concerted effort to change followers’ personal values, nor necessarily a need to develop a deep sense of trust and commitment to the leader” (Jung & Avolio, 2000, p. 951). All that is required, for transactional leaders to meet the needs of followers, is to meet agreed upon outcomes, contingent on follower performance.

Yet, Jung and Avolio (2000) argue that “transactional leaders tend to acquire what might be termed ‘conditional’ trust from followers through a reliable execution of

contracts and exchanges” (p. 952). Though no definition of “conditional” trust is provided by the authors, one is led to assume that this trust is different from that supported by the five facets of trust, as it emerges out of “reliable execution of contracts and exchanges” not from “benevolence, predictability/reliability, competence, honesty and openness” (Hoy, Gage, & Tarter, 2006, p. 240). The immediate link between transactional leadership and trust is not apparent, but when considering ‘conditional’ trust only emerges when followers are fairly rewarded, over time there is some indication that predictability and honesty are present in this relationship. Though it is unsure how “trust will mediate the impact of transactional leadership on performance” (Jung & Avolio, 2000, p. 952) the relationship does exist and the extent of its influence is worth further exploration.

Trust and Servant Leadership

Trust is an important factor to consider in this study due to the fact that trust is recognized as a key component of servant leadership. Robert Greenleaf often stressed “leaders who practiced servant leadership were more likely to be trusted” (Joseph & Winston, 2005, p. 9). Therefore, it is essential to understand how servant leadership behaviors, with an emphasis on the follower, influence teacher perceptions of collective trust. Joseph and Winston (2005) argue that it is the behaviors of servant leaders that build trust with followers and also between followers. Trust is built through:

- genuinely empowering workers
- involving employees early
- honoring commitments and being consistent

- developing coaching skills and fostering risk taking
- an appropriate management style
- through trustworthiness that is built on integrity and competence.

Joseph and Winston (2005) further explain that trust is a pivotal component of servant leadership because servant leadership is based on facets of trust. Emerging from Joseph and Winston's (2005) study are facets of trust such as honesty; a manager doing what they say they are going to do, reliability; behaving in a predictable manner; and benevolence, empathy and acceptance of followers (Forsyth et al., 2011; Joseph & Winston, 2005).

Studies exploring trust as a factor in schools, school leadership and school improvement are present in the literature. However, most acknowledge faculty trust in parents and students as an important link to enhanced student achievement (Hoy, 2002) more than any other combination of trust relationships and student outcomes. What is missing from the literature is an understanding of the influence of principal servant leadership behavior and collective faculty trust. Additionally, little is known about the influence of principal servant leadership behavior on student outcomes and whether servant leadership behavior works through collective faculty trust to influence student outcomes. This understanding is worthwhile because servant leadership has the potential to enhance organizational culture because it gives teachers the "freedom to do their jobs, instilled with trust from their leader, and provided support, they will probably feel obligated to engage in behaviors that support their leaders" (Mayer, 2010, p. 151).

Self Determination Theory

Self Determination Theory (SDT) provides an understanding of teacher perceptions of leadership behaviors and motivation to persist in efforts to reach educational goals through fulfillment of teacher psychological needs of competence, autonomy, and relatedness. If the data reveals a relationship between collective faculty trust and student outcomes, then SDT will be used to clarify the framework of the hypothesized model. This section will provide a theoretical discussion of SDT as well as rationale that will link SDT to collective faculty trust and student outcomes.

Because of the influence of the teacher and principal on student outcomes (Leithwood et al., 2004; Leithwood & Louis, 2012), understanding teacher and principal motivation to reach organizational goals is important. Studying human motivation allows researchers the opportunity to explore the unique human characteristic of the “capacity to exercise control over one’s own thought process, motivation, and action” (Bandura, 1989, p. 1175).

The fact that human nature, phenotypically expressed, can be either active or passive, constructive or indolent, suggests more than mere dispositional differences and is a function of more than just biological endowments. It also bespeaks a wide range of reactions to social environments that is worthy of our most intense scientific investigation (Ryan & Deci, 2000, p. 68)

Motivation is a product of both internal and external pressures, processes, and factors. Bandura (1989) points out that, “the notion that humans serve as entirely independent agents of their own actions has few, if any, serious advocates” (p. 1175). It is

interesting to note that two heavily used theories in educational research, Bandura's self-efficacy and expectancy theory primarily focus on the individual belief which drives motivation. Deci and Ryan (2000) explain that Bandura's (1977) self-efficacy theory "has focused specifically on the extent to which people feel capable of engaging in behaviors that will lead to desired outcomes." Furthermore, "Bandura proposed that feeling competent to carry out behaviors that are instrumental for attaining desired outcomes is the central mechanism of human agency" (p. 256).

One approach for understanding individual motivation within organizations is expectancy theory. Expectancy theory often emphasizes "the importance of forward-looking beliefs about what will occur" (Finnigan, 2010, p. 163). This popular theory appears to be able to successfully link principal behavior to teacher motivation (Finnigan, 2010). However, this theory is based on individual beliefs of sustainability and support of personal performance skills (Finnigan, 2010). Therefore, this theory becomes convoluted when applied at the school level. Finnigan (2010) explains that the problem occurs because teacher motivation is being measured primarily through student outcomes, not teacher outcomes. "The dependency on students for improved performance limits the ability of teacher because they must rely on both student ability and student motivation" (Finnigan, 2010, p. 164). These two theories do not take into consideration individual psychological needs necessary for individuals to be able to feel or believe in individual competence toward future outcomes. Both self-efficacy and expectancy theory support the idea that humans do have intrinsic motivation tendency, but they fail to consider that the "maintenance and enhancement" of such ability "requires supportive conditions" (Ryan & Deci, 2000, p. 70).

Deci and Ryan (2000) explain that the majority of motivation theories today “assume that people initiate and persist at behaviors to the extent that they believe the behaviors will lead to desired outcomes or goals” (p. 227). Furthermore, they suggest the idea that current research in motivation is now moving towards the study of individual behavior and types of goals pursued, “suggesting that the different types of goals have different behavioral and affective consequences”(Deci & Ryan, 2000, p. 227). Deci and Ryan (2000) suggest that SDT is different from the current field of motivation theories because SDT takes into consideration both the content of goals and regulatory process used to pursue goals. The essential concept guiding content and regulatory process in goal selection and pursuit is the human desire to meet innate psychological needs (Deci & Ryan, 2000). The psychological needs identified by Deci and Ryan (2000) include: autonomy, competence and relatedness (Ryan & Deci, 2000; Stone, Deci, & Ryan, 2009). SDT offers a unique look at human motivation because it considers how psychological needs are met and the resulting consequences when they are denied.

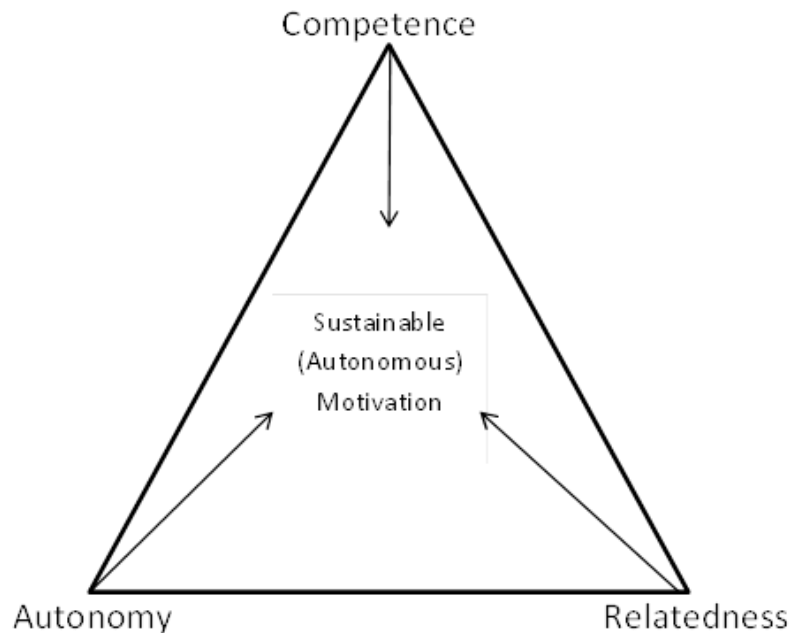
Over the past three decades Edward Deci and Richard Ryan have worked to evolve the macro theory of self-determination into a theory of self-motivation, focused on individual psychological needs (Deci, 1980; Ryan & Deci, 2000; Stone, Deci, & Ryan, 2009). Within some of the initial literature on self-determination theory (SDT) Deci (1980) wrote, “Humans are not passive agents of the environment; they are active agents within the context of the environment” (p. 16). He adds to this idea by explaining that not only is there an interplay between the individual and the environmental context, but there are also physiological and psychological contexts to be considered. These factors are

significant when considering an individual's will or motivation, or as Deci (1980) calls "the human capacity for self-determination" (p. 16).

SDT explores "people's inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration, as well as for the conditions that foster those positive processes" (Ryan & Deci, 2000, p. 68). This empirically based macro theory of motivation focuses on individual "social development and personal well-being" (Ryan & Deci, 2000, p. 68) through the attainment of three psychological needs (Deci & Ryan, 2008) as illustrated in Figure 2:

- Competence- the belief that one has the ability to influence important out comes (Stone, Deci & Ryan, 2009). Feeling confident and capable (Mayer, 2010)
- Relatedness- the experience of having satisfying and supportive social relationships. (Stone, Deci, & Ryan, 2009) Feeling connected to others (Mayer, 2010)
- Autonomy- the experience of action with a sense of choice, volition and self-determination. (Stone, Deci, & Ryan, 2009). Feeling in control of one's environment (Mayer, 2010); self-organization and self-regulation (Deci & Ryan, 2000)

Figure 2: The Foundation of Sustainable (Autonomous) Motivation



Adapted from: Stone, D. N., Deci, E. L., & Ryan, R. M. (2009). Beyond talk: Creating autonomous motivation through self-determination theory. *Journal of General Management*, 34(3), p. 78.

The framework offered by SDT, Figure 2, allows for an enhanced understanding of the ability of leadership behavior to influence normative conditions of schools that produce enhanced teacher motivation to pursue educational goals. Within SDT sustainable motivation is achieved when all three psychological factors are met. Stone, Deci, and Ryan (2009) refer to this sustainable motivation as autonomous. They suggest, “managers and organizations who support satisfaction of these core needs will realize productivity gains by creating autonomous motivation” (p. 77).

Self Determination Theory and Trust

The relationship between collective faculty trust and student outcomes has been established by multiple studies out of Rutgers, Ohio State, and University of Oklahoma

as explored by Forsyth et al. (2011) in Collective Trust. Hoy and Adams (2013) found that “faculty trust in the principal unites the school community around a shared vision for improvement” (p. 2). This conclusion was obtained after “mean math and reading achievement were higher in schools with a stronger culture of collective faculty trust” (p. 1). However, little attention has been devoted to the explanation of teacher psychological motivation in high trust environments for meeting student outcome goals, specifically in high-stakes policy environments. It stands to reason that, in schools with high collective faculty trust, teachers are motivated to persist even when faced with challenges and difficulties and even when failure to meet those goals can carry significant consequences. In trusting environments, teachers perceive that their principal acts within the accepted facets of trust: benevolence, predictability, competence, honesty, and openness (Van Maele et al., 2014). In schools with trusting environments, it is likely that teacher psychological needs of autonomy, competence, and relatedness are met. For example, if teachers believe that their principal behaves honestly and openly, they likely feel a relational connection with the principal. Additionally, if teachers feel that principals behave with predictability and competence, they likely feel that they have needed support to more fully meet student needs (Joseph & Winston, 2005). Finally, when teachers perceive principal behavior as benevolent, they likely perceive that their trust in the principal is reciprocated and that the principal has confidence in ability of teachers to make decisions to meet student needs.

Leadership Behaviors and Self-Determination Theory

Servant Leadership

It is widely accepted that the unwavering focus on followers' needs is what ultimately separates servant leadership from other leadership styles. Mayer (2010) argues that it is, in fact, the only theory with an "explicit focus on follower needs and, by extension, the development and growth of the follower" (p. 149). Therefore, with the focus already on the needs of the follower, and the understanding established by Deci and Ryan (2000) that environmental conditions can satisfy psychological needs, one could logically assume a leader exhibiting servant leadership characteristics would create the conditions necessary for meeting teacher needs of autonomy, competence, and relatedness. SDT is premised on the idea that meeting the three psychological needs of competence, autonomy and relatedness are "critical for developing a positive sense of subjective well-being, and that an inability to satisfy these needs leads to dysfunctional attitudes and behavior" (Mayer, 2010, p. 150). It could be argued that the development of dysfunctional attitudes and behaviors are detrimental to achieving organizational goals. Through servant leadership behavior characteristics such as, follower empowerment, humility, authenticity and interpersonal acceptance, the three psychological needs can be met in the follower allowing for the maintenance and enhancement of intrinsic motivation to reach intended outcome goals.

Transformational Leadership

The ability of a transformational leader to inspire followers towards collective goals is one of the hallmarks of this leadership style. Eyal and Roth's (2011) study of

transformational/transactional leadership on teacher motivation described transformational leaders as those that “promote follower’s intrinsic motivation to act beyond their job description by elevation of their self-esteem, self-value and social identification” (p. 257). Eyal and Roth’s (2011) description of transformational leadership highlights three follower results: increased self-esteem, self-value, and social identification. Self-esteem and self-value are met with the underlying requirement of self-determination theory that the psychological need of competence be met while social identification is most like the psychological need of relatedness. With transformational leadership’s heavy focus on organizational vision/mission and motivation toward collective goals, the psychological need of autonomy may not be fully met. This can be evidenced in transformational leadership that is not considered positive as exhibited by Saddam Hussein or Adolf Hitler. These pseudo-transformational leaders utilized their charisma to inspire individuals toward a collective goal that was not wholly beneficial for the course of every member’s life. Therefore, transformational leadership appears to and may be able to meet the three basic psychological needs of an individual towards intrinsic motivation but the model has the potential for disastrous results if improperly utilized. However, theorists account for the possibility of negative results by discrediting any leadership behavior that does not lead to positive outcomes (Northouse, 2013). According to Northouse (2013), these behaviors are not authentically transformational; instead, they are pseudo-transformational and do not qualify as accepted transformational leadership behavior.

Transactional Leadership

Bass et al. (2003) posits that, within transactional leadership, followers agree “with, accepted, or comply with the leader in exchange for praise, rewards, and resources or the avoidance of disciplinary action” (p. 208). However, transactional leadership can emerge as a more corrective form of leadership, this is when the “leader specifies the standards for compliance, as well as what constitutes ineffective performance, and may punish followers for being out of compliance with those standards” (Bass et al., 2003, p. 208). The premise of transactional leadership appears to run counter to SDT and its three basic psychological needs. Transactional leadership’s foundation of exchanges between leader and follower in the form of rewards or punishments does not allow for the individual’s (leader or follower) attainment of, competence, autonomy and relatedness.

Summary

The principalship is a position that is deeply rooted in the American educational system. Principals began to emerge in the American educational system around the turn of the 20th century. Over time, their role in education has become that of a middle manager caught in-between the growing demands of an antiquated bureaucratic systems of schooling and new evolving education policy.

To understand the principalship, much research has been focused on defining sets of specific leadership characteristics. Resulting in the emergence of specific leadership styles; transformational/transactional, distributive, instructional, authentic, team and servant leadership (Northouse, 2013). Each classification of leadership may have different characteristics when applied to the school settings; however, all have a similar

goal of positively influencing the school climate/culture and school outcomes through leadership.

Transformational and transactional leadership were first developed by Burns (1978) but advanced by Bass (1985) with the conceptualization of seven leadership factors. Of those seven, four are attributed to transformational leadership (intellectual stimulation, Individualized consideration, inspirational motivation and idealized influence) while three are transactional (contingent reward, management by exception passive and management by exception active) (Avolio, Bass, & Jung, 1999; Northouse, 2013). Transformational and transactional are often thought of as being oppositional to one another. Transformational leadership is the one of the two that is frequently credited toward having greater positive effects on organizations, specifically schools, by enhancing development and motivation of followers, increasing student learning and promoting trust (Bass et al., 2003; Leithwood & Jantzi, 2006).

Servant leadership emerged in the literature through the writing of Robert Greenleaf (1978). Greenleaf advocated that leaders put the follower first by empathizing with them and nurturing them in effort to empower followers to “develop their full personal capacities” (Northouse, 2013, p. 219). Servant leadership’s action-oriented state of mind is one that focuses on follower development as a way to accomplish organizational goals (Taylor et al., 2007). Characteristics of servant leadership indicate that it might be a beneficial practice for school leaders yet, little research has been done on its efficacy within a school setting.

CHAPTER III

METHODOLOGY

This study examined the relationship between three leadership behaviors in high stakes accountability policy environments and collective faculty trust. Specifically, this study explored the influence of transformational, transactional and servant leadership on faculty trust in colleagues and faculty trust in the principal. Leadership behaviors were measured using two scales; Servant Leadership Survey developed by Van Dierendonck and Nuijten (2011) and the Multifactor Leadership Questionnaire developed by Bass and Avolio (2003). Collective faculty trust was measured as an indicator of teacher motivation through the use of Hoy's (2006) Omnibus T-Scale.

Research Questions

Primary Research Question:

1. Does principal leadership behavior (transformational, transactional or servant) influence collective faculty trust?

Sub-Questions:

1. Does principal leadership behavior (transformational, transactional or servant) influence collective faculty trust in colleagues

2. Does principal leadership behavior (transformational, transactional or servant) influence collective faculty trust in the principal?

Research Population

This quantitative study examined the influence of transformational, transactional, and servant principal leadership behavior on student outcomes in a large, urban district in a Midwestern state. Evidence in the literature suggests that organizational context must be considered when studying leadership practice (Leithwood et al., 2004). Leithwood et al. (2004) suggest that organizational context such as geographic location of a school can impact leadership behavior, for example “successful principals in inner-city schools often find it necessary to engage in more direct and top-down forms of leadership than do successful principals in suburban settings” (p. 10). Additionally, evidence in the literature indicates that elementary principals operate differently than middle and high school principals, and middle and high school leaders work in larger school contexts and have additional job related responsibilities as compared to elementary school leaders (Leithwood & Jantzi, 2008; Shipps & White, 2009). Therefore, the context of data and its impact on leadership behavior will be considered during data analysis.

This district and state were specifically chosen due to the availability of rich data from a school district currently under multiple state mandated high-stakes accountability requirements. This district’s large elementary teaching staff provided a picture of leadership behaviors in a high-stakes accountability environment. High stakes testing for most grades has been mandated by this state. Most significantly, the state has recently moved to a school rating system where school quality is largely based on the student’s math and reading scores. Additional high-stakes testing can be found in a recently passed

3rd grade reading retention law and the requirement that all 9-12 grade students must pass a certain battery of tests to be eligible to graduate from high school.

In the fall of 2014, this district had a student population of 43,000, served by 4,600 administrators, teachers, and support personnel. During the school year of 2013-2014 the district employed 2,574 teachers: 1,411 elementary teachers, 321 middle school teachers, 390 high school teachers, and 452 teachers classified as special education, vocational or special assignment teachers.

The student population in this large, urban district is diverse. Most students are Hispanic (45%), with Black (27%) and Caucasian (20%) making up the next largest sub groups. Asians (3%) and Native Americans (5%) comprise the lowest represented ethnic groups in this district. Mobility in the district is a concern. During the 2012-2013 academic year, the school served a total of 45,646 students. Enrollment varied from August (33,654) to May (38,670) with the highest enrollment during the month of September (39,883). During the 2012-2013 school year, a total of 89.8% of students in the district were eligible for free or reduced lunch. Moreover, this district has reported 31.6% of student are English Language Learners. Students are spread across 89 school sites; 55 elementary, 17 secondary, 4 special centers, and 13 charter schools.

The target population of this study was all certified elementary teachers employed in the district during the 2014-2015 school year. A survey (see Appendix A) was distributed to all elementary school teachers through the district's Department of Planning, Research and Evaluation. A total of 1,411 teachers were identified. The survey instrument was sent to all teachers identified as certified elementary teaching staff. The survey

instrument was distributed a total of four times, twice in the spring of 2014 and twice in the fall of 2015.

Sample

The population for this study was 1,411 certified elementary school teachers employed across 55 schools in one large urban Midwestern school district. This district was selected due to its ability to provide a large sample size in a state that is experiencing increased school accountability legislation for elementary school students, most notable the recent passage of a reading retention bill. Also, by only including one district in the research design the study is able to hold constant “differences in trust that might occur between urban and nonurban districts” and eliminate the possibility of between districts effects (Goddard, Tschannen-Moran, & Hoy, 2001, p. 8).

With permission from the Oklahoma State University Institutional Review Board (Appendix B) and the school district’s Planning, Research and Evaluation Department (Appendix D) all 56 elementary schools were included in this study.

Data Collection Instruments

Servant Leadership Survey

Given the emergence of servant leadership in the 1970’s it is surprising that the first instruments developed to operationalize the behavior did not begin to emerge until around the turn of the 21st century (Laub, 1999; Page & Wong, 2000, Barbuto & Wheeler, 2006; Dennis & Bocarnea, 2005). The slow development of a measurement instrument may be attributed to the lack of uniformity in operationalizing servant leadership

characteristics. Verdorfer and Peus (2014) argue that with differing types of leadership attributes, measured in a variety of instruments, that “theorists have expressed concern about the construct validity of existing servant leadership measures” (p. 2). Servant leadership is difficult for authors to “clarify the constructs of servant leadership and operationalize it for empirical research” (Barbuto & Wheeler, 2006, p. 316). This difficulty is caused by the overabundance of characteristics used to describe servant leadership and a lack of cohesive constructs throughout the literature. Yet, the ambiguity that emerges in the literature over servant leadership constructs may be a benefit to servant leadership. Van Dierendonck and Nuijten (2011) reason that with servant leadership’s complicated constructs, perhaps no single measure can fully capture and operationalize its complexity. While Page and Wong (2000) suggest that to quantify servant leadership may “risk reductionism and trivialization of the concept” (p. 12).

The operationalization of servant leadership’s many constructs, as identified in the literature, has resulted in the emergence of several measurement instruments. For example, Barbuto and Wheeler (2006) developed a model to operationalize 11 characteristics of servant leadership. Through factor analysis, their data was reduced to five subscales: altruistic calling, emotional healing, wisdom, persuasive mapping, and organizational stewardship. According to Barbuto and Wheeler (2006), these subscales appear to be conceptually and empirically distinct. Furthermore, this study found some correlation between the five dimensions of servant leadership and transformational leadership and leader-member exchange theory. However, the prevalence of this instrument in the literature is lacking due to the inability of others to replicate findings (Van Dierendonck & Nuijten, 2011). Laub’s (1999) dissertation, *Assessing the servant*

organization: Development of the organizational leadership assessment (OLA) instrument, is recognized as developing one of the first measurement instruments for servant leadership. Laub's (1999) Organizational Leadership Assessment (OLA) is a 60-item measure designed to operationalize servant leadership across six clusters. However, additional usage of the instrument has indicated that its inter-correlations between clusters is excessively high, whereby multidimensionality is lost (Van Dierendonck & Nuijten, 2011). Additionally, concerns with other servant leadership instruments is lack of multi-dimensionality. Researchers do agree that servant leadership cannot be explained in one or two constructs (Van Dierendonck & Nuijten, 2011). Instead, servant leadership requires a multi-dimensional instrument of measurement to appropriately capture servant leadership in practice.

Currently, two measurement instruments have emerged that appear to successfully address previous concerns of multi-dimensionality and reliability. Liden, Wayne, Zhao, and Henderson (2008) conducted confirmatory and exploratory factor analysis with two samples (N=480) to confirm a seven factor best fitting model. However, two issues arise with this model: it is not as robust as Van Dierendonck and Nuijten's (2011) model, and this model only focuses on the follower aspect of servant leadership and not enough on the leader component of servant leadership. The counterintuitive nature of this claim seems unsettling when considering the primary construct of servant leadership is a focus on the follower. Van Dierendonck and Nuijten (2011) claim that too much focus is being placed on the servant aspect of servant leadership and not enough on the leadership component. As a model of leadership behavior, an appropriate measurement of servant leadership needs to include aspects of leadership such as, accountability and courage (Van

Dierendonck & Nuijten, 2011). Therefore, Van Dierendonck and Nuijten (2011) propose a measurement of their own that remedies this issue, the Servant Leadership Survey (SLS).

Van Dierendonck and Nuijten (2011) have created a “concise scale representing the essential characteristics of servant leadership within a multi-dimensional framework directly linked to Greenleaf’s ideas” (p. 249-250). The development of SLS started with a review of the literature, resulting in the identification of eight servant leadership characteristics: empowerment, accountability, standing back, humility, authenticity, courage, forgiveness and stewardship. These characteristics were originally operationalized into a 99 item survey. Van Dierendonck and Nuijten (2011) ran four iterations of exploratory and/or confirmatory factor analysis on the original survey over the course of four studies including Dutch and English (UK) participants (N=1,565). The resulting survey, SLS, is a 30-item survey that is acknowledged to be a “psychometrically sound multidimensional measure of servant leadership” (Verdorfer & Peus, 2014, p. 2). Correlation patterns support the content validity of SLS. Correlations between the three servant leadership measures ranged from .02 to .71. High correlations existed between empowerment, standing back, humility, and authenticity. While lower correlations were seen between forgiveness, courage and accountability. Van Dierendonck and Nuijten (2011) accept these lower correlations as an indication of the uniqueness of these characteristics.

The validity of SLS has been studied by other researchers. Verdorfer and Peus (2014) surveyed 533 participants from various businesses and were able to confirm SLS’s factorial and content validity through a confirmatory factor analysis. Furthermore,

Verdorfer and Peus (2014) tested SLS in a German translation with a German population and found that the instrument maintained its validity and reliability on measures similar to those used by Van Dierendonck and Nuijten (2011). Their findings also added to the instrument's growth as a cross-culturally valid instrument. The SLS was the instrument used in this study. It uses a 6 point Likert response set with choices ranging from "Strongly Disagree" to "Strongly Agree". Sample items include "My manager give me the authority to make decisions make work easier for me" and "My manager learns form criticism". Overall, SLS seems to correct for the shortcomings of earlier servant leadership instruments. However, it is still a fairly new instrument that will be strengthened with additional usage in empirical research.

Multifactor Leadership Questionnaire Form 5X

An investigation of transformational/transactional leadership behavior was done through the use of the Multifactor Leadership Questionnaire form 5X (MLQ-5X). The MLQ-5X is a 45 item instrument based on a Likert scale of 0-5; 0-not at all, 1- once in a while, 2- sometimes, 3- fairly often, 4- frequently, if not always. Originally, the MLQ-5X was created by Bass and Avolio to operationalize Burns (1978) concept of transformational leadership. The MLQ-5X is the most used measure of transformational/transactional leadership in research and dissertations (Muenjohn & Armstrong, 2008; Northouse, 2013). This is due primarily to the measure consistently indicating on confirmatory factor analysis that it is appropriately capturing constructs of transformational and transactional leadership (Bass & Avolio, 1997; Muenjohn & Armstrong, 2008). Bass and Avolio (1997) have also found the MLQ-5X to be valid across cultures, and different leadership levels while clearly distinguishing leadership

factors (Northouse, 2013). Given the MLQ-5X's universal appeal, application and strong statistical validity ($\alpha = .62$ to $.91$), it will be utilized in this study.

There are nine leadership factors tested in the MLQ-5X. Of these nine, five are identified as characteristic of transformational leadership; idealized attributes, idealized behaviors, inspirational motivation, individual consideration and intellectual stimulation. Two scales are characteristics of transactional leadership; contingent reward and management-by-exception. The last two scales belong to a leadership grouping known as passive/avoidant or non-leadership; management-by-exception (passive) and laissez-faire. Studies utilizing all nine factors produced a Chronbach alpha of 0.86 (Muenjohn & Armstrong, 2008). While “factor loading values in the confirmatory factor analysis ranging from an average of $.62$ to $.91$, which establishes construct validity” (Hemsworth, Muterera & Baregheh, 2013, p. 855).

Omnibus T-Scale

The Omnibus T-Scale will be used as a measure of faculty trust. The Omnibus T-Scale measures three dimensions of faculty trust: faculty trust in the principal, faculty trust in colleagues, and faculty trust in clients (students and parents) (Hoy, 2006). The scale is an omnibus scale that combines all five facets of trust (benevolence, reliability, competence, honesty, and openness); it measures the three components of faculty trust (principal, colleague, and client) and can be used in both elementary and secondary schools. This scale measures trust, not as a measure of relationships between individuals, but, instead, as a normative condition of schools where “individuals and groups are willing to make themselves vulnerable to others and take risks with confidence that others will

respond to their actions in positive ways, that is, with benevolence, predictability/reliability, competence, honesty, and openness” (Forsyth, Adams, & Hoy, 2011, p. 32). Reliabilities of the scale are consistently high, 0.90 to 0.98 range, and construct validity of scales has been supported in previous research (Smith & Birney, 2005). Hoy and Tschannen-Moran (2003) tested the validity and reliability of the Omnibus-T scales three subtest (trust in colleagues, trust in principal and trust in clients) utilizing a series of factor analytic studies which found alpha coefficients above .90. Reliability and validity of the Omnibus-T scale subtest has been supported by the work of Hoy, Gage, and Tarter (2006) who also found high alpha coefficients on each of the three subtest; trust in principal (.98), trust in colleagues (.97), and trust in clients (.98).

The Omnibus T-Scale contains 26 items on a six point Likert response set that ranges from (1) strongly disagree to (6) strongly agree. The scale includes three subscales: faculty trust in colleagues, principals, and clients (parents/students) (Hoy, Gage, & Tarter, 2006). These subscales offer an indication (Table 4) into types of trust by teachers in schools. Sample items include, “The teachers in this school have faith in the integrity of the principal” and “The principal in this school typically acts in the best interest of the teachers.” Due to concerns over the use of participant time, only the subscales of faculty trust in principal and faculty trust in colleagues were administered. This study omitted questions related to the subscale of faculty trust clients.

Table 4: Subscales of Faculty Trust

Trust Subscale	Definition of Subscale	Subscale Questions	Subscale Indicators
Faculty Trust in colleagues	measures the quality of relationships between faculty and the principal	Faculty support, openness, dependability, competence, and honesty of the principal.	Higher principal trust indicates that faculty respect and trusts the leadership of the principal.
Faculty Trust in principals	measures the quality of relationships among teachers	Faculty about their colleagues' openness, commitment to students, honesty, competence in the classroom, cooperation with each other, and reliability.	Higher faculty trust suggests that faculty perceive their colleagues as being open, honest, reliable, competent, and benevolent in their thoughts and actions.
Faculty Trust in clients	measures the quality of social interactions between faculty and parents	Faculty about parents' reliability in their commitments, parent support, parent honesty, and parent openness.	Client trustworthiness suggests that teachers perceive parents as being open, honest, reliable, competent, and benevolent in their social interactions with faculty.

Adapted from http://www.waynekhoy.com/faculty_trust.html

Measures

The measure developed for this study contains all 30 questions of the Servant Leadership Survey (Van Dierendonck & Nuijten, 2011), and 16 questions from Hoy and Tschannen-Moran (2003) Omnibus T-Scale. Questions related to teacher trust of students were excluded from this study. The survey also included 32 questions from the MLQ-5X. Only questions relating to transformational and transactional leadership were included. These included questions related to the characteristics of these two leadership styles; transformational: intellectual stimulation (IS), idealized influence (II), inspirational motivation (IM) and individual consideration (IC) and transactional: contingent reward (CR), management by exception passive (MbEP) and management by exception active (MbEA). Additionally, 5 demographic/informational questions were included in the final survey (Appendix A).

Independent Variables

This study contained 3 research variables representing leadership behavior, transformational leadership, transactional leadership and servant leadership. Transformational and transactional leadership were assessed with Avolio and Bass's (1997) MLQ-5X rater form. This scale was designed to measure a follower's perception of a leader's behavior. This instrument has 4 subscales for transformational leadership (IS, II, IM, & IC) and 3 subscales for transactional leadership (CR, MbEP, & MbEA). Participants responded to items rated along a 5 point Likert scale. For example; "My principal provides me with assistance in exchange for my efforts?". With choices "0"= "not at all" to "4"= "frequently, if not always". Scores for each sub-group

(transformational, transactional, laissez-faire and extra effort) are obtained by averaging scores from each group. Higher scores indicated greater perceived display of that particular sub-group. Laissez-faire leadership is a leadership style beyond the scope of this study and extra effort questions are new to the MLQ-5, therefore, these two sub-groups were not included in this study.

The servant leadership variable was assessed with Van Dierendonck and Nuijten's (2011) Servant Leadership Survey (SLS). This instrument assesses a follower's perception of a leader's servant leadership characteristics. Eight servant leadership characteristics were assessed in this survey, stewardship, humility, authenticity, courage, forgiveness, accountability, standing back and empowerment. Participants responded to items rated along a 6 point Likert scale. For example; "My principal emphasized the societal responsibility of our work?". With choices "1"= "strongly disagree" to "6"= "strongly agree". Scoring of this survey was based on an average overall score. A higher score indicated the leader had greater perceived servant leadership behaviors compared to a leader with a lower score.

Dependent Variables

The dependent variables for this study were collective faculty trust, collective faculty trust in colleagues and collective faculty trust in principal. The dependent variables of collective faculty trust were all scaled from 1 to 6. One being "strongly disagree", 2- "disagree", 3- "somewhat disagree", 4-"somewhat agree", 5- "agree", and 6-"strongly agree". Collective faculty trust variables were obtained from the Omnibus T-Scale (Hoy & Tschannen-Moran, 2003).

Procedures

Data was obtained through the use of a survey sent out to all certified elementary school teachers through the districts Department of Planning, Research, and Evaluation. This school district does not share teacher e-mail addresses; therefore, the district managed the distribution of the survey to elementary teachers. The researcher formatted an e-mail inviting participation in the study, and the survey link was first approved by the district and forwarded as an e-mail to the teachers from the district, not from the researcher. Surveys were conducted electronically utilizing Qualtrics software. The survey contained questions from the SLS, MLQ and Omnibus T-Scale and requested additional demographic information (Appendix A).

Two follow-up e-mails were sent, by the school district, at two-week intervals to promote participation in the study in the spring of 2015. Due to a low initial response rate another round of survey participation requested (see Appendix C). A second round of data collection was conducted during the fall of 2015. The second request for participation in the study was distributed by the district through e-mail. E-mails requesting participation were sent two weeks apart in the fall of 2015. All survey responses were returned directly to the researcher so that anonymity of respondents was protected. Only aggregated data is reported in results.

Data Analysis

Data were analyzed using SPSS version 20 for Windows. Univariate descriptive statistics were first obtained along with scatter plots and histograms in order to analyze

data distribution and assumptions of linear regression. The following assumptions are made regarding this study:

- Teacher-level data were collected and measured without error.
- Level one errors are independent and normally distributed with a common variance.
- Residuals are uncorrelated and have constant variance.
- Observations across teachers are independent.

Next, bivariate correlations for all variables in the study were obtained to determine if an empirical relationship existed between any of the studies variables. Finally, multiple regression was used to examine the role of multiple predictors on collective trust, faculty-colleague trust and faculty trust in principal.

Summary of Methodology

This chapter provided a detailed account of the methodology used in this study. Background information was provided on the location of the study and rationale for why the specific site was chosen for data collection. Descriptive information was also provided on the survey participants. Participants were certified elementary school teachers from a large urban Midwestern public school district. Data resulted from participant's completion of a survey assessing their perception of their school leadership. Survey results were analyzed using multiple statistical models. The results of data analysis are presented in chapter IV.

CHAPTER IV

RESULTS

The purpose of this study was to examine the influence of transformational, transactional and servant leadership behaviors on collective faculty trust within an environment of high-stakes state mandated testing using the theoretical frameworks of self-determination theory. This objective is explored in this chapter by first presenting descriptive statistics describing the sample and presenting results from statistical tests used to address each research question. The following research questions guided this study:

Primary Research Question:

Does principal leadership behavior (transformational, transactional or servant) influence collective faculty trust?

Sub-Questions

1. Does principal leadership behavior (transformational, transactional or servant) influence collective faculty trust in colleagues?

2. Does principal leadership behavior (transformational, transactional or servant) influence collective faculty trust in the principal?

The following hypotheses were used to guide data analysis.

1. H₀₁: Principal leadership behavior positively contributes to collective faculty trust.
2. H₀₂: Principal leadership behavior positively contributes to collective faculty trust in colleagues.
3. H₀₃: Principal leadership behavior positively contributes to collective faculty trust in the principal.

Descriptive Statistics

Univariate descriptive statistics were determined for all variables used in the study. The variables in Table 5 are divided by leadership behavior and characteristics within each behavior grouping. Table 5 presents the mean, standard deviation, minimum and maximum score and score range of each leadership behavior and its sub categories. Interestingly, the leadership behavior scale with the smallest level of variability was transactional leadership, with a standard deviation of just 0.42. Additionally, the mean score for transactional leadership was slightly higher ($M= 1.91$) than that of transformational leadership ($M= 1.88$) indicating that teachers in this study perceived their principals to be more oriented towards task completion, contingent rewards and follower compliance (Northouse, 2013).

Table 5

Descriptive statistics for variables: Total number of participants, mean score, standard deviation, minimum and maximum values and range of possible scores

Variable	n	Mean	SD	Min.	Max.	Range
Collective Faculty Trust	123	3.12	1.48	1	5	1-6
Trust in Teachers	123	2.81	1.35	1	5	1-6
Trust in Principal	123	3.43	1.69	1	6	1-6
Servant Leadership	123	3.28	1.63	1	6	1-6
Humility	98	3.24	1.62	1	6	1-6
Authenticity	106	3.77	1.29	1	6	1-6
Courage	103	3.60	1.50	1	6	1-6
Forgiveness	105	3.80	1.37	1	6	1-6
Accountability	105	5.03	0.92	1	6	1-6
Standing Back	102	3.32	1.63	1	6	1-6
Empowerment	106	3.98	1.41	1	6	1-6
Stewardship	104	4.00	1.48	1	6	1-6
Transformational	91	1.88	1.14	0	4	0-4
Intellectual Stimulation	93	1.53	1.22	0	4	0-4
Idealized Influence	92	2.02	1.15	0	4	0-4
Inspirational Motivation	95	2.20	1.24	0	4	0-4
Individualized Consideration	92	1.57	1.17	0	4	0-4
Transactional	89	1.91	0.42	1	3	0-4
Contingent Reward	94	1.98	1.13	0	4	0-4
Management by Exception-Passive	92	1.90	0.90	0	4	0-4
Management by Exception-Active	91	1.82	0.84	0	4	0-4

Additional descriptive statistics on the research site and study participants are provided in Tables 6 and 7. The sample size for this study was N=123, however on some survey items N was as low as 91. The response rate based on N=123 was 9%. Wilson Van Voorhis and Morgan (2007) suggests that the number of participants needed to examine statistical relationships should “exceed the number of predictors by at least 50” (p. 48). Additionally, better power to detect a smaller effect can be obtained with about 30 participants per variable (Wilson Van Voorhis & Morgan, 2007). This a total of 4 variables (3 independent and 1 dependent) and 123 participants this study exceeded Wilson Van Voorhis and Morgan’s (2007) recommendations for sample size criteria. Participants were predominantly female (89%). Most respondents identified as White (83%). Other race/ethnicities represented are as follows; Black (2%), Hispanic (3%), American Indian (5%), Multiracial (4%) and other (2%). A total of 36 supervisors were rated across 55 elementary sites.

Table 6
Participant Demographics

	n	%
Gender		
Male	12	11
Female	93	89
Race/Ethnicity		
American Indian	4	3
Asian	0	0
Black	2	1
White	74	70
Hispanic	3	2
Pacific Islander	0	0
Multiracial	4	3
Other	2	1
no response	16	15
Years Teaching		
0-3 years	20	19
4-7 years	15	14
7-10 years	15	14
11-14 years	13	12
15+ years	38	36
no response	4	4

Elementary schools with teachers participating in the survey (Table 7) received state school grades ranging from F to B in the 2013-2014 school year; F (n= 19), D- (n=4), D (n=3), D+ (n= 2), C- (n=3), C (n =2), B- (n= 2), B (n=1). Grades given to schools in this state are based on a 100 point scale. Schools' final point value which determines grade (A-F) is based on student achievement on state mandated standardized test. Schools in this study that had zero participating teachers school grades also ranged from F to B (Table 7). Across the district 89.6% of students were eligible for free and reduced lunch in 2013-2014. Elementary schools with teacher responses to the survey

were employed at schools that ranged from 44.3 % free and reduced lunch to 100% (Table 7). While non-participating schools ranged from 38.1 % to 100% (Table 7). This school district is often described as an urban district given its size, high minority population and socioeconomic composition (as indicated by its free and reduced lunch percentages in Table 7). This finding is worth noting because Adams and Forsyth (2013) have found that trust does exist in American urban elementary schools.

Table 7

Elementary schools A-F grade and percentage of students on free and reduced lunch (FR/L)

Schools w/ teacher participation			Schools without Teacher Participation		
School	A-F Grade	FR/L %	School	A-F Grade	FR/L %
1	B-	44.3	37	C+	38.1
2	C	69.4	38	C	38.6
3	C-	80.7	39	B	53
4	F	84.7	40	C	60.3
5	F	85.8	41	C+	85.1
6	D-	86.5	42	F	91.3
7	F	87.6	43	F	92.1
8	F	87.6	44	D+	93.7
9	C-	89	45	C+	93.9
10	F	90.7	46	F	94.2
11	F	92.7	47	F	96.9
12	F	94.1	48	C-	97.4
13	F	94.3	49	F	98.4
14	D	95	50	F	100
15	F	96.2	51	F	100
16	D-	96.8	52	F	100
17	D-	96.9	53	F	100
18	D	97.2	54	F	100
19	C	97.2	55	F	100
20	F	97.3			
21	D	97.4			
22	D+	97.4			
23	F	98			
24	F	98.3			
25	F	98.9			
26	F	99			
27	B-	99.4			
28	F	99.5			
29	F	99.8			
30	B	100			
31	F	100			
32	F	100			
33	F	100			
34	D-	100			
35	C-	100			
36	D+	100			

Bivariate correlations (Table 8) explored the degree that collective faculty trust, trust in colleagues and trust in the principal were related to leadership behavior. It was found that collective faculty trust is strongly related to servant and transformational leadership ($r = 0.76, p < 0.01$ and $r = 0.93, p < 0.01$, respectively) while showing little relation to transactional leadership ($r = 0.002, p > 0.05$). Furthermore, collective faculty trust in teachers and in the principal is strongly related to servant leadership ($r = 0.69, p < 0.01$; $r = 0.80, p < 0.01$, respectively). While transformational leadership is strongly related to faculty trust in the principal ($r = 0.72, p < 0.01$) and only moderately related to collective faculty trust in colleagues ($r = 0.26, p < 0.05$) (see Table 8). Transactional leadership failed to show any significant correlation to collective faculty trust in colleagues or in the principal ($r = 0.04, p > 0.05$; $r = 0.05, p > 0.05$ respectively).

Table 8

Bivariate correlations among variables ($N=105$)

Variable	Servant	Transf	Trans	Trust	Trust in T	Trust in P
Servant	-					
Transf	.930**	-				
Trans	0.12	0.116	-			
Trust	.763**	.549**	0.002	-		
Trust in T	.693**	.257*	0.035	.978**	-	
Trust in P	.803**	.717**	-0.051	.965**	.889**	-

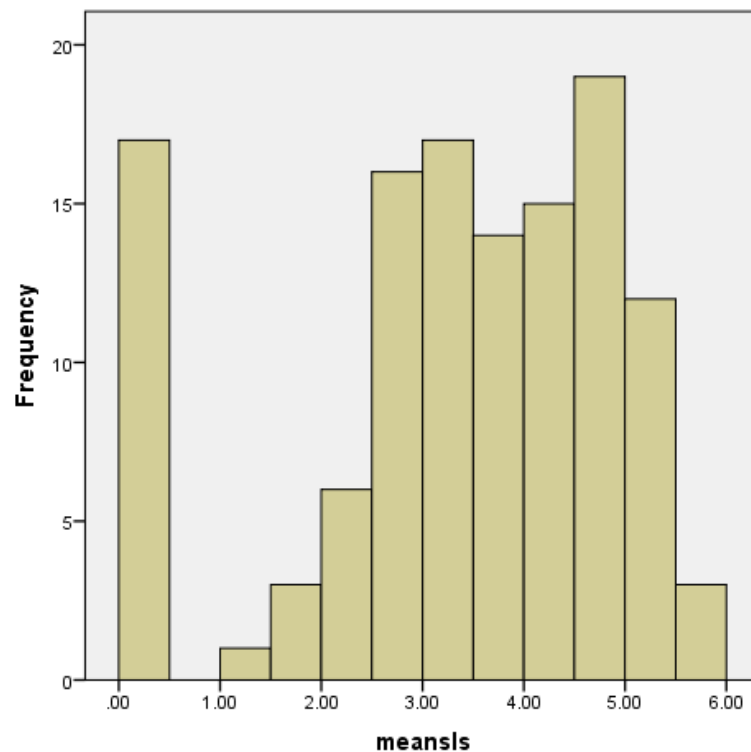
Note. Transf= Transformational leadership behaviors; Trans= Transactional leadership behaviors; Trust= collective faculty trust; Trust in T= collective faculty trust in colleagues; Trust in P= collective faculty trust in principal

The servant leadership score mean was 3.28 with a standard deviation of 1.63.

Figure 3 presents the score distribution of this variable. The skewness value of this variable was -0.836 , a moderately negative value indicating most values are to the right of the mean. However, the skewness score is between 1 and -1 indicating that the distribution of scores is within a normal range (Field, 2005). Overall, scores on this variable were equitably spread out. However, the mean score suggests that teachers on average only moderately perceived their principals as displaying servant leadership behaviors.

Figure 3

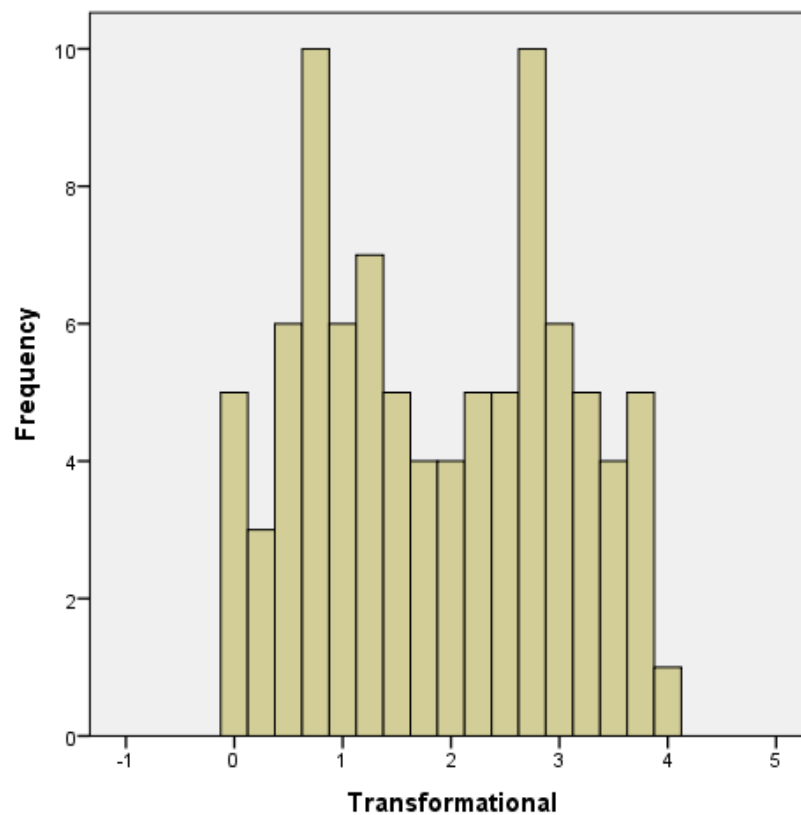
Servant leadership (meansls) value distribution ($n = 105$)



The transformational leadership score mean was 1.88 with a standard deviation of 1.14. Figure 4 presents the score distribution of this variable. The skewness value of this variable was .069, a relatively small positive value indicating that scores are mostly distributed normally with a slightly higher number of scores grouping to the left of the mean. However, the mean score suggests that teachers on average only moderately perceived their principals as displaying transformational leadership behaviors.

Figure 4

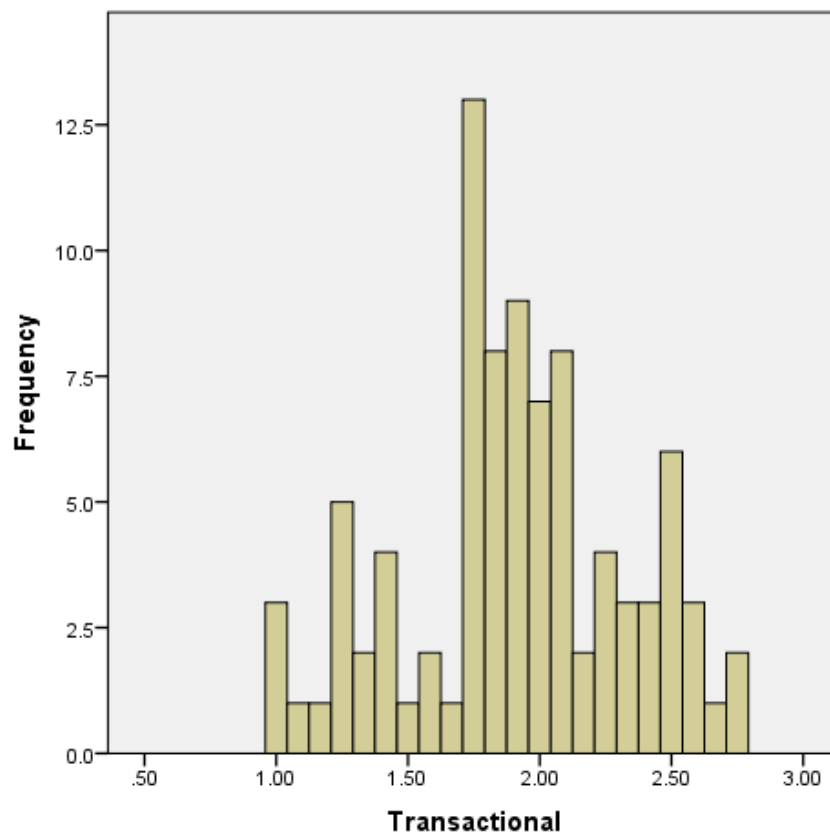
Transformational leadership value distribution ($n = 105$)



The transactional leadership score mean was 1.91, slightly higher than the transformational mean, with a standard deviation of .426. Figure 5 presents the score distribution of this variable. The skewness value of this variable was -.17, a relatively small negative value, indicating scores are normally distributed. However, the mean score suggests that teachers on average only moderately perceived their principals as displaying transactional leadership behaviors.

Figure 5

Transactional leadership value distribution ($n = 105$)



Assumptions

A partial regression plot for each dependent variable and independent variable was assessed for linearity of variables, thus, ensuring there was no violation of linearity. Partial regression plots were used because of their ability to graphically show a partial correlation of each independent variable with the dependent after removing the linear effects of the other independent variables.

Figures 6 and 7 show a linear relationship between average collective trust and servant leadership and transformational leaders, respectively. However, Figure 8 indicates that there is a very slight linear relationship between average collective trust and transactional leadership.

Figure 6

Partial regression plot: Collective faculty trust (AVGtrust) vs. Servant leadership (meansls)

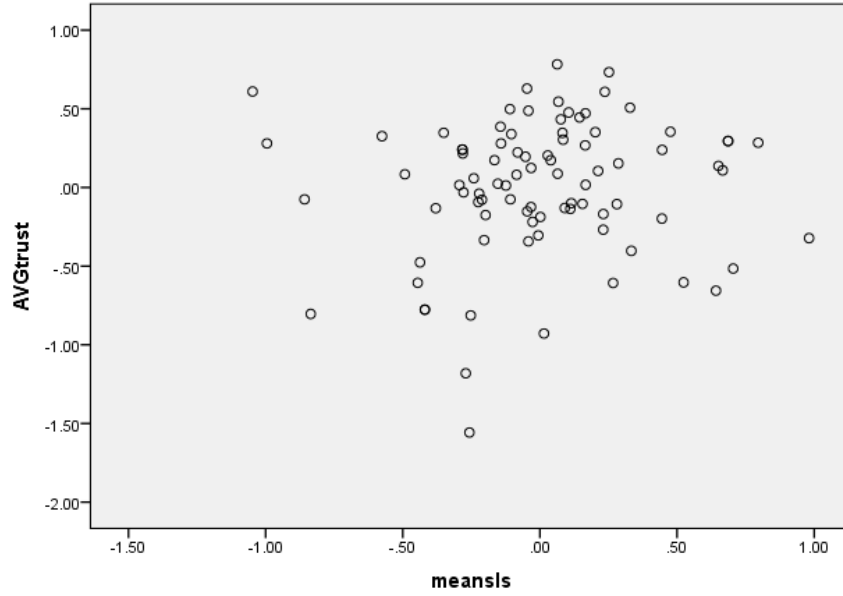


Figure 7

Partial regression plot: Collective faculty trust vs. Transformational Leadership

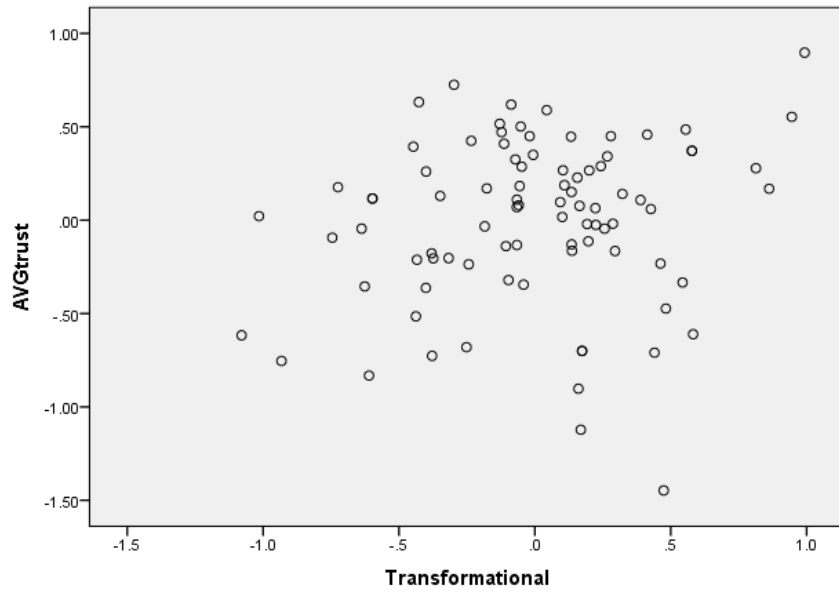
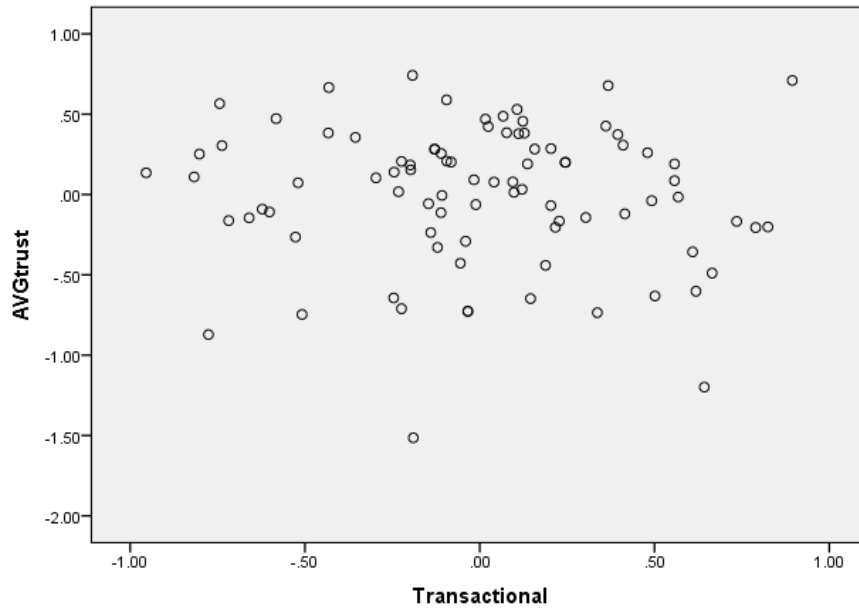


Figure 8

Partial regression plot: Collective faculty trust (AVGtrust) vs. Transactional leadership



Figures 9 and 10 show a linear relationship between average collective trust in the principal and servant leadership and transformational leaders, respectively. However, Figure 11 indicates that there is only a slight linear relationship between average collective trust in the principal and transactional leadership.

Figure 9

Partial regression plot: Collective faculty trust in the principal (FTinP) vs. Servant leadership (meansls)

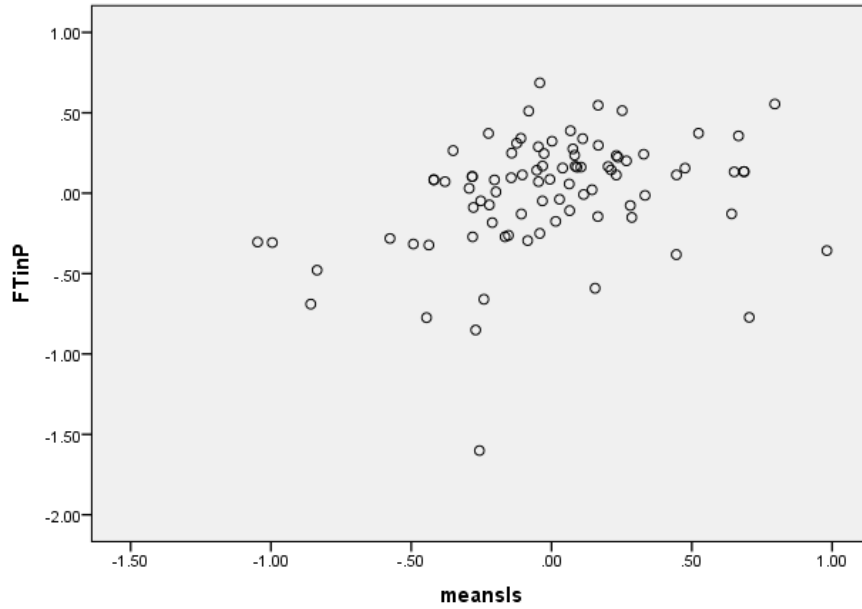


Figure 10

Partial regression plot: Collective faculty trust in the principal (FTinP) vs. Transformational leadership

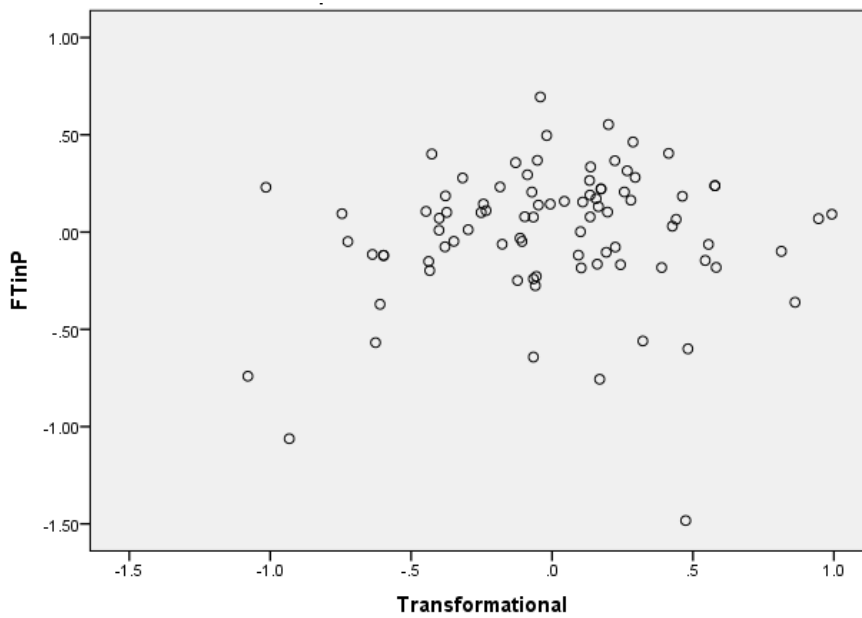
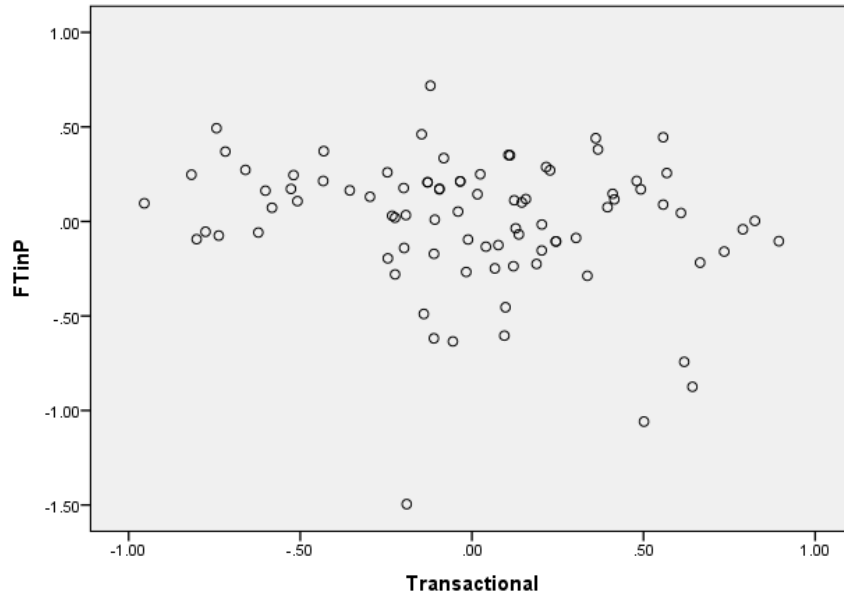


Figure 11

Partial regression plot: Collective faculty trust in the principal (FTinP) vs. Transactional leadership



Figures 12, 13 and 14 show a linear relationship between average collective trust in colleagues and servant, transformational and transactional leaders, respectively.

Figure 12

Partial regression plot: Collective faculty trust in colleagues (FTinT) vs. Servant leadership (meansls)

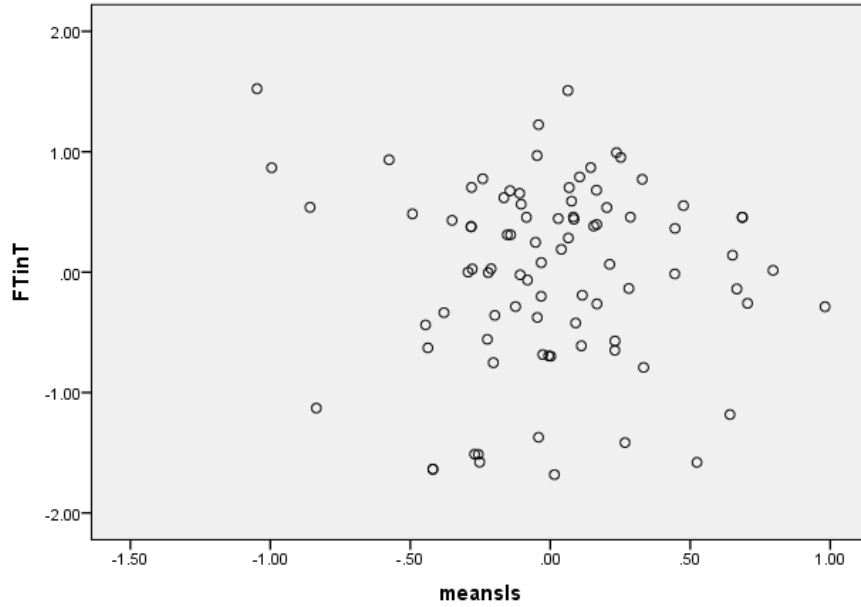


Figure 13

Partial regression plot: Collective faculty trust in colleagues (FTinT) vs. Transformational leadership

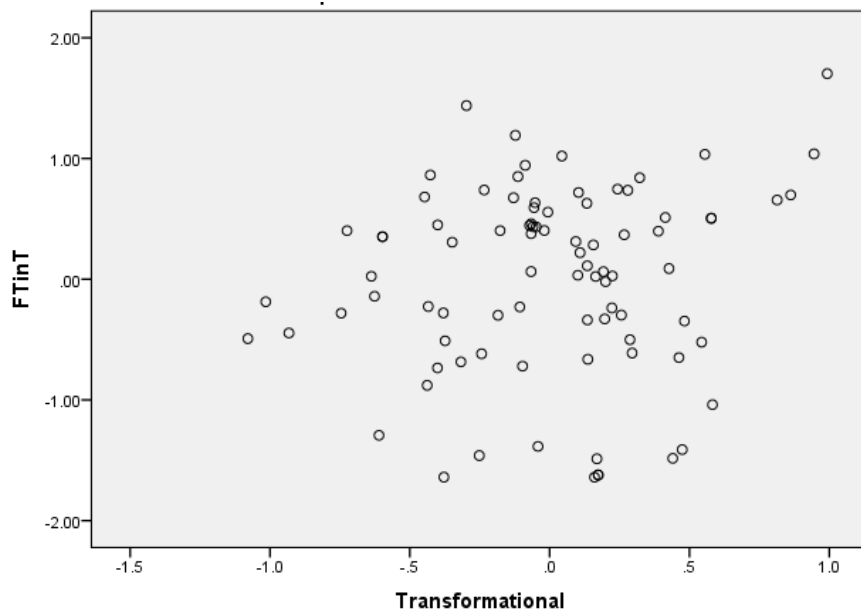
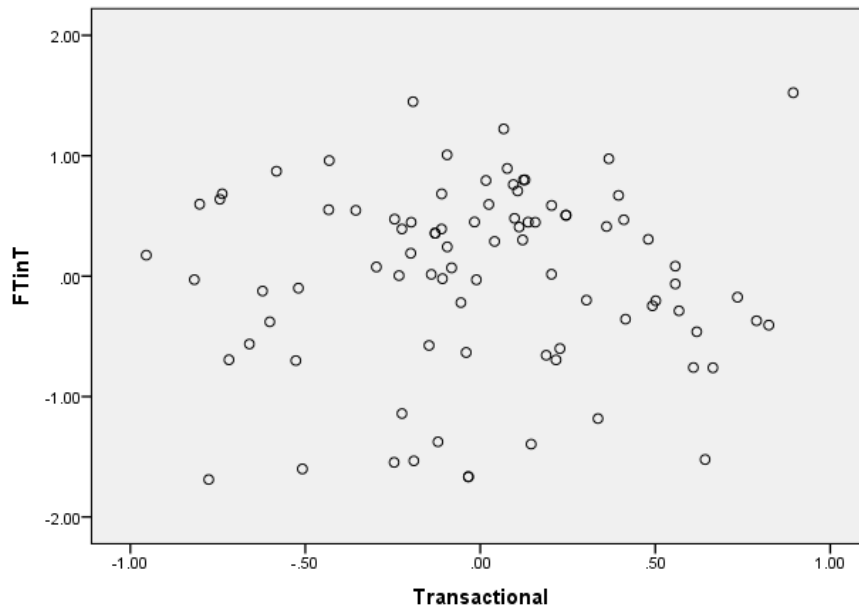


Figure 14

Partial regression plot: Collective faculty trust in colleagues (FTinT) vs. Transactional leadership



Residuals versus predicted value plots were created to check for violations of homoscedasticity, or the assumption that residuals of predictor variables have the same variance at each level (Field, 2005). Figure 15, Figure 16 and Figure 17 show the residual plots of collective faculty trust, collective faculty trust in principal and collective faculty trust in colleagues, respectively. Each plot seems to be randomly dispersed around zero indicating no violation in the homogeneity of variance.

Figure 15

Residual plot: Collective faculty trust

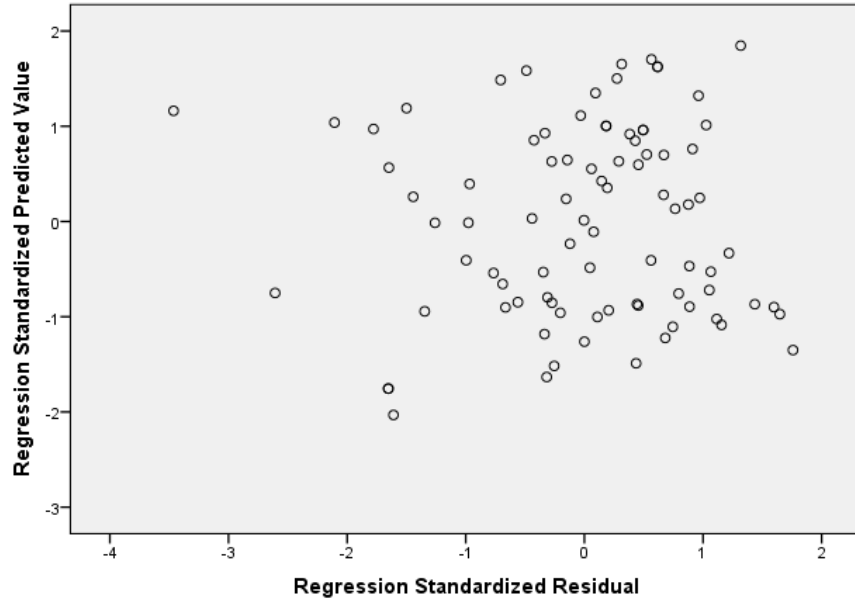


Figure 16

Residual plot: Collective faculty trust in the principal

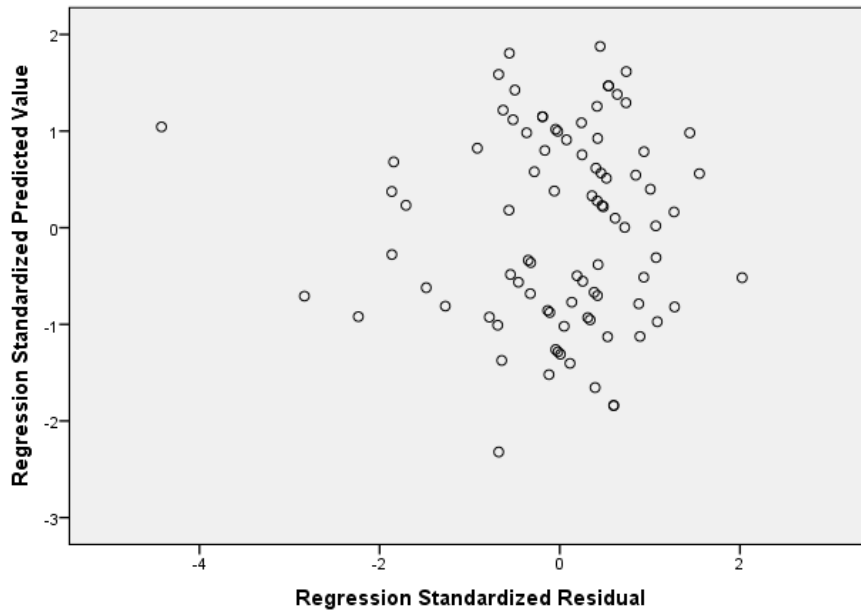
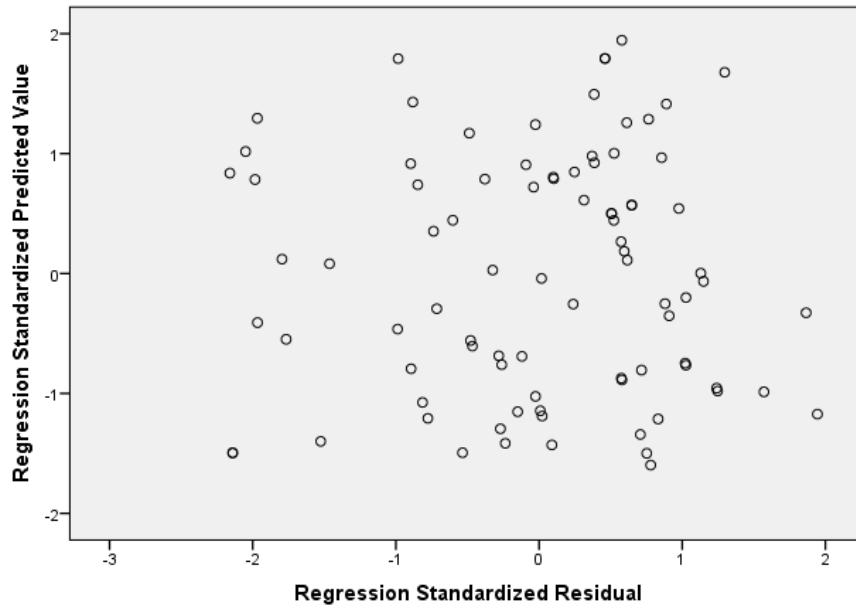


Figure 17

Residual plot: Collective faculty trust in colleagues



Summary of Data

An examination of the distributions of the three variables in the study indicated that they were within a reasonable measure of skewness. The distribution of all skewness statistics were close to zero indicating a normal distribution of scores (Field, 2005). Additionally, each variable showed a linear relationship with the dependent variable and residual plots show no linearity, suggesting residuals means are around zero and there is no violation of homogeneity. Therefore, it is concluded that all the distributions were symmetrical and linear relationships between variables did exist. The data meet the assumptions of multiple regression; linear relationship, multivariate normality, little multicollinearity and no violation of homoscedasticity. As a result, multiple regression was determined to be an appropriate statistical test for this data set.

Analyses

Multiple linear regression analysis was used to answer each research question. Basic descriptive statistics have already been presented in the previous section; therefore, this section focuses on results from regression analysis. Analysis begins with addressing each research question.

Primary Research Question: Does Principal Behavior Influence Collective Faculty Trust?

A multiple regression model was conducted to evaluate whether the perceived principal behavior, as evaluated by teachers, could predict overall collective faculty trust. The linear combination of servant leadership, transformational leadership and transactional leadership accounted for 32% of the variance in overall collective faculty trust, $R^2 = .32$, adjusted $R^2 = .29$. This model was statistically significant, $F(3, 83) = 12.84$, $p < .00$. Therefore, hypothesis H₀₁ is accepted because there is a significant positive influence of principal leadership behavior on collective faculty trust.

Table 9 shows the unique contributions, within this sample, of each leadership behavior on collective faculty trust. The data (Table 9) indicates that neither servant leadership ($b = .112$, SBE = .126, 95% CI for $b = -.138$ to .362), transformational ($b = .171$, SBE = .112, 95% CI for $b = -.051$ to .394) or transactional leadership ($b = -.074$, SBE = .113, 95% CI for $b = -.299$ to .150) explained a statistically significant amount of unique variance. The 95% confidence intervals for the slope (servant, transformational and transactional), all ranged from negative to positive values. Therefore, the conclusion cannot be made that there is a relationship between these variables independent from one another despite the scatter plots (Figures 6, 7, & 8) previously presented.

Table 9
Regression statistics for collective faculty trust

	B	SE B	β
Constant	3.147	.345	
Servant	.112	.126	.213
Transformational	.171	.112	.365
Transactional	-.074	.113	-.060

Note $R^2=.32$; $p<.001$

Sub-Question One: Does Principal Behavior Influence Collective Faculty Trust in Colleagues?

A multiple regression model was estimated to evaluate whether the perceived principal behavior as evaluated by teachers could predict collective faculty trust in colleagues. The linear combination of servant leadership, transformational leadership and transactional leadership accounted for 8% of the variance in overall collective faculty trust, $R^2 = .08$, adjusted $R^2 = .04$. This model was not statistically significant, $F(3, 83) = 2.31$, $p = .083$. Based on these results, principal leadership behavior has little influence over collective faculty trust in colleagues therefore hypothesis H_{02} is rejected.

Sub-Question Two: Does Principal Behavior Influence Collective Faculty Trust in the Principal?

A multiple regression model was estimated to evaluate whether the perceived principal behavior, as evaluated by teachers, could predict overall collective faculty trust in the principal. The linear combination of servant leadership, transformational leadership and transactional leadership accounted for 56% of the variance in overall collective faculty trust in the principal, $R^2 = .56$, adjusted $R^2 = .55$. This model was statistically significant, $F(3, 83) = 35.45$, $p < .01$. Multiple regression suggests that collective faculty

trust in the principal is influenced by principal leadership behavior therefore, hypothesis H₀₃ is not rejected; principal leadership behavior does significantly contribute to enhanced faculty trust in the principal.

Exploring unique contributions (Table 10) indicates that neither, transformational ($b = .090$, SBE = .088, 95% CI for $b = -.084$ to $.264$) or transactional leadership ($b = -.160$, SBE = .088, 95 % CI for $b = -.336$ to $.015$) explained a statistically significant amount of unique variance. The 95% confidence intervals for the slope (servant, transformational and transactional), all ranged from negative to positive values. Therefore, the conclusion cannot be made that there is a relationship between these variables independent from one another despite the scatter plots (Figures 9, 10 & 11) previously presented. Servant leadership ($b = .293$, SBE = .098, 95% CI for $b = .097$ to $.448$) may explain a statistical significant amount of variance in collective teacher trust in the principal.

Table 10

Regression Statistics for Collective Faculty Trust in the Principal

	B	SE B	β
Constant	2.409	.270	
Servant	.293	.098	.571
Transformational	.090	.088	.196
Transactional	-.160	.088	-.134

Note $R^2 = .56$; $p < .001$

Summary

Results of the data analysis for this study were presented in this chapter, addressing three research questions. Multiple linear regression was used to assess each

research question. The results showed that leadership behavior contributed significantly to collective faculty trust and collective faculty trust in colleagues but leadership behaviors showed the greatest variance in collective faculty trust in the principal. Transformational and servant leadership seemed to have greater unique contributes on faculty trust beyond that of transactional leadership. The significance of these statistics will be discussed in chapter five. Findings from this study will be discussed in concert with literature findings on leadership behavior in chapter five.

Chapter V

DISCUSSION

This study originally set out to explore the influence of principal leadership behavior on student outcomes. The literature supported the thinking that principals in today's educational climate are essential components to school reform. Furthermore, behavior of school leaders has been linked to enhanced collective faculty trust while the link to student outcomes was present but still in its infancy (Leithwood & Louis, 2012; Tschannen-Moran & Gareis, 2015). The need to bolster the literature regarding principal impact on student achievement is a direct result of accountability policies currently emerging in many states. These policies are marketed as ways to keep schools accountable to the public through not just mandated standardized testing but the grading/rating of schools and teachers based on tests. The literature indicates that persons most impacted by this high-stakes accountability environment are the school principal and the principal also has a large impact on the school environment. Actors in complex systems often become part of this phenomenon known as reciprocal causation. This phenomenon causes the principals to be the actor within the school and acted upon by policy mandates within the larger system. (Tschannen-Moran & Gareis, 2015). The current leadership environment elevates a principal's importance within the schooling

system to more than that of a simple middle manager, enhancing the need to understand the effects of their leadership behavior.

Efforts were taken to try to add further understanding to the literature on a principal behavior and its influence on student outcomes. Research questions that emerge from this type of inquiry included:

Does principal transformational leadership behavior influence student outcomes?

Does principal transactional leadership behavior influence student outcomes?

Does principal servant leadership behavior influence student outcomes?

Does principal leadership behavior (transformational, transactional or servant) work through collective teacher trust to influence student outcomes?

Ultimately these questions would require a large response rate to fully understand the unique contribution of selected principal leader behavior on student outcomes.

Hierarchical linear regression or stepwise regression would enhance the understanding of leadership behavior and student outcomes. Studies by Van Maele and Van Houtte (2015), Tschannen-Moran and Gareis (2015) and Price (2012) all explored trust in schools quantitatively with N's exceeding 600. This study had a very low response rate (9%, N = 123) with only 65% of school sites having one or more teachers respond to the survey. The survey was distributed a total of four times. Distribution of the survey was established by the condition of the initial IRB (Appendix B) submitted to the university in the spring of 2015 and the modified IRB (Appendix C), submitted in the summer of 2015, for distribution of the survey again in the fall of 2015. The survey was first

distributed in the spring of 2015 with two e-mail requests and then in the fall of 2015 with two e-mail requests. Problems regarding a low response rate could be attributed to the typically low response rate of e-mail based surveys (Ravert, Gomez-Scott, & Donnellan, 2015) or the district's unique struggle with teacher engagement. As one district administrator indicated, a low response rate is probably just teacher apathy (personal communication, 2015). However, the data that was collected was still utilized to inform the research on leadership behavior and collective faculty trust.

Understanding leadership behavior and trust is a significant component in eventually understanding the impact of leadership behavior on student outcomes. Goddard, Tschannen-Moran, and Hoy (2001) point out that “trusting relationship[s] make an important contribution to students’ academic achievement” (p. 13). Therefore, this study aimed to address the following research questions:

1. Does leadership behavior (transformational, transactional or servant) influence collective faculty trust?
2. Does leadership behavior (transformational, transactional or servant) influence collective faculty trust in colleagues?
3. Does leadership behavior (transformational, transactional or servant) influence collective faculty trust in the principal?

Out of the three research questions emerged the following three hypotheses.

H₀₁: Principal leadership behavior positively contributes to collective faculty trust.

This hypothesis was supported by the data. Multiple regression analysis revealed that leadership behavior does significantly influence collective faculty trust.

H02: Principal leadership behavior positively contributes to collective faculty trust in colleagues. Regression did show a slight positive influence in collective faculty trust in colleagues, however, the relationship was not significant. As a result of the small variance in collective faculty trust in colleagues this hypothesis was rejected.

H03: Principal leadership behavior positively contributes to collective faculty trust in the principal. Multiple regression analysis indicated leadership behavior does significantly contribute to collective faculty trust in the principal.

Demographic Data

The survey instrument was distributed a total of four times, twice in the spring of 2015 and twice in the fall of 2015. Only 123 teachers across the district started the survey and 105 completed the entire survey. This is a response rate of 7%. District personnel recognized the low response rate as “just apathy.”

Out of the 105 teachers who completed the survey, 11% were male (n= 12) and 89% were female (n= 93). 70% percent of respondents were White (n=74), 3% American Indian (n=4), 3% Multiracial (n=4), 2% Hispanic (n=3), 1% Black (n=2), 1% Other (n=2) and 15% chose not to answer the question (n=16). Asian and Pacific Islander were not represented in the sample. According the school districts statistical profile, Whites are the most heavily represented racial group for elementary teachers (n= 1104, 78%). Followed by Blacks (n=176, 12.4%) and Hispanics (n=79, 5.5%). American Indians represent 1.7% (n=25) of the district’s elementary teachers. This sample mirrors the district employment demographics for elementary teachers except for its representation of

American Indian teachers is higher than the district average and its representation of Blacks is lower than the district average.

The purpose of this study was to explore whether teacher trust in the principal and in colleagues holds an independent relationship with principal leadership behaviors. Questions regarding collective faculty trust and leadership behavior are worth exploring because “teachers who perceive their relationships with principals, colleagues, or students to be unsatisfactory demonstrate a less positive state of mind in doing their job” (Van Maele & Van Houtte, 2015, p. 107) which ultimately has the potential to negatively impact the goal of schooling, student learning.

Discussion for Primary Research Question

The results of multiple regression indicated that leadership behavior (transformational, transactional, and servant) did influence collective faculty trust. Leadership behavior accounted for 32% of the overall variance in collective faculty trust. Conversely, this could be reported as an effect size of $r = .56$ which is considered a large effect (Cohen, 1988). This finding is consistent with the literature on trust and leadership behavior. Other studies indicate that leadership behaviors such as; instructional leadership, collegial leadership and transformational leadership do influence trust within an organizations culture. (Dirks & Donald, 2001; Pillai, Schriesheim, & Williams, 1999; Van Maele & Van Houtte, 2015). However, findings in this study are unique based on consideration of servant leadership.

Discussion for Sub-Question 1

Transformational, transactional and servant leadership accounted for 8% of the variance in collective faculty trust in colleagues. The effect size was $r = .28$ and Cohen (1988) suggests that a medium effect may take place around $r = .30$. Cohen's (1988, 1992) effect size suggestions are often cited and used as guideline when evaluating effect size. However, caution is advised when determining what constitutes a large versus a small effect size. Field (2005) writes that though these guidelines are helpful, researchers must know their data.

Further exploration of the data reveals interesting patterns in regards to collective faculty trust in colleagues. Looking at each individual leader's average score on collective faculty trust in colleagues shows a range of scores from 2.8 to 5 (on a scale of 1-6). Most leaders (64%) received a score between 4 and 5. Therefore, teachers perceived there to be overall greater collective faculty trust in colleagues than, in the principal (scores ranged from 4.4 to 2.8). The literature indicates that teacher trust in colleagues is an important component in the creation of a productive working environment for teachers. Van Maele and Van Houtte (2015) observed that satisfying relationships, such as those with colleagues, enhance teacher job satisfaction, commitment and efficacy. The literature indicates that trust between teachers is a significant factor in teacher work satisfaction, school climate and student achievement (Hallinger & Heck, 1996; Tschannen-Moran & Gareis, 2015; Van Maele & Van Houtte, 2015). Furthermore, lack of trust can lead to unhealthy work situations causing teacher isolation and emotional exhaustion, two factors not conducive for promoting a teachers

sense of relatedness or competence, thereby, negatively influencing a teachers self-motivation.

Additionally, Van Maele and Van Houtte (2015) as well as Tschannen-Moran and Gareis (2015) acknowledge the principal's important role in creating conditions that promote trust and foster a productive school climate. Principal trustworthiness has been found to influence how teachers relate to one another (Tschannen-Moran & Gareis, 2015) and "support from co-workers decreases depersonalization and increases feelings of personal accomplishment." (Van Maele & Van Houtte, 2015, p. 108). Yet, the positive reporting of high levels of collective faculty trust in colleagues was not significantly related to principal leadership behavior because it was so pervasive. Leaders, regardless of their leadership behavior, all had teachers report relatively high scores (>3) on collective faculty trust in colleagues. Therefore, despite the moderate effect size, it is determined by the researcher that this study found principal behaviors to not have a significant influence on trust between teachers because, all leaders, regardless of perceived behavior seemed to have high scores on collective faculty trust in colleagues. Indicating that something other than principal behavior may have produced these responses. District level factors such as leadership and policy were not explored in this study but are two variables that have the potential to effect all school sites. Therefore, it is suggested that other factors beyond principal behaviors are effecting teacher's perceptions of collective faculty trust in colleagues.

Discussion for Sub-Question 2

A principal's leadership behavior was found to significantly influence collective faculty trust in the principal. The linear combination of servant leadership, transformational leadership and transactional leadership accounted for 56% of the variance in overall collective faculty trust in the principal. The effect size ($r = .75$) is significant as Cohen (1988) established that $r > .5$ to be a large effect. The finding in this study, that principal behavior does significantly influence collective faculty trust, is supported by Tschannen-Moran & Gareis (2015), who also found a link between leadership behavior and faculty trust in the principal. They examined instructional and collegial leadership behaviors finding, $r = 0.92, p < 0.01$ and $r = 0.91, p < 0.01$, respectively. Additional studies have concluded that, "trust in the principal contributed to lower levels of teachers' emotional exhaustion, more than did trust in colleagues and students" (Van Maele & Van Houtte, 2015, p.108). With lower levels of emotional exhaustion there would be enhanced feelings of competence, autonomy and relatedness leading to a greater sense of personal well-being and self-motivation within a teaching staff. This study and supporting literature enhance the understanding that collective faculty trust in the principal is important for teachers. However, what has yet to be determined is specific leadership behavior that leads directly to increased collective faculty trust in the principal.

This study is only able to explore principal behavior as a combination of servant, transformational and transactional leadership. Due to the low response rate, statistical models cannot be used to explore individual leadership behaviors. However, just as with the discussion for research question 2, this data can be analyzed based on each individual

leader as a way to identify patterns or trends may support the need for further research. Next, the researcher will undertake a discussion of patterns in the data relating to leadership behavior and collective faculty trust in the principal, but it should be strongly emphasized that statistical significance cannot be obtained due to the small number of participants.

Principals rated in this study received collective faculty trust in principal scores ranging from 2.7 to 4 on a scale of 1-6. Fifty-three percent (n = 18) of principals received a score of 3.5 or greater. Of these principals, 17 also scored exceptionally high on servant leadership behaviors (>3.5 on a scale of 1-6) and 14 received moderate scores on transformational leadership (> 2.5, on a scale of 0-4). Ten of these principals also received low scores on transactional leadership (<2, on a scale of 0-4), which is desirable for this measure as it is often perceived as working against constructs of trust. In total, all principals that were perceived to have positive collective faculty trust in the principal scored well on at least two of the three leadership behavior measures indicating that what could be emerging from this data are perceptions of strong leaders (high scores on all three measures) versus weak leaders (low scores on all three measures). Therefore, principals who display behaviors of a servant and transformational leadership with few behaviors of a transactional leader tend to have higher collective faculty trust scores. This finding is worth further investigation but does indicate that a wide range of leadership behaviors can lead to positive outcomes.

Summary

Tschannen-Moran and Gareis (2015) have found that, “faculty trust in the principal is related directly to student achievement, and it is also related to important elements of school climate that are, in turn, related to student achievement” (p. 84). Therefore, understanding leadership behaviors that have the potential to enhance teacher trust in the principal is essential for any school leader if accountability goals, such as increased student achievement, are to be increased or maintained.

The literature acknowledges that there is a link between certain leadership behaviors (instructional, collegial, and transformational) and collective faculty trust. This study found that combined leadership behaviors of servant, transformational and transactional leadership lead to greater perceived collective faculty trust in colleagues and in the principal suggesting that what is important for an educational leader is to be able to display facets of trust (benevolence, honesty, reliability, competence, and openness) not, strict adherence to one style of leadership. Van Maele and Van Houtte (2015) suggest behaviors from the principal such as lack of competence or reliability can influence a teacher’s level of trust in that leader ultimately leading to lowered efficiency and increased work uncertainty. This study, in conjunction with existing literature, support the idea one of the most beneficial actions an educational leader can do to enhance student performance and teacher efficacy is to practice the five facets of trust as opposed to trying to implement a specific leadership style.

Additionally, this study did find evidence to suggest that servant leadership does influence collective faculty trust in the principal beyond transformational or transactional

leadership. Statistical data at this point is weak due to low power resulting from the low response rate. Additional study is needed to support study findings regarding servant leadership. Therefore, this study does add to the research on servant leadership by providing direction for further research. There is little study on servant leadership and collective faculty trust. While servant leadership characteristics do align considerably with those of trust there has been little study on if these characteristic behaviors promote trust within an organization and how this leadership style could benefit leaders in educational settings.

Limitations

A very low response rate of 9% is a significant limitation of the study. Although numerous attempts were made to collect information through the survey emailed to potential participants, only 123 teachers chose to participate. What is not known is why this response rate was exceptionally low. This district is a large, racially/ethnically diverse, urban district with 89.6% of students qualifying for free/reduced lunch. Increasing State mandates including the ranking of schools on an A-F “report card” scale may have led to a climate where teachers struggle to accomplish daily goals, leaving little time for completion of a voluntary survey. Alternatively, administrator communication indicated that he believed the low response rate was a result of teacher apathy. Additional research is needed to better understand the culture in the district that led to very low response. Another limitation of the study includes the use of a survey instrument. Survey instruments, although they provide a means to efficiently and effectively gather large amounts of data, invitations for participation are also easily dismissed. Responses to surveys items are also dependent upon the proper understanding of each participant.

Interpretation of survey items is a common limitation of qualitative research documented in the literature (Kirk, 2013; Ravert, Gomez-Scott & Donnellan, 2015). Finally, generalizability of these findings are severely limited based on the low response rate and the fact that data was only collected in one district. Data could only be generalized to districts with similar demographic and cultural characteristics. Because cultural characteristics of this district are largely unknown, generalizability is limited.

A 9% response rate limited the researcher's ability to draw conclusions about unique variance of individual leadership behaviors. However, this limitation could also be a finding. Out of 55 elementary schools in the district, only 36 had teachers respond to the survey. There appears to be no notable difference between school characteristics (ELL, mobility rates, or free & reduced lunch percentages) of participating schools and non-participating schools. Of the 36 participating schools, there were 5 schools in the study that had four or more teachers respond to the survey indicating that perhaps school culture is being influenced by factors beyond those that can be quantified. Further investigation is needed to understand school climate and culture and leadership in schools with high participation verse schools with no participation.

Implications

Recommendations to Educational Leadership Programs

This study can inform the discipline of educational leadership and future leadership program development by providing a better understanding of leadership styles that lead to enhanced school trust in the current high-stakes policy environment.

Understanding the influence of different leadership styles on teachers and school cultures

can lead to a better understanding and acceptance of school reform and accountability policy.

It is understood that positive faculty trust in the principal is related to many school factors such as teacher burnout, emotional wellbeing and teacher sense of personal efficacy. These school factors are all related to student achievement (Tschannen-Moran & Gareis, 2015). Therefore, a principal who is not trusted is unlikely to meet a school's basic mission of positive student achievement. The cultivation of aspiring principals needs to occur in leadership programming that recognizes the importance of leadership behavior on trust development.

Recommendations for Principals

School leaders and principals can benefit from an understanding of behaviors that promote collective faculty trust. Van Maele and Van Houtte (2015) explain that “principals set the tone for a school atmosphere which is conducive for all kind of trust relationships in school to develop” (p. 110). The creation of trust relationship in schools specifically between teacher and principal facilitate higher levels of achievement for teacher and students while also creating a schooling environment that is more conducive to the accomplishment of shared educational objectives (Tschannen-Moran & Gareis, 2015). Findings from this study indicate that a combination of leadership styles (transformational, transactional and servant) may be most beneficial in promoting faculty trust. Understanding situational variables that lead to principal action or inaction may promote the kinds of environments conducive to student learning. For example, teachers may find reason to trust the principal when the principal takes needed corrective action

when the situation warrants it (transactional leadership). Additionally, teachers may find reasons to trust the principal when the principal motivates them through supportive behaviors (servant leadership). What seems most important from these findings is that practicing the five facets of trust as opposed to trying to implement a specific leadership style may be most important for school improvement.

Reflection

I started the dissertation process with the knowledge that I wanted to explore school leadership in the context of school accountability policy, but; I didn't know how that interest translated into research. In effort to just get something down on paper, I produced a ten page discussion of what I thought I wanted to study. These ten pages acted as a starting point for conversations and guidance from my advisor. With increased (and targeted) attention in the literature and continuous writing, research questions started to emerge. I was going to examine principal leadership behaviors and student outcomes within the context of school accountability, or so I thought. Unfortunately, that goal was not achieved in this research cycle. It was not for a lack of trying that this exploration did not come to fruition. It was simply the messy underworld of research that is never truly illustrated in all the papers and dissertations I read in preparation for, and throughout this dissertation process.

From the start I understood that an exploration of school leadership and student outcomes would require a large response rate and electronic surveys typically lacked high participation rates. I would be at the mercy of the school district and teachers in the study. In theory I knew that the response rate could be low, limiting the statistical methods that

could be used and potentially forcing the study to shift away from using student outcomes as the dependent variable. This was repeatedly brought to my attention by my advisor. However, at the start of this dissertation process I'm not sure I had enough research know-how to fully comprehend what she was warning me about. I went on to write my first three chapters, specifically my literature review, optimistic that everything would workout. Yet, the nagging doubt that data collection could be a problem forced me to carefully select each section and sub-section of the literature review, fully exploring each component in the literature and ensuring that topics covered in the literature review linked or could link to one another. This was done through the use of a working outline that helped to provide a quick snapshot of how the paper was unfolding section by section, a document that continued to evolve and change as pages of writing started to pile up.

The process of writing and completing a strong literature review was the most significant piece of my dissertation. It's important to discuss how I approached this section of the dissertation. My literature review went about examining current thought and research on school leadership theories, student outcomes, trust, school accountability and self-determination theory. The literature review was first written with the assumption that student outcomes would be the DV. As events would unfold, I would find myself in a situation where I would not be able to examine school leadership and student outcomes with the collected data. However, this change in the research focus did not result in the need to make an overwhelming number of changes in the work up to the change point. I feel the selection and discussion of three specific topics (trust, Self-

Determination Theory & student outcomes) helped to strengthen the study to a point where change could be manageable and not demoralizing.

Within the literature review, trust was always a component of the research, as it was originally intended to be used as a mediating variable. Therefore, the connection to leadership and trust had to be fully examined. Therefore, “if” the response rate was not to a desired number then trust would become the DV and would need to be explained anyway. Self-Determination Theory (SDT) was chosen as the conceptual framework because it could explain teacher motivation in trusting relationship or teacher motivation to persist in producing student outcome goals. Student outcomes relationship to leadership was originally addressed in chapter two because student outcomes were to be the dependent variable in the study. As the study evolved over time and student outcomes were no longer able to be the dependent variable, it was clear that student outcomes were still an important component of school leadership and helped to fully explain the stress of the school leadership position in the current accountability environment. So, student outcomes moved away from being the DV, but their place in chapter two remained relatively un-touched due to their importance in understanding school leadership. In the end very little in chapter two had to be changed to accommodate the shift in research focus. This result, I feel, was due to the careful nature in which the literature review was laid out from the start.

I feel I was methodical in choosing what I wanted to discuss in chapter two. I knew how I wanted to present my topic, I felt I was fully entrenched in the literature and my organizational supports were helping me to stay on task. But, I don’t think I fully understood how, what I was doing at the time, fit into the larger picture of my research.

Reflecting back I can now fully appreciate how the work and time I spent on chapter two helped carry me through the rest of the research process. The quality construction of the literature review not only gave my study a very sturdy foundation on which to rest, it also provided me with a tremendous amount of knowledge and understanding on my topic. When time came to change dependent variables it was a very smooth course correction given my mastery of the topic and understanding of my study in the current literature. The completion of a well-done, thoughtful literature review gave me the self-confidence boost to face research challenges and more importantly helped me to understand my own thinking on my topic, my research and ultimately the changes the research would have to undergo due to unforeseen events.

Moving forward from chapter two lead to actual data collection. At the end of the first round of data collection it became clear that the project was probably going to have to go to its fall back plan of looking at leadership and collective faculty trust. However, before I committed to this change of plan, I wanted to attempt to collect a little bit more data. Maybe luck would be in my favor this time. Fortunately, my modified IRB was accepted quickly and the school district was very willing to work with me in an attempt to obtain greater teacher participation so, they too approved a second round of data collection in the fall of 2015. I hoped that a better response would come from a fall request of participation than a spring request. Teachers would be well rested from the summer, excited about a new school year, not trying to de-stress after a month of standardized testing, but, this was not the case. The second round of data collection boosted the response rate by about 2%, still not enough to run an ICC, HLM or step-wise regression.

As disappointing as these participation results were, they were not crushing for a couple of reasons. First, the teachings from my program provided me with the skills I needed to establish a solid literature review which I relied on as the foundation of my work. Shifting the focus of my study did not significantly alter the strength of the foundation but instead simply relocated some of the study's walls. Secondly, the disappointing response rate and understanding that I would not be able to use student outcomes as the dependent variable occurred at a time when I no longer saw the dissertation as simply the end goal but, instead just another check point along the way. I was ready to move beyond my dissertation. In the fall of 2015 I was planning for graduation, thinking about employment and future research. I was ready to be done and began to really take to heart what I had heard all along, "the best dissertation is a finished dissertation".

Additionally, I felt as if I had the confidence as a researcher to move forward without student outcomes and still feel as if I had created a strong piece of work. I liked my dissertation with collective faculty trust and felt as though I had established a nice framework for future research with student outcomes. I started to understand the true complexity of what I was studying and to really do justice to my topic. I just needed to complete my dissertation research so that I would have the legitimacy as a researcher to continue examination of this topic.

I am very satisfied with the work I have created but for me the learning came in the day to day process and in the things that went unwritten; in the multiple discussions with my advisor, the presentation at various venues on my topic, explaining my work to family and friends, continually looking to the literature and always being my worst critic.

I thought at the start of this study that the dissertation itself was the end goal, but now I realize that the personal and academic growth that occurs simultaneously is perhaps more valuable. Furthermore, I know I didn't accomplish what I set out to a year ago but I truly did learn a lot. Each twist and turn was a learning opportunity, testing my academic knowhow in solving research problems and, also building my personal resolve to complete what I had started 4 years prior.

Finally, I'd like to take credit for being able to picture both the proposed study and the potential alternate study, both contingent on the response rate, but this is only something I have learned in hind-sight. My advisor's, Dr. Kathy Curry, guidance through this portion of the process was invaluable. She taught me to be targeted in my research approach while also keeping an eye on the large picture all at once. Her continual feedback kept me on track and moving forward. This helped me to produce a product in which I take great pride in having completed.

Further Study

Further study is needed to understand the influence of different types of leadership behaviors on various school factors when trust acts as a mediating variable. Specifically, little is known about the effects of transformational, transactional, and servant leadership styles in high stakes accountability policy environments on student outcomes or if these leadership styles influence teacher motivation to persevere in meeting educational goals. Evidence in the literature suggests that the influence of principal leadership behavior on student outcomes is an indirect influence facilitated by the principal's influence on the school culture. Additionally, because little research exists

on the construct of servant leadership, it is suggested greater focus be paid to the influence of servant leadership on student outcomes. Because educators often enter the profession of education with aspirations of fulfilling a “purpose beyond oneself,” servant leadership behaviors may be a natural leadership style of many educational leaders (Taylor, Martin, Hutchinson, & Jinks, 2007). However, little is known about the effectiveness of servant leadership behavior for meeting student outcome goals in high stakes accountability environments. Therefore, it is recommended that further studies explore servant leadership, trust and student outcomes.

This study focused solely on urban elementary principal’s leadership behaviors as perceived by elementary school teachers. This group of principals and teachers was focused on as a direct result of state legislation defining student achievement goals specifically, in elementary reading. However, the demands and requirements of urban elementary school principals and teachers differ from those placed on other groups of principals and teachers such as; middle school, high school, career tech, alternative education, private schooling, special education, inner-city and rural schools.. These areas of education are also seeing a rise in external mandates of student outcomes, from graduation standards at the high school level to testing reading proficiency in the middle school for student to be eligible to earn a driver’s license.

This study found that it is more important for a leader to show strong leadership, one that promotes trust over a specific type of leadership, transformational, transactional, or servant. However, this only applies to an urban elementary school setting. Given the various demands on faculty and leaders in different schooling contexts it is worth evaluating leadership behavior and collective faculty trust to see if the results are up held

within other schooling settings. If results are maintained across schooling context this may suggest that specific traits or characteristics from transformational, transactional and servant leadership help to create a strong leader potentially leading to a new theory of leadership which encompasses all three leadership behaviors. If differences are found among schooling contexts then it becomes even more imperative that these differences are fully explored and expressed so that practicing administrators and leadership program development can adjust according based on the given schooling context.

A striking finding from this study was the amount of silence from teachers across the district. Of the 55 schools surveyed there were 19 schools where no teachers responded and multiple schools with only one or two participating teachers. Given this survey was about leadership and trust perhaps the low response rate is an indication teacher perceived problems with one or both of these variables leading to a failure to participate. This void in the study deserves greater attention; however, it is suggested that qualitative follow up study may help to uncover some of the factors that influenced the outcomes of this study.

Finally, one issue not addressed in this study was teacher retention and tenure. Stand for Children Oklahoma is a non-profit organization that recently released a report *Pipeline to Success: Why Principal Support & Development is Key to School Turnaround* (2015) exploring leadership in the same district where this study was conducted. One insightful finding from the report states that the district has a 22% annual turnover rate in its principals, which has been occurring for the past twenty years. To make this statistic more shocking the report states that this turnover rate is equivalent to “roughly 1 out of every 5 schools *every year* being led by a new principal” (2015, p.5) With elementary

schools encompassing over half the district's schools one can infer that a large portion of schools in the study could have had new or relatively new (<2 years) leadership during the time of the study. Principal's years of experience, turnover, and tenure were not considered in this study but the literature shows these factors to significantly impact a school culture (Leithwood & Louis, 2012). A principals years of experience has been linked to a variety of school performance measures such as; student achievement, student absences/suspensions and teacher absences (Rice, 2010). Furthermore, Rice (2010) found that lower-achieving schools are more likely to have principals who are in their first year. According to the state where this study was conducted almost all schools would be considered low achieving. The variable of principal experience in schools is worth considerable exploration and warrants further study. Additionally, principal turnover and principal tenure have been found to influence school culture. Greater attention and research must be devoted to this issues especially when considering the problem of leadership retention is not unique to this urban school district.

Summary

This study's original intent was to help understand leadership's contribution to student outcomes through collective faculty trust. Given the current climate of education reform and its emphasis on the school leader producing measurable results it was expected that this course of study would be beneficial to current and future school leaders as well as leadership preparation programs. However, due to a low response rate to the survey instrument, this line of analysis was not possible.

The original intent of the study was not carried out, but data was still usable in understanding the role of teacher perceived leadership behaviors on collective faculty trust in both colleagues and in the principal.

This study contributed to the literature on educational leadership by providing further evidence that leadership behavior does influence collective faculty trust. This study assisted in the diversification of the literature away from only studying leadership in packaged sets of leadership behaviors, such as transformational or servant to the understanding of a broader range of behaviors that contribute to collective faculty trust. Though no statistical significance could be obtained due to the low response rate, it was observed that high collective faculty trust in colleagues and in the principal scores tended to be correlated to above average scores on at least two of the three leadership behaviors tested in this study. This finding, explored through the discussion of research questions 2 and 3, suggests that to enhance or influence collective faculty trust an educational leader should diversify leadership behaviors as opposed to practicing one packaged set of behaviors.

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APPENDICES

Appendix A

Principal Leadership Behavior Survey

Q1.1 Thank you for participating in this survey. Please remember, all responses will be returned anonymously so that no one can connect your answers to you directly. Only aggregated findings will be included in reports.

Q1.2 I am a certified teacher in Oklahoma City Public Schools.

- Yes (1)
- No (2)

Servant Leadership Survey

Q2.1 Using the following 6 point scale indicate the extent to which you strongly disagree or strongly agree with the following statements as they pertain to your current principal or school leader.

Q2.2 My principal emphasizes the societal responsibility of our work.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.3 My principal has a long-term vision.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.4 My principal emphasizes the importance of focusing on the good of the whole.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.5 If people express criticism, my principal tries to learn from it.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.6 My principal learns from the different views and opinions of others.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.7 My principal admits his/her mistakes to his/her superior.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.8 My principal tries to learn from the criticism he/she gets from his/her superior.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.9 My principal learns from criticism.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.10 My principal shows his/her true feelings to her/her staff.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.11 My principal is prepared to express his/her feelings even if this might have undesirable consequences.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.12 My principal is often touched by the things he/she sees happening round him/her.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.13 My principal is open about his/her limitations and weaknesses.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.14 My principal takes risks and does what needs to be done in his/her view.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.15 My principal takes risks even when he/she is not certain of the support from his/her own manager.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.16 My principal finds it difficult to forget things that have gone wrong in the past.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.17 My principal maintains a hard attitude towards people who have offended him/her at work.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.18 My principal keeps criticizing people for the mistakes they have made in their work.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.19 My principal holds me and my colleagues responsible for the way we handle a job.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.20 I am held accountable for my performance by my principal.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.21 My principal holds me responsible for the work I carry out.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.22 My principal appears to enjoy his/her colleagues' success more than his/her own.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.23 My principal is not chasing recognition or rewards for the things he/she does for others.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.24 My principal keeps himself/herself in the background and gives credit to others.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.25 My principal offers me abundant opportunities to learn new skills.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.26 My principal enables me to solve problems myself instead of just telling me what to do.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.27 My principal gives me the authority to make decisions which make work easier for me.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.28 My principal encourages his/her staff to come up with new ideas.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.29 My principal helps me to further develop myself.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.30 My principal encourages me to use my talents.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q2.31 My principal gives me the information I need to do my work well.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Omnibus T-Scale (Trust)

Q3.1 Using the following 6 point scale indicate the extent to which you strongly disagree or strongly agree with the following statements as they pertain to your current principal or school leader.

Q3.2 The principal doesn't tell teachers what is really going on.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.3 When teachers in this school tell you something you can believe it.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.4 The teachers in this school are open with each other.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.5 The principal in this school is competent in doing his or her job.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.6 Teachers in this school have faith in the integrity of their colleagues.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.7 Teachers in this school can rely on the principal.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.8 Teachers in this school do their jobs well.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.9 Even in difficult situations, teachers in this school can depend on each other.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.10 The principal of this school does not show concern for the teachers.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.11 The principal in this school typically acts in the best interests of teachers.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.12 Teachers in this school are suspicious of each other.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.13 The teachers in this school have faith in the integrity of the principal.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.14 Teachers in this school typically look out for each other.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.15 The teachers in this school are suspicious of most of the principal's actions.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.16 Teachers in this school trust each other.

- Strongly Disagree (1)
- Disagree (2)
- Somewhat Disagree (3)
- Somewhat Agree (4)
- Agree (5)
- Strongly Agree (6)

Q3.17 Teachers in this school trust the principal.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

MLQ-5

****Due to copyright the entirety of this portion of the survey cannot be displayed.**

Q4.1 Using the following 5 point scale to indicate the extent to which your principal or school leader displays the following behaviors, from 'not at all' to 'frequently, if not always'.

The following questions are copyrighted by Bruce Avolio and Bernard Bass, 1995. Published by www.mindgarden.com

Q4.2 My principal provides me with assistance in exchange for my efforts.

- Not at all (1)
- Once in a while (2)
- Sometimes (3)
- Fairly often (4)
- Frequently, if not always (5)

Q4.3 My principal re-examines critical assumptions to questions whether they are appropriate.

- Not at all (1)
- Once in a while (2)
- Sometimes (3)
- Fairly often (4)
- Frequently, if not always (5)

Q4.4 My principal fails to interfere until problems become serious.

- Not at all (1)
- Once in a while (2)
- Sometimes (3)
- Fairly often (4)
- Frequently, if not always (5)

Q5.1 Please answer the following demographic questions.

Q5.2 What is your gender?

- Male (1)
- Female (2)

Q5.3 What is your race/ethnicity?

- American Indian (1)
- Asian (2)
- Black (3)
- Hispanic (4)
- White (5)
- Pacific Islander (6)
- Multiracial (7)
- Other (8)

Q5.4 How many total years have you been teaching?

- 0-3 years (1)
- 4-7 years (2)
- 7-10 year (3)
- 11-14 years (4)
- 15 + years (5)

Q5.5 How many years have you been teaching at your current school site?

- 0-3 years (1)
- 4-7 years (2)
- 7-10 years (3)
- 11-14 years (4)
- 15+ years (5)

Q5.6 At which elementary site are you currently teaching? (If teaching at more than one site choose all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Adams (1) | <input type="checkbox"/> Horace Mann (22) | <input type="checkbox"/> Sequoyah (44) |
| <input type="checkbox"/> Arthur (2) | <input type="checkbox"/> Jackson | <input type="checkbox"/> Shidler (45) |
| <input type="checkbox"/> Bodine (3) | <input type="checkbox"/> Enterprise (23) | <input type="checkbox"/> Southern hills (46) |
| <input type="checkbox"/> Britton (4) | <input type="checkbox"/> Johnson (24) | <input type="checkbox"/> Spencer (47) |
| <input type="checkbox"/> Buchannan (5) | <input type="checkbox"/> Kaiser (25) | <input type="checkbox"/> Stand Watie (48) |
| <input type="checkbox"/> Capitol Hill (6) | <input type="checkbox"/> Kaiser East | <input type="checkbox"/> Telstar (49) |
| <input type="checkbox"/> Cesar Chavez (7) | <input type="checkbox"/> 6th GC (26) | <input type="checkbox"/> Thelma R. Parks (50) |
| <input type="checkbox"/> Cleveland (8) | <input type="checkbox"/> Lee (27) | <input type="checkbox"/> Van Buren (51) |
| <input type="checkbox"/> Coolidge (9) | <input type="checkbox"/> Linwood (28) | <input type="checkbox"/> West Nicholas Hills (52) |
| <input type="checkbox"/> Edgemere (10) | <input type="checkbox"/> Mark Twain (29) | <input type="checkbox"/> Westwood (53) |
| <input type="checkbox"/> Edwards (11) | <input type="checkbox"/> Martin Luther King (30) | <input type="checkbox"/> Wheeler (54) |
| <input type="checkbox"/> Eugene Field (12) | <input type="checkbox"/> Monroe (31) | <input type="checkbox"/> Willow Brook (55) |
| <input type="checkbox"/> Fillmore (13) | <input type="checkbox"/> Moon (32) | <input type="checkbox"/> Wilson (56) |
| <input type="checkbox"/> Gatewood (14) | <input type="checkbox"/> Nicholas Hills (33) | |
| <input type="checkbox"/> Green Pastures (15) | <input type="checkbox"/> North Highland (34) | |
| <input type="checkbox"/> GreystoneLower (16) | <input type="checkbox"/> Oakridge (35) | |
| <input type="checkbox"/> Greystone Upper (17) | <input type="checkbox"/> Parmelee (36) | |
| <input type="checkbox"/> Hawthorne (18) | <input type="checkbox"/> Pierce (37) | |
| <input type="checkbox"/> Hayes (19) | <input type="checkbox"/> Prairie Queen (38) | |
| <input type="checkbox"/> Heronville (20) | <input type="checkbox"/> Putnam Heights (39) | |
| <input type="checkbox"/> Hillcrest (21) | | |
| <input type="checkbox"/> Quail Creek (40) | | |
| <input type="checkbox"/> Rancho Village (41) | | |
| <input type="checkbox"/> Ridgeview (42) | | |
| <input type="checkbox"/> Rockwood (43) | | |

Appendix B

Oklahoma State University Institutional Review Board

Date: Thursday, May 14, 2015
IRB Application No ED1517
Proposal Title: Principal Behaviors and Student Outcomes: An Examination of Transformational, Transactional and Servant Leadership
Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 5/13/2018

Principal Investigator(s):

Alexandra Holter
2204 Willard Hall
Stillwater, OK 74078

Katherine Curry
306 Willard
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,



Hugh Crethar, Chair
Institutional Review Board

Appendix C

Oklahoma State University Institutional Review Board

Date: Tuesday, July 07, 2015 Protocol Expires: 5/13/2018
IRB Application No: ED1517
Proposal Title: Principal Behaviors and Student Outcomes: An Examination of Transformational, Transactional and Servant Leadership
Reviewed and Processed as: Exempt
Modification
Status Recommended by Reviewer(s) **Approved**
Principal Investigator(s):
Alexandra Holter Katherine Curry
2204 Willard Hall 306 Willard
Stillwater, OK 74078 Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Modification to conduct study during September 2015.

Signature :



Hugh Crethar, Chair, Institutional Review Board

Tuesday, July 07, 2015
Date

Appendix D



Holter, Alexandra <holter@ostatemail.okstate.edu>

Outside Research in Oklahoma City Public Schools

Weeter, Richard D. <rdweeter@okcps.org>
To: "Holter, Alexandra" <holter@ostatemail.okstate.edu>

Mon, May 11, 2015 at 1:17 PM

Dear Ms. Holter

I am very pleased to notify you that the Oklahoma City Public Schools district has approved your research project, **"Principal Behaviors and Student Outcomes: An Examination of Transformational, Transactional and Servant Leadership."**

All research in the district must be conducted under conditions of informed consent. All data collected must follow the guidelines, conditions, and timelines described in your proposal. Should you determine that you require any substantive changes in these procedures, please contact me at the number below.

On the basis of this district-level approval, I will be glad to facilitate a mass email to our elementary sites containing your invitation and a link to your survey. Then about 2 weeks later a reminder. Please note that our email will include a disclaimer that OKCPS is neither requiring or endorsing your research. Contact me as soon as you have your message and link ready to send.

Good luck in collecting your data.

Sincerely,

Richard Weeter, Ph.D.

Executive Director, Planning, Research, and Evaluation Department

Oklahoma City Public Schools

413 NW 12th Street

Oklahoma City, OK 73103

(405) 297-6776

Appendix E

For use by Alexandra Holter only. Received from Mind Garden, Inc. on May 1, 2015

Permission for Alexandra Holter to reproduce 1400 copies

Multifactor Leadership Questionnaire™

Instrument (Leader and Rater Form)

**and Scoring Guide
(Form 5X-Short)**

by Bruce Avolio and Bernard Bass

Published by Mind Garden, Inc.

info@mindgarden.com

www.mindgarden.com

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VITA

Alexandra Jane Holter

Candidate for the Degree of

Doctor of Philosophy

Thesis: ELEMENTARY PRINCIPAL BEHAVIORS AND TEACHER TRUST: AN EXAMINATION OF TRANSFORMATIONAL, TRANSACTIONAL AND SERVANT LEADERSHIP

Major Field: Educational Leadership and Policy Studies

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Educational Leadership and Policy Studies, Oklahoma State University, Stillwater, Oklahoma in December, 2015.

Completed the requirements for the Master of Science in Mathematics and Science Education major at The University of Tulsa, Tulsa, Oklahoma in 2008.

Completed the requirements for the Bachelor of Arts in History at The University of Tulsa, Tulsa, Oklahoma in 2006.

Experience: Middle School Science Teacher at Union Public Schools in Tulsa, Oklahoma from 2008-2012. Middle School Science Teacher at Jenks Public Schools in Jenks, Oklahoma from 2012-2013. Teaching and Research Assistant, Department of Social foundations and School of Educational Studies, Oklahoma State University, Stillwater, Oklahoma from 2013-2015,

Professional Memberships: American Education Research Association, University Council for Educational Administration