DIFFERENCES IN STUDENT ACHIEVEMENT AND PRINCIPAL BEHAVIOR AS A FUNCTION OF YEARS OF PRINCIPAL EXPERIENCE: A NATIONAL INVESTIGATION

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DEDICATION

Completion of this dissertation would not be possible without the inspiration, support, and the sacrifices of several individuals. First, I would like dedicate this accomplishment with my parents. I am grateful to my father for always pushing me to pursue my doctorate by being the voice in my ear. Since before moving to the United States, he set obtaining my doctorate is an unquestionable goal and dream for me. For years, he kept reminding me and challenging me that I must achieve it because it was one of the primary reasons for me moving the United States. He kept pushing and believing in me until I was able to achieve it. To my mother who made so many sacrifices raising four kids and dealing with poverty and rough times for several years. I am inspired by her kindness and wiliness to help others. Her constant prayers certainly helped me achieve great things.

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ABSTRACT

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Purpose

The purpose of this journal-ready dissertation was to determine the relationship of principal years of experience as an administrator with the academic achievement of students, with areas that principals emphasize in their school practices, and with the size of their schools, with respect to student enrollment. In the first journal article, the degree to which differences were present in student achievement as a function of principal years of experience as an administrator was examined. In the second study, the extent to which principals differed in what they emphasize in their school practices as a function of principal years of experience was ascertained. In the third empirical investigation, the degree to which principals had different emphases in their school practices, as well as areas in which they focused on staff training, was analyzed as a function of student enrollment. In each of these three empirical investigations, data from a national dataset on principals were examined.

Method

A causal-comparative research design was used in this quantitative study. A national dataset, the Early Childhood Longitudinal Study, Kindergaten Class of 2010-2011 principal survey, was obtained from the National Center for Education Statistics.

The variables that were analyzed as a function of principal years of experience and school size were: student achievement, the way principals spend their time at work, and train their teachers.

Findings

Students who attended schools with Experienced Principals had statistically significant higher reading, mathematics, and science achievement than students who attended schools with either New Principals or Moderately Experienced Principals.

Experienced Principals emphasized working with teachers and on required paperwork more than New Principals or Moderately Experienced Principals. Regarding school size, Principals of Large-size schools spent more time working than principals of Small-size schools and Moderate-size schools. Principals of Large-size schools placed statistically significantly more emphasis on training their teachers than principals of Small-size schools or Moderate-size schools. Principals of Large-size schools placed more emphasis on training their teachers on reading strategies, mathematics strategies, behavioral support, collecting and managing data, and interpreting and using data than principals of Moderate-size and Small-size schools. Implications for policy and recommendations for research were provided.

KEY WORDS: ECLS-K, Experienced Principals, Moderately Experienced Principals, New Principals, Principal Emphases, Small-size schools, Moderate-size schools, Large-size schools, Training areas.

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CHAPTER I

INTRODUCTION

School districts around the nation are struggling more than ever to meet increased accountability systems mandated by the federal government. In fact, the No Child Left Behind Act (2001) and the Every Student Succeeds Act (2015) required all schools to improve student performance of all students regardless of the school demographics. In addition, principals can play an important role in creating and promoting high quality schools. Thus, school district officials are determined to develop, train, and select the most highly effective principal for each campus to improve student achievement. School leaders are expected to be instructional leaders and visionaries to influence student performance and meet these high stakes accountabilities. As a result, the daily tasks of a principal are becoming more complex and more difficult to accomplish.

In this journal-ready dissertation, the extant research literature in three areas was reviewed. In the first review area, the empirical literature on the influence of principals on student achievement was discussed. In the second literature review section, specific areas that principals emphasize at their school campuses were analyzed. In the third review area, the relationship of school size and what principals emphasize at their school campuses and areas in which they train their teachers was addressed.

Review of the Literature for School Leadership and Student Achievement

Principals have an extensive array of duties and tasks for which they are responsible. They deal with personnel issues, student behavior problems, parent concerns, and community relationships, along with ensuring that their schools are meeting local, state, and federal accountability measures (Brockmeier, Starr, Green, Pate,

& Leech, 2013; Horng, Klasik, & Loeb, 2010). In fact, to meet constantly increasing accountability requirements, school district leaders across the country concentrate their efforts on improving student achievement. As a result, school district leaders need to focus on selecting the most effective principals for their school campuses. Several scholars (e.g., Borg & Slate, 2014; Grissom & Loeb, 2011; Marzano, Waters, & McNulty, 2005; Seashore-Louis, Leithwood, Wahlstrom, & Anderson, 2010) have discussed the crucial role of the school leader in the success of a school and student learning, particularly at the most challenging schools.

In a meta-analysis, Leithwood, Day, Sammons, Harris, and Hopkins (2008) conducted a review of literature regarding successful school leadership. They concluded that school leadership was second only to classroom teaching as an influence on student success in learning. School principals affect teaching and learning most by motivating staff members and through exhibiting commitment to improve their working conditions. Furthermore, principals influence the instructional quality and thus student achievement through the hiring, coaching, and retaining of highly effective teachers (Harris, Rutledge, Ingle, & Thompson, 2010).

In a recent study in which data were analyzed from the Early Childhood

Longitudinal Study-Kindergarten Class of 1998-1999, Azaiez and Slate (2017) examined
the relationship of principal years of experience as an administrator with student reading
and mathematics achievement. Specifically, they focused on student performance in
reading and mathematics between principals with less than 6 years of experience and
principals with more than 6 years of experience. They established that students who were
enrolled in schools with principals with more than 6 years of experience had statistically

significantly higher reading and mathematics test scores than students who were enrolled in schools with principals with 6 years or less of experience. Based on their results, Azaiez and Slate (2017) contended that school district leaders should assist new principals making decisions on the goals and objectives they need to emphasize to increase student achievement.

Using an elementary school dataset, Brockmeier et al. (2013) examined the extent to which principal tenure, principal stability, or principal experience were predictive of elementary school student performance. The authors used a state dataset that included 1,023 schools from the State of Georgia and Grade 3 as well Grade 5 student scale scores in reading, English/Language Arts, mathematics, science, and social studies. They documented that principal tenure and principal stability were statistically significantly related to student achievement in Grade 3 and Grade 5. As a result, Brockmeier et al. (2013) recommended minimizing principals' turnover and increasing retention of principals to assist with school improvement.

In another elementary school study, principal and school factors that influenced elementary student achievement were analyzed by Gieselmann (2009). She specifically examined years of principal experience, students at the school receiving free and reduced lunch, principal gender, highest level of education by the principal, years of teaching experience of the principal, years of principal experience at current campus, and principal leadership as measured using the Principal Instructional Management Rating Scale. In her study, the percentage of free and reduced lunch variable was the best predictor of student achievement. Interestingly, principal years of experience, gender, or highest level of education were not related to student achievement (Gieselmann, 2009). In regard to

middle schools, Huff, Brockmeier, Leech, Martin, Pate, and Siegrist (2011) investigated the relationship between principal tenure or experience and middle school student achievement. In their study, they documented the presence of a statistically significant relationship between principal longevity and student achievement. As such, they revealed the importance of hiring and retaining leaders with several years of experience. In a similar study conducted in North Carolina public schools, Miller (2013) examined the effect of principal turnover on student achievement. Schools with new principals initially experienced a decrease in student academic performance. In most cases, student academic achievement did not improve until a few years after the new principal had been in place on that campus.

On the other hand, the School Leaders Network (2014) described in their report that strong principals can positively influence the school culture and the instructional quality of the teachers. In fact, they determined that the effect of school leaders on student academic performance was about 25% of the total school influences on student academic achievement. However, 50% of new principals are not retained beyond their third year of employment at a specific campus. In addition, the cost to develop, hire, and mentor a new principal is 75,000 dollars (School Leaders Network, 2014). They suggested it takes an average of five years to create a vision, improve systems and teaching staff, and implement new practices and policies to influence the performance of the campus.

The influence of principal turnover on student achievement and school climate has been investigated over the past decade. For instance, Mascall and Leithwood (2010) determined principal turnover usually has a negative influence on student achievement.

Given this negative relationship, they suggested school districts retain principals for a minimum of 4 years at the same campus to produce positive results. Thus, school district leaders should develop a retention plan and should encourage and support new principals. Valentine and Prater (2011) examined the relationship between student achievement and principals' managerial, instructional, and transformational leadership in public schools. They established that principals' behaviors promoting instructional and curriculum improvement were directly related to student achievement, and they identified instructional improvement, curricular improvement, identifying a vision, providing a model, and fostering groups goals are the most important principal behaviors or factors for effective leadership. These factors were linked to student achievement (Valentine & Prater, 2011).

Leadership turnover is a major issue facing school districts all across the United States. In fact, annual turnover rates of principals range between 15% and 30% in most school districts, with statistically significantly higher turnover rates in schools with students in poverty and who are low achieving (Béteille, Kalogrides, & Loeb, 2012; Branch, Hanushek, & Rivkin, 2008). Principal turnover is a larger issue at urban and rural schools than at suburban schools (DeAngelis & White, 2011). Partlow and Ridenour (2008) explored the relationship of principal turnover in Ohio with school factors. They determined that schools that had three or more principals in a 7 year-period were 42.7% urban, 19.2% suburban, and 40.1% rural. In a Missouri study completed by Baker, Punswick, and Belt (2010) about one half of the principals leave the principalship in the state after 5 years. They added that salary influenced principals' decision whether to remain or to leave. Therefore, district officials should be more intentional about

retaining experienced principals by creating differentiated pay model for principals and providing the necessary preparation and training for new principals (Baker et al., 2010).

In a recent investigation, Fuller and Young (2009) analyzed principal tenure in Texas schools. They determined that principal tenure and retention varied drastically across school levels. In fact, the tenure of elementary school principals was about 5 years, middle school principal tenure was about 4.5 years, and the tenure of high school principals was less than 4 years. Only 50% of newly hired high school principals remained for three years and less than 30% of them remained for five years. Fuller and Young (2009) established that principals in the lowest performing schools had the shortest tenure and principals in the highest performing schools had the highest retention rates. Moreover, they documented that principal retention and tenure were directly connected to the percentage of students who were economically disadvantaged. Principals at low-poverty schools had the longest tenure and principals at high-poverty schools had the shortest tenure (Fuller & Young, 2009).

In addition to Texas, school districts in other states have experienced and continue to experience high rates of leadership turnover (DeAngelis & White, 2011; Ringel, Gates, Chung, Brown, & Ghosh-Dastidar, 2004). Béteille et al. (2012) investigated the consequences of leadership changes on school performance in Miami-Dade County Public Schools, one of the largest public school districts in the United States. They determined that one out of five principals leave their schools each year because of district leadership choices or in some cases for personal reasons such as working at a school with higher achieving students and thus easier to staff. Moreover, principals often use schools with high percentages of students in poverty as stepping stones for more desirable

assignments. Béteille et al. (2012) established that the consequences of principal turnover on student achievement were negative and new principals without prior experience were less effective than experienced principals. In addition, turnover has more negative effects on low performing schools than on high performing schools because experienced principals are less attracted to low performing schools.

Additionally, Coelli and Green (2012) examined the influence of principal mobility on student achievement. They revealed that principals matter in influencing high school student outcomes if they remain at the same school for more than three school years. As such, Coelli and Green (2012) contended policymakers and school district leaders should minimize principal turnover and develop methods to increase retention of effective principals.

Review of the Literature for School Leadership and What Principals Emphasize in Their Schools

The role of principal has been evolving in recent years (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Horng, Klasik, & Loeb, 2010; Searby, 2010). The principal role has shifted from being the school disciplinarian and teacher supervisor to a more complex and demanding role. In fact, principals are required to handle instruction, personnel, students, strategic planning, government and public relations, and finance (Lynch, 2012). As a result, public school principals work far more than the average 40 hours per week and balance a wide range of responsibilities within a week (Papa & Baxter, 2008; Wallace Foundation, 2013). Given the many demands made on their time, principals have to prioritize and emphasize the tasks that are the most important. In fact, the lack of time management skills and abilities among principals can be considered as

one of the main factors that could lead to leadership inefficiency and thus, to absence of progress or improvement at the campus (Botha, 2013). Some of the reasons that make managing time by principals a difficult task is the quantity as well as the unpredictability of daily school activities. For instance, according to Drake and Roe (2003), principals reported having between 50 and 100 daily events and up to 400 interactions with people with 75% of these contacts were unscheduled. In contrast, corporate executives reported spending only 10% of their time on unscheduled contacts (Drake & Roe, 2003).

In one study in which the dataset that was analyzed in this article was used, the Early Childhood Longitudinal Study-Kindergarten Class of 1998-1999, Borg and Slate (2014) examined principal leadership emphases as a function of school performance. Specifically, they focused on the extent to which school principals at low and high performing schools emphasized the same nine goals and objectives that was discussed in this study. Borg and Slate (2014) documented that principals in high performing schools emphasized different goals or objectives. One of their salient findings was that principals of high achieving schools emphasized providing challenging tasks for higher achieving students more than principals of low achieving schools. They concluded that school district leaders should assist new principals making decisions on the goals and objectives they need to emphasize to increase student achievement.

In a similar study, and using the same dataset, the Early Childhood Longitudinal Study-Kindergarten Class of 1998-1999, Smith and Slate (2014) analyzed principal perspectives at high and low performing private schools specific to what they emphasized with respect to working well with other faculty members and challenging high achieving students. They concluded that principals of high performing schools emphasize

providing challenging tasks for higher achieving students more than principals of low achieving schools.

Henkel and Slate (2013) examined the differences between private and public school principals with regard to their emphasis using the Early Childhood Longitudinal Study-Kindergarten surveys. Principals were asked about their degree of emphasis (i.e., minor, moderate, major) on staff working well together, achieving high standards, challenges for high-achievers, communicating well with parents, and instructional strategies. Principals of public schools had more major emphases than principals of private schools in achieving high standards, challenges for high-achievers, and instructional strategies aligned with standards (Henkel & Slate, 2013). On the other hand, private school principals had more major emphases than public school principals in staff working well together and communicating well with parents.

In another study and using a more recent dataset, Lavigne, Shakman, Zweig, and Greller (2016) analyzed how principals spent their day and the kinds of professional development in which they participated. The authors used the same dataset that was used for this study, the Early Childhood Longitudinal Study-Kindergarten Class of 2010-2011. Principals reported spending an average of 59 hours a week on the job, focusing mainly on some internal administrative tasks. Lavigne et al. (2016) indicated a principal's day is complicated and included a variety of tasks such as communicating with stakeholders, hiring teachers and staff, appraising and coaching teachers, filing reports to the district, meeting with parents, disciplining students, and dealing with crises and special situations. They determined that principals who made adequate yearly progress spent most of their time on administrative tasks, curriculum, and teaching related tasks. Principals of high

poverty schools that did not make adequate yearly progress spent more time on the job than did principals of high poverty schools that made adequate yearly progress (Lavigne et al., 2016).

In a similar study, Horng et al. (2010) investigated principals' time use and school effectiveness. The authors determined that principals spent about 30% of their time in administrative tasks such as discipline and completing compliance requirement, 21% of the day in organization management such as managing budget and staff, and 15% of their time on internal relations such as building relationship with students and networking with staff members. In addition, principals devoted 5% of their time on external relation tasks such as working with outside partnerships. However, principals dedicated only 6% to instructional-related activities daily classroom observations and only 7% on general instructional program duties such as assessing curriculum and designing professional development (Horng et al., 2010).

In a recent analysis, Tomàs-Folch and Ion (2015) explored how principals managed their responsibilities and time. They sorted principals' tasks into four categories: objectives, people, organization, and instruction. Tomàs-Folch and Ion (2015) determined that principals spent twice as much time on people, two times more than they spent on objectives, organization, or instruction. Principals spent the same amount of time on objectives, organization, and instruction.

One of the most important roles of principals is to increase student achievement (Borg & Slate, 2014). To improve student performance, principals are required to focus on certain tasks. Farver and Holt (2015) investigated how principal coaches work with campus leaders to equip them with the necessary skills to influence student achievement

and to keep up with the demand of the new state and federal accountability. They determined that coaching provided principals with a thinking partner who assisted in goal-setting, problem solving, and action planning. The relationships between the principal coach and the campus leader were built on trust, confidentiality, reciprocity, and facilitative. Principals were allowed to have confidential and reflective conversations, present ideas or concerns without making any judgment and received valuable feedback.

In a related investigation, Shatzer, Caldarella, Hallam, and Brown (2013) analyzed the effects of instructional and transformational leadership on student achievement by determining specific leadership practices associated with increased student performance. They established that certain behaviors or emphases were associated with increasing student achievement such as monitor student progress, protect instructional time, provide incentives for learning, provide incentives for teachers, and make rewards contingent. Shatzer et al. (2013) added that instructional leadership practices are more effective than transformational practices.

On the other hand, O'Donnell and White (2005) analyzed how principals' instructional leadership behavior or emphasis influenced student achievement. They determined that principals who promoted school learning to a higher level exhibited certain behaviors including protecting instructional time, maintain high visibility, provide incentives to teachers, promote professional development, and provide incentives for learning. O'Donnell and White (2005) added that focusing on these task and behaviors were even more crucial for schools with a large percentage of students who were economically disadvantaged. However, principal emphasis should extend beyond overseeing the day-to-day instructional practices and conducting classroom observation

(Grissom & Loeb, 2011). In fact, the effectiveness of instructional leadership depends on the successful orchestration of school programs, people, resources, and managing of key organizational tasks such as maintaining the facility and school budget (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010).

The work of the school principal has never been a simple one, with local and federal accountability increasing and making it even more challenging as well as elevating the stakes to a high level. Thus, principals often rely on teachers and other stuff members to assist them in completing these tasks. Spillane, Camburn, and Pareja (2007) indicated that principals shared or delegated leading activities most of the time. In fact, principals only lead activities alone 35% of the time whereas they co-lead activities 33% of the time or do not lead activities 31.4% of the time (Spillane et al., 2007). Alvoid and Black (2014) contended that school districts should be committed to the task of developing campus leadership and be eager to invest the energy, time, effort, and the necessary resources to achieve this goal. Moreover, principal development and training should be less theoretic and more holistic (Levine, 2005; Marks & Printy, 2003). The development should emphasize instructional practices as well as key management components such as how to handle personnel and maintaining facilities (Hess & Kelly, 2007).

Review of the Literature on School Size and What Principals Emphasize in Their Schools and Areas of Teacher Training

Texas public school enrollment has increased by 17.2% from the 2005-2006 school year to the 2015-2016 school year (Texas Education Agency, 2016). Along with this increase in total student enrollment, the percentage of students in poverty increased

by 24.6% during the same period. Almost 60% (i.e., 58.9%) of students enrolled in Texas public schools meet the criteria for being economically disadvantaged (Texas Education Agency, 2016). As such, the responsibilities of school districts in educating students comprise a challenging task. The responsibility of ensuring that student achievement is increased is often delegated by school superintendents to school principals. Almost two thirds, 63%, of superintendents say that the most important factor in evaluating or appraising principals is how successful they are in improving students' performance (Kaplan, Owings, & Nunnery, 2005).

Principals are required to fill a multitudes of roles (O'Donnell & White, 2005). They ensure the safety of students and staff by monitoring the hallways and lunchroom. They meet with parents, students, vendors, and community members. In addition, they monitor student data including attendance and discipline data. To complete these leadership and managerial tasks, principals usually delegate some tasks to other staff members. Spillane, Camburn, and Pareja (2007) reported that principals lead activities alone 35% of the times, co-leading activities 33% of the times, and not leading activities 31.4% of the times. However, one of their most important roles is to be the instructional leader of the campus which require working with teachers on instructional issues such as training teachers on how to collect, manage, interpret, and use data. In fact, the instructional leadership of the principal has been discussed and identified as a critical factor in increasing student achievement (Borg & Slate, 2014; Marzano et al., 2005; Nettles & Petscher, 2006). In one study, Kaplan et al. (2005) analyzed the relationship between principal quality and student achievement. They determined that the higher the quality of the principal the higher student achievement was. In addition, principals of

schools with low student achievement data were perceived as less capable (Kaplan et al., 2005) than principals of high performing schools.

The relationship between student performance and school size has been investigated by several researchers (e.g., Borland & Howsen, 2003; Leithwood & Jantzi, 2009; Riha, Slate, & Martinez-Garcia, 2013; Slate & Jones, 2005; Zoda, Combs, & Slate, 2011a, 2011b, 2011c) and produced some conflicting results. Slate and Jones (2005) articulated that in most of these studies three major concerns were observed. First, the studies conducted in schools were rife with methodological issues such as confusing correlational results with cause-and-effect relationships. They added that many researchers who utilized an advocacy researcher style failed to bracket their bias which could have influenced the results of their investigations. Of particular note was that the definition of large and small schools has been different from one study to another (Slate & Jones, 2005). In fact, Slate and Jones (2005) confirmed that very small and very large school are often negatively related to school quality because schools lack appropriate resources to serve students adequately.

In another elementary school analysis, Borland and Howsen (2003) examined the relationship of elementary school size on student academic achievement. They contended that the optimal elementary school size was approximately 760 students. They suggested that school districts should move to school sizes with student enrollment of about 760 students and to encourage educational market competition to improve student achievement. However, when advocating for an optimal size it is important to consider the demographic characteristics of the school's student enrollment because it can potentially be detrimental to certain students (Weiss, Carolan, & Baker-Smith, 2010).

Zoda et al. (2011a) investigated Black student reading, mathematics, and writing performance as a function of elementary school size. Zoda et al. (2011a) analyzed student data on the state-mandated reading, mathematics, and writing examinations for five consecutive years. They grouped schools with less than 400 students as Very Small schools, schools with 400 to 799 students as Small schools, and schools with 800 to 1,199 students as Large schools. They determined that reading and mathematics passing rates for Black students were higher at Large elementary schools than in either Very Small or in Small elementary schools in all five school years. The writing passing rates of Black students were higher at Large elementary schools than in either Very Small or in Small schools in four of the five school years (Zoda et al., 2011a).

In a similar study, Zoda et al. (2011b) examined Texas statewide data on the relationships of elementary school size with Hispanic student reading, mathematics, and writing performance over a 5-year time period. Using the same school size definitions as in the 2011a investigation, they established that Hispanic students had higher reading and mathematics performance in Large elementary schools than in either Very Small or in Small elementary schools. The writing performance of Hispanic students was higher in Large elementary schools than in either Very Small or in Small elementary schools in four of the five school years of data they analyzed. Thus, in both the Zoda et al. (2011a) and (2011b) investigations, the academic performance of Black and Hispanic students was statistically significantly higher in Large elementary schools than in either the Very Small or the Small elementary schools.

In a review of empirical evidence about school size effects, Leithwood and Jantzi (2009) examined 57 post 1990 empirical studies of school size effects on organizations

and student performance. They determined that smaller schools worked better for students who were historically struggling or who were in poverty. They suggested that for students who were economically disadvantaged, an ideal size for elementary school would be 300 students or less and for a secondary school would be 600 students or less. Furthermore, for students who were relatively advantaged, the maximum size for an elementary school would be about 500 students and the maximum size for a secondary would be about 1,000 students. However, Leithwood and Jantzi (2009) indicated that although smaller schools might be an advantage to most students, some evidence was present to recommend larger schools for increasing student achievement in high schools.

In a conceptual analysis, Zoda et al. (2011c) reviewed the empirical literature concerning the relationship between elementary school size and student performance. The authors noted in their literature review that some researchers had documented that student achievement in reading and mathematics was poorer in large elementary schools. Zoda et al. (2011c) suggested rephrasing the question "What is the optimum school size?" with the question of "What is the optimal school size range for Hispanic students in elementary schools to achieve well academically?" Readers should note that the question they posed could readily be modified for schools with large populations of Black students or students in poverty. Student demographic characteristics such as ethnic/racial groups and percentage of students in poverty as well as the desired academic achievement outcome should be considered as part of determining the optimal size of a particular level of schools (Zoda et al., 2011c).

Statement of the Problem

The role of principals and their influence on success or failure of campuses has been discussed by several scholars (Marzano et al., 2005; Nettles & Petscher, 2006). In fact, Borg and Slate (2014) indicated that the role of school leaders may be second only to classroom teaching when it comes to influencing student achievement. The school principal is the builder or molder of a school's teaching culture and influences the actions of the school staff as well as their motivations and inspirations (Deal & Peterson, 1999). In addition, campus principals have an influence on teacher job performance, collaboration with collogues, motivation, commitment to continuous professional growth, and effectiveness with student learning. Thus, principals are some of the most influential persons in the success or the failure of a campus because they are responsible for recruiting, training, and retaining highly effective teachers (Azaiez & Slate, 2017).

Principals are also in charge for developing and executing the vision of a campus while ensuring that teachers and staff members are aligned behind the same goals. In fact, highly effective teachers are attracted and willing to work harder under a highly effective leader. However, across the nation, school districts struggle to recruit, train, and retain highly effective principals, especially with turn-around campuses. Furthermore, often, school district leaders scramble to find the best principal fit for certain schools. Therefore, several school district leaders have increased principal starting salaries to remain competitive with other school districts. Other school districts created a performance pay or retention bonus to attract and retain the best principals available in the area. However, many principals are not staying at the same school or as school administrators for several years for a variety of reasons.

School principals have many responsibilities, goals, and duties they are required to accomplish and juggle every day. For instance, they have to meet with parents, monitor student's attendance and discipline, walk the hallways, manage staff members, work on instructional issues, and complete required paperwork. Furthermore, principals structure their day and allocate a certain amount of time to each activity based on their preferences. Frequently, principals select the areas of training and coaching for teachers, they feel the most important for their campuses. However, principals sometimes focus on the wrong or the least important tasks. Instead, principals need to focus on tasks with the highest leverage for improving student academic performance. To date, however, few researchers have investigated what principals emphasize as being important in their schools, the way that principals spend their time at work on certain tasks, and how they train their teachers, particularly with respect to student enrollment. Based on the lack of research into these areas and school size with respect to student enrollment, it appears that an assumption has been made that principals respond in the same manner in these areas, irrespective of the size of the student body at their campuses.

Purpose of the Study

The purpose of this journal-ready dissertation was to determine the relationship of principal years of experience as an administrator with the academic achievement (i.e., reading, mathematics, and science) of students, with areas that principals emphasize in their school practices, and with the size of their schools, with respect to student enrollment. In the first journal article, the degree to differences were present in student reading and mathematics achievement as a function of principal years of experience as an administrator was examined. In the second study, the extent to which principals differed

in what they emphasize in their school practices as a function of principal years of experience as an administrator was ascertained. In the third empirical investigation, the degree to which principals had different emphases in their school practices, as well as areas in which they focused on staff training, was analyzed as a function of the size of their schools, with respect to student enrollment. In each of these three empirical investigations, data from a national dataset on principals were examined. Through analysis of this national dataset, generalizations of findings obtained in the three articles to principals across the United States was possible.

Significance of the Study

A large body of research has been produced in which the crucial role of the principal has been documented on the success of a campus and student achievement (e.g., Borg & Slate, 2014; Marzano et al., 2005; Nettles & Petscher, 2006). Moreover, principals are only second to effective teachers in improving student achievement (Leithwood, Day, Sammons, Harris, & Hopkins, 2008). Nevertheless, fewer researchers (e.g., Partlow & Ridenour, 2008) have focused on the effect of principal longevity and years of experience on student performance in reading, mathematics, and science. In fact, most of the researchers have concentrated on a subset of principals located in a particular state within the United States and on secondary schools mainly. Findings may have practical implications for school district officials when it comes to hiring or transferring principals to a certain school. Furthermore, school district leaders and educational policymakers may be motivated to examine ways and incentives to increase principal retention and thus, minimize principal turnover, and selecting the best fit for a school based on the right characteristics and the desired student academic outcomes.

School leaders have a complex job because of the diversity of tasks and functions of management. According to Whitaker (2012), school leaders should emphasize on people and not program by building capacity and developing teachers. Furthermore, based on the studies examined in the literature review section, principal leadership, preparation, and experience have an important influence on student achievement. The way principals spend their time prioritize their duties can affect academic performance and thus, they can influence the success or failure in improving student achievement.

Several studies (Zoda et al., 2011a, 2011b) have been conducted on the influence of school size on student achievement. Nevertheless, an absence of research is present into the role of principals, the way they spent their time at work on certain tasks, and how they train their teachers as a function of the student enrollment at their campuses or school size. The assumption should not be made that principal behavior is the same regardless of the student enrollment at their campuses. Empirical analyses of principal behavior at different size school campuses, with respect to student enrollment, are essential to ascertain whether principals behave differently or similarly based upon the student enrollment at their campuses. As such, this study is important because information obtained herein may fill a void in the extant research literature. Another uniqueness of this empirical investigation is that the findings of this study may be generalized to elementary schools across the United States, which is possible with the use of a national dataset. Additionally, findings may have practical implications for school district leaders and policymakers to incorporate changes to their professional development, coaching, and mentoring programs for new principals along with developing preparation programs for prospective principals.

Definition of Terms

The following terms used in this study are defined to assist the reader in understanding the context of this investigation.

Early Childhood Longitudinal Study-Kindergarten (ECLS-K)

The National Center for Education Statistics described the Early Childhood Longitudinal Study-Kindergarten as the following.

The Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K: 2011) is sponsored by the National Center for Education Statistics (NCES) within the Institute of Education Sciences (IES) of the U.S. Department of Education. The ECLS-K: 2011 draws together information from multiple sources to provide rich data on children's early school experiences beginning with kindergarten and following children through fifth grade. The ECLS-K: 2011 provides descriptive information on children's status at entry to school, their transition into school, and their progression through the elementary grades. The longitudinal nature of the ECLS-K: 2011 data enables researchers to study how a wide range of family, school, community, and individual factors are associated with school performance over time. (National Center for Education Statistics, 2017a, para. 1)

Experienced Principal

In this study, an Experienced Principal was a principal who has reported that s/he has seven or more years of experience as a school principal based on the data obtained from the ECLS-K class of 2010-2011 questionnaire (ECLS-K questionnaire, p. 31).

Large-Size School

In this study, a large-size school was a school with a student enrollment of 800 or more students (Zoda, Combs, & Slate, 2011a, 2011b).

Moderately Experienced Principal

In this study, a Moderately Experienced Principal was a principal who reported that s/he has between four and six years of experience as a school principal based on the data obtained from the ECLS-K class of 201-2011 questionnaire (ECLS-K questionnaire, 2011, p. 31).

Moderate-Size School

In this study, a moderate-size school was defined as a school with a student enrollment of 400 through 799 students (Zoda et al., 2011a, 2011b).

National Center for Education Statistics

The National Center for Education Statistics, part of the U.S. Department of Education and the Institute of Education Sciences, is the primary federal unit for gathering and analyzing data associated with education in the U.S. and other nations. The National Center for Education Statistics is mandated by the U.S Congress to gather, organize, evaluate, and report complete statistics on the status of American education. In addition, the National Center for Education Statistics is required to conduct and publish reports as well as assess and report on education activities aboard (National Center for Education Statistics - About us, 2017c, para.1).

New Principal

In this study, a New Principal was a principal who reported that s/he has three or less years of experience as a school principal based on the data obtained from the ECLS-K class of 2010-2011 questionnaire (ECLS-K questionnaire, 2011, p. 31).

Principal

According to the Merriam-Webster website, a principal is defined as a person who has controlling authority or is in a leading position such as a chief, headman or woman, or chief executive officer of an educational institution (2017, para. 4).

Principal Emphases

The Spring 2011 Kindergarten School Administrator Questionnaire, prepared by the National Center for Education Statistics (2011), included the following emphases as part of the daily work or activities of a school principal.

(a) Working with teachers on instructional issues; (b) internal school management (weekly calendars, vendors, office, memos, etc.); (c) student discipline/ attendance; (d) monitoring hallways, playground, lunchroom; (e) teaching; (f) talking and meeting with parents; (g) meeting with students; and (h) paperwork required by local, state, or federal authorities. (ECLS-K questionnaire, 2011, p. 33)

Principal Experience

In the Spring 2011 Kindergarten School Administrator Questionnaire, prepared by the National Center for Education Statistics (2011), principal experience constitutes the number of years a principal reported that he/she had been employed as a principal (ECLS-K questionnaire, 2011, p. 31).

Small-Size School

In this study, a small-size school constituted a school with a student enrollment of less than 400 students (Zoda et al., 2011a, 2011b).

Training Areas

Training areas listed in the Spring 2012 Kindergarten School Administrator Questionnaire, prepared by National Center for Education Statistics (2012), were: train teachers in the delivery of effective reading instruction; train teachers in the delivery of effective behavioral supports, train teachers in collecting, organizing, and managing assessment data; and train teachers in interpretation and use of assessment data to guide instruction (ECLS-K questionnaire, 2012, p. 32).

Literature Review Search Procedures

For the purpose of this journal-ready dissertation, the literature regarding principal experience and turnover, student academic achievement, principal emphasis or time spent on the job or on certain tasks, areas of training for teachers, and school size was examined. Phrases that were used in the search for relevant literature were: *principal experience, student academic achievement and school engagement, principal turnover, principal emphasis or time, training areas for teachers, and school size.* Searches were conducted through the EBSCO Host database. Only peer reviewed articles from 1999-2017 were considered.

Key word searches for "principal experience" yielded 7,882 results, and by narrowing the publication date to 1999-2017 the search was reduced to 6,301, the search was then reduced to 382 by adding "academic achievement". Key word searches from

1999-2017 for "principal turnover" yielded 632 results and by narrowing by only peer review articles, the search was reduced to 234 results. A key word "principal emphasis or time" was used and 33,675,282 articles from 1999 to 2017 were displayed. This number was condensed to 1,334 results when "principal experience" was added to the search. The number of articles was further condensed to 333 results by narrowing by only peer review articles. When the key word "school size" was used for the word search, 21,770 articles yielded from the search, to compact the number, "principal time" was used to display 75 articles from 1990 to 2017. Key word searches for "school size" and "teacher training" yielded 388 articles from 1999 to 2017 and was reduced to 176 results by selecting only peer review articles.

Delimitations

In this investigation, only the reading, mathematics, and science academic achievement of students were addressed, along with how principals report they spent their time on the job or on certain tasks in the 2010-2011 and 2011-2012 school years were analyzed. Only a single year of data was analyzed, thereby restricting the degree to which any results may be generalized. A second delimitation was that the data were collected from principals who volunteered to complete the Early Childhood Longitudinal Study-Kindergarten survey questionnaire for the 2010-2011 and 2011-2012 school years and thus, limiting the number of participants. Additionally, the three studies in this journal-ready dissertation was restricted to elementary school principals. As such, the extent to which any findings would be generalizable to middle school principals or to secondary school principals is not known.

Limitations

For the purpose of this journal-ready dissertation, the relationship of principal years of experience as an administrator with the academic achievement (i.e., reading, mathematics, and science) of students, with areas that principals emphasize in their school practices, and with the size of their schools, with respect to student enrollment were addressed. As such, several critical limitations were present. One major limitation included the fact that the study data were collected from based from self-reports by the principals who completed this survey. As such, the possibility existed that principals were not accurate or honest in their responses to this survey.

Another limitation is the use of a 2010-2011 and 2011-2012 dataset. Many changes have happened in the education such as the creation of the Every Student Succeeds Act and the implementation of new teacher and principal evaluations systems in several states and school districts since the 2011-2012 school year. Thus, these changes have resulted in principals shifting their time allocation to each task as well as areas of training for teachers. In addition, the use of archival data represented another limitation. In fact, in a cause-effect study in which archival data are analyzed, a cause-effect relationship determination cannot be made. Consequently, variables other than principal years of experience or school size may have contributed to any results that may be present.

Assumptions

For the purpose of this journal-ready dissertation, the assumption was made that academic achievement data, principal years of experience, time spent on the job or on certain task, and areas of training for teachers were recorded accurately and consistently

on the Early Childhood Longitudinal Study-Kindergarten questionnaire. A second assumption was made that academic achievement data, principal years of experience, time spent on the job or on certain task, and areas of training for teachers were collected and reported accurately and consistently by National Center for Education Statistics. Consequently, any deviations from these assumptions may affect any results obtained in this journal-ready dissertation.

Procedures

After securing approval of the journal-ready dissertation from the researcher's proposal committee, a request was submitted to the Sam Houston State University Institutional Review Board to seek their permission to conduct the study. Once a letter of approval was secured from the Institutional Review Board, the Early Childhood Longitudinal Study-Kindergarten 2010-2011 and 2011-2012 archival data were analyzed. The dataset had already been downloaded from the website of the National Center for Education Statistics prior to the analysis. The National Center for Education Statistics publishes this dataset and others on their public website for easy access and without requiring a submission of a Public Information Request.

Organization of the Study

In this journal-ready dissertation, three research investigations were conducted. In the first study, research questions that were addressed were related to the reading, mathematics, and science achievement as a function of principal years of experience as an administrator. In the second study, research questions specifically related to the way principals spent their time on the job and on specific task as a function of principal years of experience as an administrator were addressed. In the final investigation, research

questions that involved the way principals spent their time on the job and on specific tasks as well how they train teachers as a function of school size, with respect to student enrollment, were examined.

This journal-ready dissertation consists of five chapters with three different journal articles. Included in Chapter I are the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, delimitations, limitations, assumptions, and outline of the proposed journal-ready dissertation. In Chapter II, the first journal-ready research study on student achievement in reading, mathematics, and science as a function of principal years of experience as an administrator was discussed. In Chapter III, the second journal-ready research investigation on to the way principals spent their time on the job and on specific task by principal years of experience was presented. Finally, in Chapter IV was the third journal-ready research investigation on the way principals spent their time on the job and on specific tasks as well how they train teachers as a function of the size of their campuses with respect to student enrollment. Finally, in Chapter V, an overview of the results interpreted in the three research articles was provided, along with implications for future policy and for practice, as well as recommendations for future research.

CHAPTER II

This dissertation follows the style and format of Research in the Schools (RITS).

Abstract

In this investigation, the reading, mathematics, and science performance of elementary school students was examined based on the years of experience of their school principal. Data were obtained from the Early Childhood Longitudinal Study-Kindergarten Class of 2010-2011 principal survey. Inferential statistical analyses revealed that students at campuses where principals had 7 or more years of experience had statistically significantly higher reading, mathematics, and science achievement than at campuses where principals had less than 7 years of experience as a principal. School district officials responsible for recruiting, coaching, retaining, and transferring principals may consider these findings when making decisions about recruiting and retention programs. Suggestions for future research and implications for policy and practice were made.

Keywords: ECLS-K, Experienced Principals, Moderately Experienced Principals, New Principals, Principal Experience

PRINCIPAL EXPERIENCE AND STUDENT ACHIEVEMENT: A NATIONAL INVESTIGATION

Principals have an extensive array of duties and tasks for which they are responsible. They deal with personnel issues, student behavior problems, parent concerns, and community relationships, along with ensuring that their schools are meeting local, state, and federal accountability measures (Brockmeier, Starr, Green, Pate, & Leech, 2013; Horng, Klasik, & Loeb, 2010). In fact, to meet constantly increasing accountability requirements, school district leaders across the country concentrate their efforts on improving student achievement. As a result, school district leaders need to focus on selecting the most effective principals for their school campuses. Several scholars (e.g., Borg & Slate, 2014; Grissom & Loeb, 2011; Marzano, Waters, & McNulty, 2005; Seashore-Louis, Leithwood, Wahlstrom, & Anderson, 2010) have discussed the crucial role of the school leader in the success of a school and student learning, particularly at the most challenging schools.

In a meta-analysis, Leithwood, Day, Sammons, Harris, and Hopkins (2008) conducted a review of literature regarding successful school leadership. They concluded that school leadership is second only to classroom teaching as an influence on student success in learning. School principals affect teaching and learning most by motivating staff members and through exhibiting commitment to improve their working conditions. Furthermore, principals influence the instructional quality and thus student achievement through the hiring, coaching, and retaining of highly effective teachers (Harris, Rutledge, Ingle, & Thompson, 2010).

In a recent study in which data were analyzed from the Early Childhood

Longitudinal Study-Kindergarten Class of 1998-1999, Azaiez and Slate (2017) examined
the relationship of principal years of experience as an administrator with student reading
and mathematics achievement. Specifically, they focused on student performance in
reading and mathematics between principals with less than 6 years of experience and
principals with more than 6 years of experience. They established that students who were
enrolled in schools with principals with more than 6 years of experience had statistically
significantly higher reading and mathematics test scores than students who were enrolled
in schools with principals with 6 years or less of experience. Based on their results,
Azaiez and Slate (2017) contended that school district leaders should assist new
principals making decisions on the goals and objectives they need to emphasize to
increase student achievement.

Using an elementary school dataset, Brockmeier, Starr, Green, Pate, and Leech (2013) examined the extent to which principal tenure, principal stability, or principal experience were predictive of elementary school student performance. The authors used a state dataset that included 1,023 schools from the State of Georgia and Grade 3 as well Grade 5 student scale scores in reading, English/Language Arts, mathematics, science, and social studies. They documented that principal tenure and principal stability were statistically significantly related to student achievement in Grade 3 and Grade 5. As a result, Brockmeier et al. (2013) recommended minimizing principals' turnover and increasing retention of principals to assist with school improvement.

In another elementary school study, principal and school factors that influenced elementary student achievement were analyzed by Gieselmann (2009). She specifically

examined years of principal experience, students at the school receiving free and reduced lunch, principal gender, highest level of education by the principal, years of teaching experience of the principal, years of principal experience at current campus, and principal leadership as measured using Principal Instructional Management Rating Scale. In her study, the percentage of free and reduced lunch variable was the best predictor of student achievement. Interestingly, principal years of experience, gender, or highest level of education were not related to student achievement (Gieselmann, 2009). In regard to middle schools, Huff, Brockmeier, Leech, Martin, Pate, and Siegrist (2011) investigated the relationship between principal tenure or experience and middle school student achievement. In their study, they documented the presence of a statistically significant relationship between principal longevity and student achievement. As such, they revealed the importance of hiring and retaining leaders with several years of experience. In a similar study conducted in North Carolina public schools, Miller (2013) examined the effect of principal turnover on student achievement. Schools with new principals initially experienced a decrease in student academic performance. In most cases, student academic achievement did not improve until a few years after the new principal had been in place on that campus.

On the other hand, the School Leaders Network (2014) described in their report that strong principals can positively influence the school culture and the instructional quality of the teachers. In fact, they determined that the effect of school leaders on student academic performance was about 25% of the total school influences on student academic achievement. However, 50% of new principals are not retained beyond their third year of employment at a specific campus. In addition, the cost to develop, hire, and

mentor a new principal is 75,000 dollars (School Leaders Network, 2014). They suggested it takes an average of five years to create a vision, improve systems and teaching staff, and implement new practices and policies to influence the performance of the campus.

The influence of principal turnover on student achievement and school climate has been investigated over the past decade. For instance, Mascall and Leithwood (2010) determined principal turnover usually has a negative influence on student achievement. Given this negative relationship, they suggested school districts retain principals for a minimum of 4 years at the same campus to produce positive results. Thus, school district leaders should develop a retention plan and should encourage and support new principals. Valentine and Prater (2011) examined the relationship between student achievement and principals' managerial, instructional, and transformational leadership in public schools. They established that principals' behaviors promoting instructional and curriculum improvement were directly related to student achievement, and they identified instructional improvement, curricular improvement, identifying a vision, providing a model, and fostering groups goals are the most important principal behaviors or factors for effective leadership. These factors were linked to student achievement (Valentine & Prater, 2011).

Leadership turnover is a major issue facing school districts all across the United States. In fact, annual turnover rates of principals range between 15% and 30% in most school districts, with statistically significantly higher turnover rates in schools with students in poverty and who are low achieving (Béteille, Kalogrides, & Loeb, 2012; Branch, Hanushek, & Rivkin, 2008). Principal turnover is a larger issue at urban and

rural schools than at suburban schools (DeAngelis & White, 2011). Partlow and Ridenour (2008) explored the relationship of principal turnover in Ohio with school factors. They determined that schools that had three or more principals in a 7 year-period were 42.7% urban, 19.2% suburban, and 40.1% rural. In a Missouri study completed by Baker, Punswick, and Belt (2010) about one half of the principals leave the principalship in the state after 5 years. They added that salary influenced principals' decision whether to remain or to leave. Therefore, district officials should be more intentional about retaining experienced principals by creating differentiated pay model for principals and providing the necessary preparation and training for new principals (Baker et al., 2010).

In a recent investigation, Fuller and Young (2009) analyzed principal tenure in Texas schools. They determined that principal tenure and retention varied drastically across school levels. In fact, the tenure of elementary school principals was about 5 years, middle school principal tenure was about 4.5 years, and the tenure of high school principals was less than 4 years. Only 50% of newly hired high school principals remained for three years and less than 30% of them remained for five years. Fuller and Young (2009) established that principals in the lowest performing schools had the shortest tenure and principals in the highest performing schools had the highest retention rates. Moreover, they documented that principal retention and tenure were directly connected to the percentage of students who were economically disadvantaged. Principals at low-poverty schools had the longest tenure and principals at high-poverty schools had the shortest tenure (Fuller & Young, 2009).

In addition to Texas, school districts in other states have experienced and continue to experience high rates of leadership turnover (DeAngelis & White, 2011; Ringel, Gates,

Chung, Brown, & Ghosh-Dastidar, 2004). Béteille et al. (2012) investigated the consequences of leadership changes on school performance in Miami-Dade County Public Schools, one of the largest public school districts in the United States. They determined that one out of five principals leave their schools each year because of district leadership choices or in some cases for personal reasons such as working at a school with higher achieving students and thus easier to staff. Moreover, principals often use schools with high percentages of students in poverty as stepping stones for more desirable assignments. Béteille et al. (2012) established that the consequences of principal turnover on student achievement were negative and new principals without prior experience were less effective than experienced principals. In addition, turnover has more negative effects on low performing schools than on high performing schools because experienced principals are less attracted to low performing schools. Additionally, Coelli and Green (2012) examined the influence of principal mobility on student achievement. They revealed that principals matter in influencing high school student outcomes if they remain at the same school for more than three school years. As such, Coelli and Green (2012) contended policymakers and school district leaders should minimize principal turnover and develop methods to increase retention of effective principals.

Statement of the Problem

The role of principals and their influence on success or failure of campuses has been discussed by several scholars (Marzano et al., 2005; Nettles & Petscher, 2006). In fact, Borg and Slate (2014) contended that the role of school leaders may be second only to classroom teaching when it comes to influencing student achievement. According to a

Wallace Foundation report (2013), an empirical links exist between school leadership and improved student achievement. Furthermore, school principals are the builder or molder of a school's teaching culture and influences the actions of the school staff as well as their motivations and inspirations (Deal & Peterson, 1999). In addition, campus principals have an influence on teacher job performance, collaboration with collogues, motivation, commitment to continuous professional growth, and effectiveness with student learning. Thus, principals are some of the most influential persons in the success or the failure of a campus because they are responsible for recruiting, training, and retaining highly effective teachers (Azaiez & Slate, 2017).

Principals are also in charge for developing and executing the vision of a campus while ensuring that teachers and staff members are aligned behind the same goals. In fact, highly effective teachers are attracted and willing to work harder under a highly effective leader. However, across the nation, school districts struggle to recruit, train, and retain highly effective principals, especially with turn-around campuses. Furthermore, often, school district leaders scramble to find the best principal fit for certain schools. Therefore, several school district leaders have increased principal starting salaries to remain competitive with other school districts. Other school districts created a performance pay or retention bonus to attract and retain the best principals available in the area. However, many principals are not staying at the same school or as school administrators for several years for a variety of reasons.

Purpose of the Study

The purpose of this study was to examine the degree to which principal years of experience as an administrator were related to student performance in reading,

mathematics, and science. School and principal effectiveness are measured by the academic achievement of their students. States use standardized tests to measure the effectiveness of schools in particular in reading, mathematics, and science. In Texas for instance, reading is assessed for students in Grades 3 through 10, mathematics for students in Grades 3 through 10, and science for students in Grades 5, 8, and 9.

Therefore, these subject areas represent the most important components for determining the success or failure of a campus based on state and federal accountability measures. Furthermore, determining the factors that are connected to student performance in reading, mathematics, and science can assist school district leaders in making the best decisions with regard to hiring and assigning school principals to particular campuses.

Significance of the Study

A considerable number of research studies (e.g., Borg & Slate, 2014; Marzano et al., 2005; Nettles & Petscher, 2006) exists in which the critical part of the principal on the success or failure of a campus and student achievement has been analyzed. Nevertheless, fewer researchers (e.g., Partlow & Ridenour, 2008) have focused on the effect of principal years of experience on student performance in reading, mathematics, and science. In fact, the vast majority of researchers have concentrated on a subset of principals located in a particular state within the United States. The uniqueness of this empirical investigation is that the findings of this study may be generalized across the United States, which is possible with the use of a national dataset. Moreover, most of the researchers who conducted these studies focused on secondary schools. Findings may have practical implications for school district officials when it comes to hiring or transferring principals to a certain school. Finally, school district leaders and educational

policymakers may be motivated to examine ways and incentives to increase principal retention and thus, minimize principal turnover, and selecting the best fit for a school based on the right characteristics and the desired student academic outcomes.

Research Questions

In this empirical investigation, the following research questions were addressed:

(a) What is the difference in reading achievement as a function of principal years of experience as a school principal?; (b) What is the difference in mathematics achievement as a function of principal years of experience as a school principal?; and (c) What is the difference in science achievement as a function of principal years of experience as a school principal?

Method

Research Design

A non-experimental, causal-comparative research design (Creswell, 2014;

Johnson & Christensen, 2014) was used for this study. A national archival dataset was utilized to examine the academic performance of students in reading, mathematics, and science and the years of principal experience. As such, both the student academic outcomes and the principal years of experience as an administrator had already occurred. Accordingly, in this non-experimental, causal-comparative research, neither the independent variable nor the dependent variables was manipulated (Johnson & Christensen, 2014). The independent variable in this investigation was the years of experience as school principal and the dependent variables were the academic performance of students in reading, in mathematics, and in science.

Participants and Instrumentation

Used as the unit of analysis for this study were data obtained from public and private school administrators of campuses across the United States. Principals, heads of school, or other administrators were asked to complete the survey for Early Childhood Longitudinal Study- Kindergarten Class 2010-2011 (ECLS-K) in the spring of 2011 (National Center for Education Statistics, 2011, 2017b). The number of public and private school administrators who completed the administrator survey in the Spring of 2011 was about 6,000 administrators. They willingly completed the ECLS-K questionnaire.

The ECLS-K self-administered questionnaire was intended to collect information about the school, student performance in reading and mathematics, teachers, school climate, as well as demographic characteristics of the school's principal of headmaster.

The ECLS-K School Administrator Questionnaire was administrated in Spring 2011.

School administrators were asked to record the percentage of students whose achievement level was "proficient" or above in reading, mathematics, and science.

Another important question was for school administrators to list their years of experience as a school administrator.

For the purpose of this study, principals who reported that they have less than three years of experience as a school principal were grouped and labeled as New Principals. Principals who reported that they have between four and six years of experience as a school principal were grouped and labeled as Moderately Experienced Principals. Finally, principals who reported that they have more than seven years of experience as a school principal were grouped and labeled as Experienced Principals.

Results

To answer each research question in this investigation, an Analysis of Variance (ANOVA) procedure was calculated. The underlying assumptions of data normality (i.e., skewness and kurtosis) and homogeneity of variance (i.e., Levene's Test of Error Variance) were checked for each use. The underlying assumptions were not met in the majority of instances. Despite its assumptions not being met, Field (2013) contends that the ANOVA procedure is robust enough to withstand its underlying assumptions not being met. Accordingly, ANOVA procedures were used to answer the research questions in this study.

With respect to the first research question regarding student reading achievement by principal years of experience groupings, a statistically significant difference was present, F(2, 9708) = 10.34, p < .001, partial $\eta^2 = .002$, a below small effect size (Cohen, 1988). To ascertain which pairs of principal years of experience groups differed in the reading achievement of their students, Scheffe' post hoc procedures were performed. Two of the three pairwise comparisons were statistically significant.

Students who were at schools with Experienced Principals had statistically significantly higher reading achievement, 72.33%, than their peers who were at schools with either Moderately Experienced Principals or with New Principals. Schools with New Principals differed from schools with Experienced Principals by 2.10 % in their percent of student reading achievement, accounting for the largest mean difference among the groups. Schools with Moderately Experienced Principals and Experienced Principals differed by 1.75% in student reading achievement. Students who were at schools with New Principals or Moderately Experienced Principals had similar reading

achievement with 70.23% and 70.58%, respectively. Revealed in Table 2.1 are the descriptive statistics for this analysis.

Insert Table 2.1 about here

Concerning the second research question regarding student mathematics achievement by principal years of experience groupings, a statistically significant difference was present, F(2, 9651) = 4.83, p = 008, partial $\eta^2 = .001$, a below small effect size (Cohen, 1988). To determine which pairs of principal years of experience groups differed in the mathematics achievement of their students, Scheffe' post hoc procedures were performed. One of the three pairwise comparisons were statistically significant.

Students who were at schools with Experienced Principals had statistically significantly higher mathematics achievement, 74.85%, than their peers who were at schools with either Moderately Experienced Principals or with New Principals. Schools with New Principals differed from schools with Experienced Principals by 1.37% in the percent of their student mathematics achievement, accounting for the largest mean difference among the groups. Schools with Moderately Experienced Principals and Experienced Principals differed by almost 1% in student mathematics achievement. Students who were at schools with New Principals or Moderately Experienced Principals had similar mathematics achievement with 73.48% and 73.90% respectively. Descriptive statistics for this analysis are presented in Table 2.2.

Insert Table 2.2 about here

In addressing the third research question regarding student science achievement by principal years of experience groupings, a statistically significant difference was present, F(2, 1855) = 6.12, p < .001, partial $\eta^2 = .007$, a below small effect size (Cohen, 1988). To determine which pairs of principal years of experience groups differed in the science achievement of their students, Scheffe' post hoc procedures were performed. Two of the three pairwise comparisons were statistically significant.

Students who were at schools with Experienced Principals had statistically significantly higher science achievement, 69.77%, than their peers who were at schools with either Moderately Experienced Principals or at schools with New Principals.

Schools with New Principals differed from schools with Experienced Principals by 3.46% in the percent of their student science achievement, accounting for the largest average difference among the groups. Schools with Moderately Experienced Principals and Experienced Principals differed by 3.44% in their student science achievement.

Students who were at schools with New Principals or Moderately Experienced Principals had similar science achievement with 66.33% and 66.31%, respectively. Table 2.3 contains the descriptive statistics for this analysis.

Insert Table 2.3 about here

Discussion

The extent to which differences were present in the reading, mathematics, and science performance of elementary school students by principal years of experience was examined in this investigation. Analyses were conducted of principal responses obtained from a national dataset. Results were that students who were at schools with Experienced Principals had statistically significantly higher reading, mathematics, and science performance than their peer who were enrolled at schools with either New Principals or Moderately Experienced Principals. Students who were enrolled at elementary schools with Experienced Principals differed the most in their science achievement, 3.44%, from students who were enrolled in schools with either New Principals or with Moderately Experienced Principals. In contrast, students who attended schools with either New Principals or Moderately Experienced Principals had similar reading, mathematics, and science achievement.

Connection with Existing Literature

These results were commensurate with results of previous researchers (Azaiez & Slate, 2017; Mascall & Leithwood, 2010) regarding the influence of principal years of experience on student achievement. Students who were enrolled in schools with principals with seven or more years of experience had statistically significantly higher reading, mathematics, and science achievement than students who were enrolled in schools with principals with six years or less of experience. Interestingly, in this investigation, principal years of experience did not have a measureable influence on student reading, mathematics, and science achievement for the first six years of the

principalship. Revealed in Table 2.4 are the results of the statistical analyses for students in reading, mathematics, and science as a function of principal years of experience.

Insert Table 2.4 about here

In this investigation of reading, mathematics, and science achievement, principal experience was determined to be a statistically significantly factor. Azaiez and Slate (2017) had recently documented that reading and mathematics achievement were higher for students who attended schools were principals had six or more years of experience. Leithwood et al. (2008) indicated that school leadership was second only to classroom teaching as an influence on student success in learning. In fact, the School Leaders Network described that the effect of school leaders on student academic performance was about 25% of the total school influence on student academic achievement. Furthermore, Brockmeier et al. (2013) determined that principal experience was statistically significantly related to student achievement in elementary schools. However, only 50% of new principals are not retained beyond their third year of employment at a specific campus (School Leaders Network, 2014). One important difference between several earlier studies (Brockmeier et al, 2013; Huff et al., 2011) and this investigation is that earlier investigations were conducted using statewide data as opposed to the analysis of a national dataset in this study. In addition, in this study, the principal years of experience rather than years of tenure at the same campus were examined.

Implications for Policy and for Practice

Principal years of experience was determined to be statistically significantly related to student achievement in reading, mathematics, and science. Despite concerted efforts at the local level to address principal retention, principal turnover continues to be a salient issue for most school districts, especially for districts with highest percentage of students who were economically disadvantaged (Fuller &Young, 2009). Principals are faced with a consistently increasing and changing federal and state accountability mandates. School district officials are growing increasingly anxious about quickly turning around schools and improving student achievement without allowing sufficient time, resources, support, and coaching to principals. Furthermore, principals are spending more time investigating issues caused by social media that were not possible 10 or more years ago. Thus, the job of principal is becoming more complex than ever. Therefore, many principals are burning out and leaving principalship for a less stressful assignment.

School district officials are encouraged to develop principal pathway academy to prepare a select cohort of leaders for the increasing challenges of principalship by providing them with targeted, timely, and personalized professional development. The cohort will constitute a pool of prospective principals who are better equipped to take on the role of campus leader. In addition, school district officials are encouraged to provide a rigorous and personalized mentoring, support, and coaching opportunities for all new principals for their first three years. School districts should differentiate their pay scale by ensuring that principals with more than six years of experience are receiving a bigger salary and possibly a retention bonus to incentivize them to remain on the job for a longer

period of time. Finally, state and federal agencies need to examine and reevaluate the mandates and their timelines that are facing principals. As such, they should provide principals with more flexibility and time to meet them.

Recommendations for Future Research

Based upon the results of this empirical investigation, several recommendations for future research can be made. First, because only one year of data were analyzed herein, future researchers are encouraged to analyze more years of data. The degree to which the results of this study would be generalizable to principals today is not known. Second, principal experience in this study was defined as their total years of experience rather than their years of employment at a particular campus. Accordingly, in future studies, researchers are encouraged to examine the influence of principal years of experience at the same campus on student achievement. Third, another recommendation for future research involves analyzing what principals emphasize and how they spend their time at work as a function of their years of experience. Fourth, an analysis of the differences that may exist in what principals emphasize and how they spend their time at work by the student enrollment at their campuses could provide relevant data with regard to principal assignment by school size. Other recommended studies could also include the examination of preparation programs for principals and as well as the reasons principals leave the principalship. Furthermore, researchers should analyze the influence of principal years of experience on student achievement at the middle and high school level. Lastly, an examination of the differences that might exist in high school student graduation rate by principal years of experience could provide relevant data on the influence principal years of experience on the success of high schools.

Conclusion

The purpose of this research study was to determine the extent to which differences were present in the reading, mathematics, and science achievement of elementary students. A national dataset was obtained from the National Center for Education Statistics and analyzed. Statistically significant differences were revealed in reading, mathematics, and science achievement for students as a function of principal years of experience. Students who were enrolled at elementary schools with Experienced Principals had higher reading, mathematics, and science performance than students who were enrolled at elementary schools with either New Principals or Moderately Experienced Principals. Consistent with previous researchers (e.g., Azaiez & Slate, 2017; Brockmeier et al., 2013; Huff et al., 2011; Leithwood et al., 2008; Mascall & Leithwood, 2010), school leadership experience is a contributing influence on student achievement.

References

- Azaiez, H., & Slate, J. R. (2017). Student achievement as a function of principal longevity. *Journal of Advances in Education Research*, 2(3), 157-162. doi:10.22606/jaer.2017.23003
- Baker, B. D., Punswick, E., & Belt, C. (2010). School leadership stability, principal moves, and departures: Evidence from Missouri. *Educational Administration Quarterly*, 46, 523-557. doi:10.1177/0013161X10383832
- Béteille, T., Kalogrides, D., & Loeb, S. (2012). Steeping stones: Principal career paths and school outcomes. *Social Science Research*, *41*, 904-919. doi:10.106/j.ssresearch.2012.03.003
- Borg, D., & Slate, J. R. (2014). Principals' leadership emphases as a function of school performance. *Frontiers in Education*, 2(1), 1-5.
- Branch, G. F., Hanushek, E. A. & Rivkin, S. G. (2008, December). *Principal turnover* and effectiveness. Paper presented at the American Economic Association, San Francisco, CA.
- Brockmeier, L. L., Staar, G., Green, R., Pate, J. L., & Leech, D. W. (2013). Principal and school-level effects on elementary school student achievement. *NCPEA International Journal of Education Leadership Preparation*, 8(1), 49-61.

 Retrieved from http://files.eric.ed.gov/fulltext/EJ1013001.pdf
- Coelli, M. M., & Green, D. G. (2012). Leadership effects: School principals and student outcomes. *Economics of Education Review*, *31*(1), 92-109. doi:10.1016/j.econedurev.2011.09.001

- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.).

 Hillsdale, NJ: Lawrence Erlbaum Associates.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- Deal, T. E., & Peterson, K. D. (1999). Shaping school culture: The heart of leadership.

 San Francisco, CA: Jossey-Bass.
- DeAngelis, K. J., & White, B. R. (2011). *Principal turnover in Illinois public schools*,

 2001-2008. Illinois Education Research Council. Retrieved from

 https://ia600209.us.archive.org/28/items/ERIC_ED518191/ERIC_ED518191.pdf
- Field, A. (2013). Discovering statistics using SPSS (4th ed.). Thousand Oaks, CA: Sage.
- Fuller, E., & Young, M. D. (2009). Tenure and retention of newly hired principals in

 Texas. *Texas High School Project*. Retrieved from

 https://www.researchgate.net/publication/228660740_Tenure_and_Retention_of_

 Newly Hired Principals in Texas
- Gieselmann, S. S. (2009). Principals and school factors that impact elementary school student achievement. *Mid-Western Educational Researcher*, 22(2), 16-22.
- Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. *American Educational Research Journal*, 48, 1091-1123. doi:10.3102/0002831211402663
- Harris, D. N., Rutledge, S. A., Ingle, W. K., Thompson, C. C. (2010). Mix and match: What principals really look for when hiring teachers. *Education Finance and Policy*, *5*(2), 228-246.

- Horng, E. L., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness.

 *American Journal of Education, 116, 491-523.
- Huff, T. S., Brockmeier, L. L., Leech, D. W., Martin, E. P., Pate, J. L., & Siegrist, G.(2011). Principal and school-level effects on student achievement. *National Teacher Education Journal*, 4(2), 67-79.
- Johnson, B., & Christensen, L. (2014). Educational research: Quantitative, qualitative, and mixed approaches (5th ed.). Los Angeles, CA; Sage.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. Retrieved from http://dera.ioe.ac.uk/6967/1/download%3Fid%3D17387%26filename%3Dseven-claims-about-successful-school-leadership.pdf
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). School leadership that works:

 From research to results. Alexandria, VA: Association for Supervision and
 Curriculum Development.
- Mascall, B., & Leithwood, K. (2010). Investing in leadership: The district's role in managing principal turnover. *Leadership and Policy in Schools*, *9*, 367-383. doi:10.1080/15700763.2010.493633
- Miller, A. (2013). Principal turnover and student achievement. *Economics of Education Review*, *36*, 60-72. doi:10.1016.2013.05.004
- National Center for Education Statistics. (2011). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Spring School Administrator Questionnaire.

 Retrieved from

- https://nces.ed.gov/ecls/pdf/kindergarten2011/Spring_K_School_Administrator.pdf
- National Center for Education Statistics. (2017). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Combined user's manual for the ECLS data files

 and electronic codebooks. Retrieved from

 https://nces.ed.gov/ecls/kindergarten2011.asp
- Nettles, S., & Petscher, Y. (2006, April). An examination of the relationship between the implementation practices of school principals and student achievement in reading. Paper presented at the annual American Educational Research Association, San Francisco, CA.
- Partlow, M. C., & Ridenour, C. S. (2008). Frequency of principal turnover in Ohio's elementary schools. *Mid-Western Educational Researcher*, 21(2), 15-23.
- Ringel, J., Gates, S. M., Chung, C., Brown, A., & Ghosh-Dastidar, B. (2004). *Career paths of school administrators in Illinois: Insights from an analysis of state data*.

 Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/pubs/technical_reports/TR123.html
- School Leaders Network. (2014). *Churn: The high cost of principal turnover*. Retrieved from http://connectleadsucceed.org/sites/default/files/principal_turnover_cost.pdf
- Seashore-Louis, K., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010).

 **Learning from leadership: Investigating the links to improved student learning.

 New York, NY: Wallace Foundation. Retrieved from

 http://www.wallacefoundation.org/knowledge-center/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf

- Valentine, J. W., & Prater, M. (2011). Instructional, transformational, and managerial leadership and student achievement: High school principals make a difference.

 NASSP Bulletin, 95(1), 5-30. doi:10.1177/019263665511404062
- Wallace Foundation. (2013). The school principal as leader: Guiding schools to better teaching and learning. New York, NY: Author. Retrieved from http://www.wallacefoundation.org/knowledge-center/Documents/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning-2nd-Ed.pdf

Table 2.1

Descriptive Statistics for Reading Performance by Principal Years of Experience

Years of Experience	n	M	SD
0-3 Years	2,022	70.23	22.21
4-6 Years	2,372	70.58	21.04
7 or more Years	5,317	72.33	20.00

Table 2.2

Descriptive Statistics for Mathematics Performance by Principal Years of Experience

Years of Experience	n	М	SD
0-3 Years	2,022	73.48	18.82
4-6 Years	2,355	73.90	18.13
7 or more Years	5,277	74.85	18.75

Table 2.3

Descriptive Statistics for Science Performance by Principal Years of Experience

Years of Experience	n	М	SD	
0-3 Years	359	66.33	19.88	
4-6 Years	480	66.31	23.06	
7 or more Years	1,019	69.77	20.70	

Table 2.4

Summary of Statistical Analyses of Reading, Mathematics, and Science Performance by

Principal Years of Experience

Subject	Statistically Significant	Effect Size	Highest Performing Group
Reading	Yes	Below Small	Experienced Principal
Mathematics	Yes	Below Small	Experienced Principal
Science	Yes	Below Small	Experienced Principal

CHAPTER III

DIFFERENCES IN WHAT PRINCIPALS EMPHASIZE AS A FUNCTION OF YEARS OF EXPERIENCE: A NATIONAL ANALYSIS

This dissertation follows the style and format of Research in the Schools (RITS).

Abstract

Examined in this study was the degree to which differences were present between experienced, moderately experienced, and new school principals related to what they emphasized and how they spent their work time at their campuses. Data were obtained from the Early Childhood Longitudinal Study-Kindergarten Class of 2010-2011 principal survey. Inferential statistical analyses revealed the presence of statistically significant differences in the way principals reported spending their time and the objectives they emphasized by their years of experience as school principal. Experienced principals emphasized more working with teachers and on required paperwork and less on school management, discipline and attendance, and monitoring school areas than New Principals or Moderately Experienced principals. Implications are discussed and suggestions for further research are made.

Keywords: ECLS-K, Experienced Principals, Moderately Experienced Principals, New Principals, Principal Emphases, Principal Experience

DIFFERENCES IN WHAT PRINCIPALS EMPHASIZE AS A FUNCTION OF YEARS OF EXPERIENCE: A NATIONAL ANALYSIS

The role of principal has been evolving in recent years (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Horng, Klasik, & Loeb, 2010; Searby, 2010). The principal role has shifted from being the school disciplinarian and teacher supervisor to a more complex and demanding role. In fact, principals are required to handle instruction, personnel, students, strategic planning, government and public relations, and finance (Lynch, 2012). As a result, public school principals work far more than the average 40 hours per week and balance a wide range of responsibilities within a week (Papa & Baxter, 2008; Wallace Foundation, 2013). Given the many demands made on their time, principals have to prioritize and emphasize the tasks that are the most important. In fact, the lack of time management skills and abilities among principals can be considered as one of the main factors that could lead to leadership inefficiency and thus, to absence of progress or improvement at the campus (Botha, 2013). Some of the reasons that make managing time by principals a difficult task is the quantity as well as the unpredictability of daily school activities. For instance, according to Drake and Roe (2003), principals reported having between 50 and 100 daily events and up to 400 interactions with people with 75% of these contacts were unscheduled. In contrast, corporate executives reported spending only 10% of their time on unscheduled contacts (Drake & Roe, 2003).

In one study in which the dataset that was be analyzed in this article was used, the Early Childhood Longitudinal Study-Kindergarten Class of 1998-1999, Borg and Slate (2014) examined principal leadership emphases as a function of school performance. Specifically, they focused on the extent to which school principals at low and high

performing schools emphasized the same nine goals and objectives that was be discussed in this study. Borg and Slate (2014) documented that principals in high performing schools emphasized different goals or objectives. One of their salient findings was that principals of high achieving schools emphasized providing challenging tasks for higher achieving students more than principals of low achieving schools. They concluded that school district leaders should assist new principals making decisions on the goals and objectives they need to emphasize to increase student achievement.

In a similar study, and using the same dataset, the Early Childhood Longitudinal Study-Kindergarten Class of 1998-1999, Smith and Slate (2014) analyzed principal perspectives at high and low performing private schools specific to what they emphasized with respect to working well with other faculty members and challenging high achieving students. They concluded that principals of high performing schools emphasize providing challenging tasks for higher achieving students more than principals of low achieving schools.

Henkel and Slate (2013) examined the differences between private and public school principals with regard to their emphasis using the Early Childhood Longitudinal Study-Kindergarten surveys. Principals were asked about their degree of emphasis (i.e., minor, moderate, major) on staff working well together, achieving high standards, challenges for high-achievers, communicating well with parents, and instructional strategies. Principals of public schools had more major emphases than principals of private schools in achieving high standards, challenges for high-achievers, and instructional strategies aligned with standards (Henkel & Slate, 2013). On the other

hand, private school principals had more major emphases than public school principals in staff working well together and communicating well with parents.

In another study and using a more recent dataset, Lavigne, Shakman, Zweig, and Greller (2016) analyzed how principals spent their day and the kinds of professional development in which they participated. The authors used the same dataset that was used for this study, the Early Childhood Longitudinal Study-Kindergarten Class of 2010-2011. Principals reported spending an average of 59 hours a week on the job, focusing mainly on some internal administrative tasks. Lavigne et al. (2016) indicated a principal's day is complicated and included a variety of tasks such as communicating with stakeholders, hiring teachers and staff, appraising and coaching teachers, filing reports to the district, meeting with parents, disciplining students, and dealing with crises and special situations. They determined that principals who made adequate yearly progress spent most of their time on administrative tasks, curriculum, and teaching related tasks. Principals of high poverty schools that did not make adequate yearly progress spent more time on the job than did principals of high poverty schools that made adequate yearly progress (Lavigne et al., 2016).

In a similar study, Horng et al. (2010) investigated principals' time use and school effectiveness. They determined that principals spent about 30% of their time in administrative tasks such as discipline and completing compliance requirement, 21% of the day in organization management such as managing budget and staff, and 15% of their time on internal relations such as building relationship with students and networking with staff members. In addition, principals devoted 5% of their time on external relation tasks such as working with outside partnerships. However, principals dedicated only 6% to

instructional-related activities daily classroom observations and only 7% on general instructional program duties such as assessing curriculum and designing professional development (Horng et al., 2010).

In a recent analysis, Tomàs-Folch and Ion (2015) explored how principals managed their responsibilities and time. They sorted principals' tasks into four categories: objectives, people, organization, and instruction. Tomàs-Folch and Ion (2015) determined that principals spent twice as much time on people, two times more than they spent on objectives, organization, or instruction. Principals spent the same amount of time on objectives, organization, and instruction.

One of the most important roles of principals is to increase student achievement (Borg & Slate, 2014). To improve student performance, principals are required to focus on certain tasks. Farver and Holt (2015) investigated how principal coaches work with campus leaders to equip them with the necessary skills to influence student achievement and to keep up with the demand of the new state and federal accountability. They determined that coaching provided principals with a thinking partner who assisted in goal-setting, problem solving, and action planning. The relationships between the principal coach and the campus leader were built on trust, confidentiality, reciprocity, and facilitative. Principals were allowed to have confidential and reflective conversations, present ideas or concerns without making any judgment and received valuable feedback.

In a related investigation, Shatzer, Caldarella, Hallam, and Brown (2013) analyzed the effects of instructional and transformational leadership on student achievement by determining specific leadership practices associated with increased student performance. They established that certain behaviors or emphases were

associated with increasing student achievement such as monitor student progress, protect instructional time, provide incentives for learning, provide incentives for teachers, and make rewards contingent. Shatzer et al. (2013) added that instructional leadership practices are more effective than transformational practices.

On the other hand, O'Donnell and White (2005) analyzed how principals' instructional leadership behavior or emphasis influenced student achievement. They determined that principals who promoted school learning to a higher level exhibited certain behaviors including protecting instructional time, maintain high visibility, provide incentives to teachers, promote professional development, and provide incentives for learning. O'Donnell and White (2005) added that focusing on these task and behaviors were even more crucial for schools with a large percentage of students who were economically disadvantaged. However, principal emphasis should extend beyond overseeing the day-to-day instructional practices and conducting classroom observation (Grissom & Loeb, 2011). In fact, the effectiveness of instructional leadership depends on the successful orchestration of school programs, people, resources, and managing of key organizational tasks such as maintaining the facility and school budget (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010).

The work of the school principal has never been a simple one, with local and federal accountability increasing and making it even more challenging as well as elevating the stakes to a high level. Thus, principals often rely on teachers and other stuff members to assist them in completing these tasks. Spillane, Camburn, and Pareja (2007) indicated that principals shared or delegated leading activities most of the time. In fact, principals only lead activities alone 35% of the time whereas they co-lead activities 33%

of the time or do not lead activities 31.4% of the time (Spillane et al., 2007). Alvoid and Black (2014) contended that school districts should be committed to the task of developing campus leadership and be eager to invest the energy, time, effort, and the necessary resources to achieve this goal. Moreover, principal development and training should be less theoretic and more holistic (Levine, 2005; Marks & Printy, 2003). The development should emphasize instructional practices as well as key management components such as how to handle personnel and maintaining facilities (Hess & Kelly, 2007).

Statement of the Problem

Numerous low performing schools exist across the United States, with most of these low performing schools having high principal turnover as one of their main challenges. New principals usually are poorly prepared to face school leadership challenges. In fact, principals have many goals and objectives that they need to work on daily such working on instructional issues, disciplining students, walking the hallways, and communicating with parents. However, principals sometimes focus on the wrong or the least important tasks. Principals need to focus on tasks with the nmost leverage for improving student academic performance. School principals are the architect or influencer of school's culture through the daily interaction and actions with the staff members and the rest of the community. Campus leaders have an essential direct or indirect influence on teachers' performance, job satisfaction, effectiveness, and motivation (Harris, Rutledge, Ingle, & Thompson, 2010). Accordingly, principals are the most influential persons in the success or the failure of a campus. The success or the

failure of principals depend on the goals or objectives emphasized by the principals with their teachers.

Purpose of the Study

The purpose of the study was to determine the degree to which differences might be present in the number of hours principals reported they spent on average per week in different activities as a function of their years of experience as school administrators. Specifically analyzed were three groups of principals (i.e., New Principals, Moderately Experienced Principals, and Experienced Principals) and the number of hours they reported they spent on average per week on working in instructional issues, in internal school management, in student discipline and attendance, in monitoring hallways, in teaching, in talking and meeting with parents, and in required paperwork. Through analyzing a national dataset, the degree to which trends were present between principal years of experience as an administrator and principal emphases or focus areas was determined.

Significance of the Study

Based on the studies examined in the literature review section, principal leadership, preparation, and experience have an important influence on student achievement. Principals can influence the success or the failure of a campus in improving student achievement. The way principals spend their time prioritize their duties can affect academic performance. However, most of the researchers (e.g., Lavigne et al., 2016; Tomàs-Folch & Ion, 2015) in the literature have focused on a subset of principals from a particular state or school district. The findings of this study could be generalized across the entire United States because a national database was used.

Furthermore, findings may have practical implications for school district leaders and policymakers when it comes to planning professional development, coaching, and mentoring new principals as well as developing preparation programs for prospective principals.

Research Questions

In this empirical investigation, the following overarching research question was addressed: What is the difference in the number of hours spent on average per week in different activities as a function of principal experience (i.e., New Principals, Moderately Experienced Principals, and Experienced Principals). Research subquestions related to specific goals and objectives were: (a) What is the difference in the number of hours spent on average per week on working with teachers in instructional issues as a function of principal experience?; (b) What is the difference in the number of hours spent on average per week in internal school management such as weekly calendars, vendors, office, and memos as a function of principal experience?; (c) What is the difference in the number of hours spent on average per week in student discipline and attendance as a function of principal experience?; (d) What is the difference in the number of hours spent on average per week in monitoring hallways, playground, lunchroom as a function of principal experience?; (e) What is the difference in the number of hours spent on average per week in teaching as a function of principal experience?; (f) What is the difference in the number of hours spent on average per week in talking and meeting with parents as a function of principal experience?; (g) What is the difference in the number of hours spent on average on meeting with students as a function of principal experience?; and (h) What

is the difference in the number of hours spent on average per week in paperwork required by local, state, or federal authorities as a function of principal experience?

Method

Research Design

In this empirical investigation, a non-experimental, causal-comparative research design (Creswell, 2014; Johnson & Christensen, 2014) was present. In this investigation, a national archival dataset was analyzed to ascertain whether differences were present in the way school principals reported spending their work time in different activities. The outcomes of the average number of hours principals spend on different activities had already been reported and were present in the national dataset that was analyzed. The independent variable in this investigation was principal years of experience as an administrator categorized into three groups: New Principals, Moderately Experienced Principals, and Experienced Principals. In this article, the dependent variables was comprised of the number of hours spent weekly by school principals in different activities (i.e., working with teachers on instructional issues, internal school management, student discipline/attendance, monitoring hallways, teaching, talking and meeting parents, meeting with students, and required paperwork). Thus, in this non-experimental, causalcomparative research, none of the variables analyzed could be manipulated or changed (Johnson & Christensen, 2014).

Participants and Instrumentation

The unit of analysis in this investigation was administrators of elementary school campuses across the United States. Principals, head of schools, or other administrators were asked to complete a questionnaire voluntarily as part of the survey for Early

Childhood Longitudinal Study- Kindergarten Class 2010-2011 (ECLS-K) in the Spring of 2011 (National Center for Education Statistics, 2011, 2017b). The number of elementary school administrators who completed the administrator survey in the Spring of 2011 was around 6,000 administrators.

The ECLS-K self-administered questionnaire was intended to collect information about the school, student achievement, student demographics, school policies, teachers, school climate, as well as demographic characteristics of the school's principal of headmaster. The ECLS-K School Administrator Questionnaire was administrated Spring 2011 and was divided into eight sections. In the last section of the questionnaire, the school administrator characteristics section, school administrators were asked to record the number of hours they spend on average per week in working with teachers on instructional issues; internal school management; student discipline/attendance; monitoring hallways, playground, lunchroom; teaching; talking and meeting with parents; meeting with students; and paperwork required by local, state, or federal authorities. Campus leaders' responses to these questions were used in this study. In the same section of the questionnaire, school principals indicated the number of years of administrative experience (National Center for Education Statistics, 2011, 2017b). For each research subquestion, principals with 1-3 years of principal experience as an administrator was grouped as New Principals, principals with 4-6 years of principal experience constituted the group of Moderately Experienced Principals, and principals with more than 6 years of principal experience comprised the group of Experienced Principals.

Results

With respect to the research question, the multiple dependent variables consisted of continuous and interval level data (i.e., working with teachers on instructional issues, internal school management, student discipline/attendance, monitoring hallways, teaching, talking and meeting parents, meeting with students, and required paperwork). As such, a multivariate analysis of variance (MANOVA) statistical analysis was conducted. However, prior to conducting any inferential statistical procedures, the underlying assumptions of the MANOVA procedure were checked. Specifically examined were data normality, Box's Test of Equality of Covariance and the Levene's Test of Equality of Error Variances. Although the majority of these assumptions were not met, the robustness of a MANOVA procedure made it appropriate to use on the data in this study (Field, 2013).

The MANOVA revealed a statistically significant difference, Wilks' Λ = .97, p < .001, partial η^2 = .02, in the number of hours spend per week by principals on different activities as a function of principal years of experience. Using Cohen's (1988) criteria, the effect size was small. Univariate follow-up analysis of variance procedures revealed statistically significant differences in the number of hours working on school management, F(2, 12737) = 45.05, p < .001, partial η^2 = .007, a below small effect size; the number of hours per week working on discipline and attendance, F(2, 12737) = 40.58, p < .001, partial η^2 = .006, a below small effect size; in the number of hours per week monitoring school areas, F(2, 12737) = 64.23, p < .001, partial η^2 = .01, a small effect size; in the number of hours per week spent on teaching, F(2, 12737) = 49.65, p < .001, partial η^2 = .008, a below small effect size; in the number of hours per week meeting with

parents, F(2, 12737) = 48.22, p < .001, partial $\eta^2 = .008$, a below small effect size; and in the number of hours per week meeting with students, F(2, 12737) = 25.84, p < .001, partial $\eta^2 = .004$, a below effect size. Statistically significant differences were not yielded for the number of hours per week working with teachers, F(2, 12737) = 2.72, p = .07; and in the number of hours per week working on required paperwork, F(2, 12737) = 2.42, p = .089. With respect to the statistically significant differences, a small effect size was present for the number of hours per week monitoring school areas, with a below small effect size being present for the number of hours working on school management, discipline and attendance, spent teaching, meeting with parents, and meeting with students (Cohen, 1988).

To determine which pairs of principals groups differed from each other in their way the spent their time weekly on different activities, Scheffe' post hoc procedures were conducted. These post hoc procedures revealed that statistically significant differences were present by principal years' experience in several areas of emphasis. Experienced Principals spent more hours working with teachers than New Principals and Moderately Experienced Principals. In contrast, Experienced Principals spent fewer hours working on school management, discipline and attendance, monitoring areas, meetings with parents, and meeting with students than New Principals and Moderately Experienced Principals. Interestingly, a stair-step effect was present for the amount of time spent for school management, discipline and attendance, monitoring school areas, meeting with parents, and meeting with students in that the greater the number of years of experience the lower the amount of hours spent on each individual task. Readers are referred to Tables 3.1, 3.2, and 3.3 for the descriptive statistics for the number of hours spent by

principals on different activities by their years of experience as principals. It is important to note that principals reported working a different total number of hours per week depending on their years of experience. In fact, New Principals reported spending an average of more than 58 hours, Moderately Experienced Principals about an average of 56 hours, and Experienced Principals an average of almost 53 hours per week working on a variety of activities.

Insert Tables 3.1, 3.2, and 3.3 about here

Principals reported spending different numbers of hours on the administrator survey questionnaire. Accordingly, New Principals reported spending more than 58 hours, Moderately Experienced Principals about 56 hours, and Experienced Principals almost 53 hours per week working on a variety of activities. Principals could have spent the same numbers hours in a particular task, yet those hours could have constituted different percentages of their total work because they spent less hours per week at work. Thus, a decision was made to convert their hours worked in each of the areas to a percent of their total workweek. Therefore, converting hours worked in each area to a percent of the total hours worked provides a different and more detailed analysis of how principals spent their work hours or their areas of emphasis.

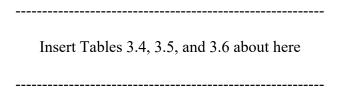
Following these conversions, a MANOVA statistical analysis was conducted.

However, prior to conducting any inferential statistical procedures, the underlying assumptions of the MANOVA procedure were checked. Specifically examined were data normality, Box's Test of Equality of Covariance and the Levene's Test of Equality of

Error Variances. Although the majority of these assumptions were not met, the robustness of a MANOVA procedure made it appropriate to use on the data in this study (Field, 2013).

The MANOVA revealed a statistically significant difference, Wilks' $\Lambda = .97$, p <.001, partial $\eta^2 = .013$, in the percentage of hours spend per week by principals on different activities as a function of principal years of experience. Using Cohen's (1988) criteria, this effect size was below small. Univariate follow-up analysis of variance procedures revealed statistically significant differences in the percentage of hours per week working with teachers, F(2, 12737) = 56.89, p < .001, partial $\eta^2 = .009$, a below small effect size; the percentage of hours working on school management, F(2, 12737) =7.54, p = .001, partial $\eta^2 = .001$, a below small effect size; the percentage of hours per week working on discipline and attendance, F(2, 12737) = 16.72, p < .001, partial $\eta^2 =$.003, a below small effect size; in the percentage of hours per week monitoring school areas, F(2, 12737) = 39.57, p < .001, partial $\eta^2 = .006$, a below small effect size; in the percentage of hours per week spent on teaching, F(2, 12737) = 25.93, p < .001, partial η^2 = .004, a below small effect size; in the percentage of hours per week meeting with parents, F(2, 12737) = 9.05, p < .001, partial $\eta^2 = .001$, a below small effect size; in the percentage of hours per week meeting with students, F(2, 12737) = 14.47, p < .001, partial $\eta^2 = .002$, a below effect size; and in the percentage of hours per week working on required paperwork, F(2, 12737) = 2.42, p < .001, partial $\eta^2 = .002$, a below small effect size. With respect to the statistically significant differences, a below small effect size was present for the percentage of hours per week number of hours working with teachers, monitoring school areas, on school management, discipline and attendance, teaching, meeting with parents, and meeting with students, required paperwork (Cohen, 1988).

To determine which pairs of principals groups differed from each other in these emphasis areas, Scheffe' post hoc procedures were conducted. These post hoc procedures revealed that statistically significant differences were present by principal years of experience in several emphasis areas. Experienced Principals spent a larger percentage of their time working with teachers and on paperwork than New Principals and Moderately Experienced Principals. In contrast, Experienced Principals spent the least percentage of their hours working on school management, discipline and attendance, monitoring areas, and meeting with students than New Principals and Moderately Experienced Principals. Stimulatingly, a stair-step effect was present for the percentage of time spent for working with teachers and on required paperwork in that the greater the number of years of experience the higher the percentage of hours spent on those tasks. Interestingly, Experienced Principals spent roughly the same percentage of time per week, almost 20% on school management. Tables 3.4, 3.5, and 3.6 contain the descriptive statistics for the percentage of hours spent by principals on different activities by their years of experience as principals.



Discussion

In this study, the way principals spent their time at work was examined as a fucntion of their years of experience. Analyses were conducted of principal responses

obtained from the National Center for Education Statistics, a national dataset.

Statistically significant differences were present on how principals spent their time at work as function of their years of experience. Experienced Principals spent a larger percentage of their day working with teachers and on required paperwork than New Principals or Moderately Experienced Principals. In contrast, Experienced Principals spent a smaller percentage of their day working on school management, discipline and attendance, monitoring areas, and meeting with students than New Principals or Moderately Experienced Principals. A possible explanation is that Experience Principals have better systems and routines in their campuses than New Principals or Moderately Experienced Principals, as such they have more time to work with teachers.

Readers should note a potential confounding interpretation of how principals emphasize activities by examining the number of hours spent on each activity. In fact, New Principals reported spending an average of more than 58 hours, Moderately Experienced Principals an average of about 56 hours, and Experienced Principals an average of almost 53 hours per week working on a variety of activities. As such, Principals could have spent the same numbers hours in a particular task, yet those hours could have constituted different percentages of their total work because they spent less hours per week at work. Consequently, the more precise way of determining how principals emphasized activities was by analyzing the percentage of time allocated for each activity.

Connection with Existing Literature

The role of principals and their areas of emphasis has been extensively investigated (Henkel & Slate, 2013; Horng et al., 2010; Tomàs-Folch & Ion, 2015). In

this empirical investigation, principals spent many hours per week working on various activities, with New Principals reporting spending more than 58 hours, Moderately Experienced Principals about 56 hours, and Experienced Principals almost 53 hours. These findings are aligned with the finding of a study conducted by Lavigne et al. (2016) who determined that principals work an average of 59 hours a week. Furthermore, the way principals spend their time in certain areas was consistent with Horng et al. (2010). For instance, principals spent almost 20% of their time on school management, about 11% on discipline and attendance, and almost 15 % on required paperwork.

It is important to note that documented in this investigation were the ways in which principals reported they spent their time and their areas of emphasis by principal years of experience, an analysis that was not conducted in previous studies. In fact, Experienced Principals emphasized certain areas differently than New Principals and Moderately Experienced Principals. Particularly, Experienced Principals emphasized working with teachers more than New Principals and Moderately Experienced Principals, a finding that might explain how student achievement is connected to principal years of experience.

Implications for Policy and for Practice

The jobs of principals and their influence on the success or the failure of campuses has been discussed by several researchers (Borg & Slate, 2014; Marzano et al., 2005; Nettles & Petscher, 2006). Furthermore, the role of principals has shifted from being the teacher supervisor to a more complex and high stake role. Above all, principals are handling instruction, personnel issues, required paperwork, strategic planning, public relations, and finance as well as ensuring their campuses are meeting all local, state, and

federal accountabilities (Lynch, 2012). Accordingly, principals have to emphasize and prioritize certain tasks that can bring the highest value added to the organization to improve student achievement. Principal years of experience was determined to be statistically significantly related to student achievement (Azaiez & Slate, 2017; Mascall & Leithwood, 2010). Consequently, understanding the areas of most emphasis for Experienced Principals might assist school district officials to create the best principal preparation programs for prospective principals as well as a more rigorous and tailored mentoring or coaching opportunities. Finally, principals could spend more time with teachers by planning and scheduling their classroom visits, coaching, and feedback sessions weekly to influence better student achievement.

Experienced Principals spent most of their work week working with teachers. Thus, local school districts in conjunction with state and federal agencies and resources should ensure that professional development efforts target how principals better manage their work load and how to focus more on working with teachers. Finally, they should minimize required paperwork and documentation to allow principals to spend more time working with teachers.

Recommendations for Future Research

Based upon the results of this empirical investigation, several recommendations for future research can be made. First, in this investigation, only one year of data was analyzed. As such, as an extension and replication of this study is recommend. Second, in this study, principal years of experience was defined as their total years of experience as a school principal regardless of their campus of employment. Accordingly, researchers are encouraged to explore the influence of principal years of experience at the

same campus on student achievement. Third, a research investigation into the differences that may exist in what principals emphasize and how they spend their time at work by school size could provide relevant data with regard to principal assignment by school size. Fourth, researchers are recommended to examine whether differences might be present in the way principals spend their work time at the middle and high school level. Finally, an analysis of the extent to which differences might exist in high school student graduation rate by the way principal spent their work time or emphasis.

Conclusion

In this empirical investigation, the extent to which differences were present in the way principals spent their work time or emphasis was examined. A national dataset was obtained from the National Center for Education Statistics and analyzed. Statistically significant differences were revealed in the way principals spent their work time as a function of principal years of experience. Experienced principals spent a higher percentage of their time working with teachers and on required paperwork than New Principals or Moderately Experienced Principals. On the other hand, Experienced principals spent a smaller percentage of their time on school management, discipline and attendance, and monitoring school areas than New Principals or Moderately Experienced Principals.

References

- Alvoid, L., & Black, W. L. (2014). The changing role of the principal: How high achieving districts are recalibrating school leadership. Washington, DC: Center for American Progress. Retrieved from https://cdn.americanprogress.org/wp-content/uploads/2014/06/PrincipalPD-FINAL.pdf
- Azaiez, H., & Slate, J. R. (2017). Student achievement as a function of principal longevity. *Journal of Advances in Education Research*, 2(3), 157-162. doi:10.22606/jaer.2017.23003
- Borg, D., & Slate, J. R. (2014). Principals' leadership emphases as a function of school performance. *Frontiers in Education*, 2(1), 1-5.
- Botha, R. J. (2013). Time management abilities of school principals according to gender:

 A case study in selected Gauteng schools. *Africa Education Review*, 10(2), 364-380. doi:10.1080/18146627.2013.853532
- Bryk, A., Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- DiPaola, M., Tschannen-Moran, M., & Walther-Thomas, C. (2004). School principals and special education: Creating the context for academic success. *Focus On Exceptional Children*, *37*(1), 1-10.

- Drake, T. L., & Roe, W. H. (2003). *The principalship* (6th ed.). Upper Saddle, NJ: Merrill Prentice Hill.
- Farver, A. R., & Holt, C. R. (2015). Value of coaching in building leadership capacity of principals in urban schools. *NCPEA Education Leadership Review of Doctoral Research*, 2(2), 67-76. Retrieved from http://files.eric.ed.gov/fulltext/EJ1105730.pdf
- Field, A. (2013). Discovering statistics using SPSS (4th ed.). Thousand Oaks, CA: Sage.
- Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. *American Educational Research Journal*, 48, 1091-1123. doi:10.3102/0002831211402663
- Harris, D. N., Rutledge, S. A., Ingle, W. K., & Thompson, C. C. (2010). Mix and match: What principals really look for when hiring teachers. *Education Finance and Policy*, *5*(2), 228-246.
- Henkel, B. L., & Slate, J. R. (2013). Differences in what public and private school principals emphasize in their schools. *Journal of Education Research*, 7(2), 103-110.
- Hess, F. M., & Kelly, A. P. (2007). Learning to lead: What gets taught in principal-preparation programs. *Teachers College Record*, 109(1), 244-274.
- Horng, E. L., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness.

 *American Journal of Education, 116, 491-523.
- Johnson, B., & Christensen, L. (2014). Educational research: Quantitative, qualitative, and mixed approaches (5th ed.). Los Angeles, CA; Sage.

- Lavigne, H. J., Shakman, K., Zweig, J., & Greller, S. L. (2016). *Principals' time, tasks, and professional development: An analysis of Schools and Staffing Survey data.*Regional Education Development Center, Inc. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL_201720.pdf
- Levine, A. (2005). *Educating school leaders*. New York, NY: The Education Schools Project.
- Lynch, J. J. (2012). Responsibilities of today's principal: Implications for principal preparation programs and principal certification policies. *Rural Special Education Quarterly*, 31(2), 40-47.
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39), 370-397. doi:10.1177/0013161X03253412
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). School leadership that works:

 From research to results. Alexandria, VA: Association for Supervision and Curriculum Development.
- Mascall, B., & Leithwood, K. (2010). Investing in leadership: The district's role in managing principal turnover. *Leadership and Policy in Schools*, 9, 367-383. doi:10.1080/15700763.2010.493633
- National Center for Education Statistics. (2011). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Spring School Administrator Questionnaire.

 Retrieved from

 https://nces.ed.gov/ecls/pdf/kindergarten2011/Spring_K_School_Administrator.p

 df

- National Center for Education Statistics. (2017). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Combined user's manual for the ECLS data files

 and electronic codebooks. Retrieved from

 https://nces.ed.gov/ecls/kindergarten2011.asp
- Nettles, S., & Petscher, Y. (2006, April). An examination of the relationship between the implementation practices of school principals and student achievement in reading. Paper presented at the annual American Educational Research Association, San Francisco, CA.
- O'Donnell, R. J., & White, G. P. (2005). Within the accountability era: Principals' instructional leadership behaviors and student achievement. *NASSP Bulletin*, 89, 56-71. doi:10.1177/019263650508964505
- Papa Jr., F., & Baxter, I. (2008). Hiring teachers in New York's public schools: Can the principal make a difference? *Leadership & Policy in Schools*, 7(1), 87-117. doi:10.1080/15700760701655524
- Searby, L. J. (2010). Preparing future principals: Facilitating the development of a mentoring mindset through graduate coursework. *Mentoring & Tutoring:*Partnership in Learning, 18(1), 5-22. doi:10.1080/13611260903448292
- Shatzer, R. H., Caldarella, P., Hallam, P. R., & Brown, B. L. (2013). Comparing the effects of instructional and transformational leadership on student achievement:

 Implications for practice. *Educational Management Administration and Leadership*, 42, 445-459. doi:10.1177/1741143213502192

- Smith, J. A., & Slate, J. R. (2014). Private school principals of high and low achieving schools and student achievement and teacher collaboration. *Journal of Education Research*, 8(4), 197-202.
- Spillane, J. J, Camburn, E. M., & Pareja, A. S. (2007). Taking a distributed perspective to the school principal's workday. *Leadership and Policy in Schools*, 6(1), 103-125. doi:10.1080/15700760601091200
- Tomàs-Folch, M., & Ion, G. (2015). Exploring the management of principal responsibilities in secondary schools in Barcelona: A case study. *International Journal of Educational Organization and Leadership*, 21(3/4), 1-11.
- Wallace Foundation. (2013). The school principal as leader: Guiding schools to better teaching and learning. New York, NY: Author. Retrieved from http://www.wallacefoundation.org/knowledge-center/Documents/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning-2nd-Ed.pdf

Table 3.1

Descriptive Statistics for the Number of Hours Spent per Week for New Principals

Area of Emphasis	M	SD
Working with Teachers	9.95	8.33
School Management	11.49	8.68
Discipline and Attendance	6.41	6.60
Monitoring School Areas	7.81	7.75
Teaching	2.03	4.97
Meeting with Parents	6.61	5.80
Meeting with Students	6.43	7.07
Working on Required Paperwork	7.73	7.04

Note. The number of principals in this analysis was 2,740.

Table 3.2

Descriptive Statistics for the Number of Hours Spent per Week for Moderately

Experienced Principals

Area of Emphasis	M	SD
Working with Teachers	9.76	6.62
School Management	11.73	7.91
Discipline and Attendance	6.34	5.55
Monitoring School Areas	6.71	4.77
Teaching	1.17	2.44
Meeting with Parents	5.86	4.37
Meeting with Students	6.23	5.18
Working on Required Paperwork	8.09	6.59

Note. The number of principals in this analysis was 3,103.

Table 3.3

Descriptive Statistics for the Number of Hours Spent per Week for Experienced

Principals

Area of Emphasis	M	SD
Working with Teachers	10.12	7.2
School Management	10.33	7.17
Discipline and Attendance	5.54	4.42
Monitoring School Areas	6.32	5.29
Teaching	1.36	3.25
Meeting with Parents	5.61	3.94
Meeting with Students	5.66	4.34
Working on Required Paperwork	7.81	7.03

Note. The number of principals in this analysis was 6,897.

Table 3.4

Descriptive Statistics for the Percentage of Hours Spent per Week for New Principals

Area of Emphasis	М%	SD%
Working with Teachers	17.06	9.60
School Management	20.85	13.03
Discipline and Attendance	10.98	7.48
Monitoring School Areas	13.32	7.82
Teaching	3.19	6.92
Meeting with Parents	11.14	6.35
Meeting with Students	10.10	5.19
Working on Required Paperwork	13.36	5.83

Note. The number of principals in this analysis was 2,740.

Table 3.5

Descriptive Statistics for the Percentage of Hours Spent per Week for Moderately

Experienced Principals

Area of Emphasis	M%	SD%
Working with Teachers	17.68	9.88
School Management	21.25	11.63
Discipline and Attendance	11.18	7.32
Monitoring School Areas	12.19	7.15
Teaching	2.03	4.60
Meeting with Parents	10.51	6.35
Meeting with Students	10.93	6.69
Working on Required Paperwork	14.23	8.78

Note. The number of principals in this analysis was 3,103.

Table 3.6

Descriptive Statistics for the Percentage of Hours Spent per Week for Experienced

Principals

Area of Emphasis	М%	SD%
Working with Teachers	19.30	10.83
School Management	20.22	13.24
Discipline and Attendance	10.38	6.70
Monitoring School Areas	11.81	7.53
Teaching	2.68	6.51
Meeting with Parents	10.67	5.88
Meeting with Students	10.53	5.84
Working on Required Paperwork	14.40	10.00

Note. The number of principals in this analysis was 6,897.

CHAPTER IV

SCHOOL SIZE AND DIFFERENCES IN WHAT PRINCIPALS EMPHASIZE AND HOW THEY TRAIN THEIR TEACHERS: A NATIONAL ANALYSIS

This dissertation follows the style and format of Research in the Schools (RITS).

Abstract

In this investigation, differences in what principals emphasized, in how they spent their work time, and how they trained their teachers were examined as a function of student enrollment numbers. Data were acquired from the Early Childhood Longitudinal Study-Kindergarten Class of 2010-2011 principal survey. Three school categories were generated with student enrolment data: Small-size schools, Moderate-size schools, and Large-size schools. Inferential statistical analyses revealed the presence of statistically significant differences in the way principals reporting spending their time and the training areas they emphasized. Principals of Large-size schools spent more hours at work, invested more time working with teachers, and emphasized more training their teachers than principals of Small-size schools and Moderate-size schools. Suggestions for future research and implications for policy and practice were made.

Keywords: ECLS-K, Student enrollment, Small-size schools, Moderate-size schools, Large-size schools, Training areas, Principal Emphases.

SCHOOL SIZE AND DIFFERENCES IN WHAT PRINCIPALS EMPHASIZE AND HOW THEY TRAIN THEIR TEACHERS: A NATIONAL ANALYSIS

Texas public school enrollment increased by 17.2% from the 2005-2006 school year to the 2015-2016 school year (Texas Education Agency, 2016). Along with this increase in total student enrollment, the percentage of students in poverty increased by 24.6% during the same period. Almost 60% (i.e., 58.9%) of students enrolled in Texas public schools meet the criteria for being economically disadvantaged (Texas Education Agency, 2016). As such, the responsibilities of school districts in educating students comprise a challenging task. The responsibility of ensuring that student achievement is increased is often delegated by school superintendents to school principals. Almost two thirds, 63%, of superintendents say that the most important factor in evaluating or appraising principals is how successful they are in improving students' performance (Kaplan, Owings, & Nunnery, 2005).

Principals are required to fill a multitudes of roles (O'Donnell & White, 2005). They ensure the safety of students and staff by monitoring the hallways and lunchroom. They meet with parents, students, vendors, and community members. In addition, they monitor student data including attendance and discipline data. To complete these leadership and managerial tasks, principals usually delegate some tasks to other staff members. Spillane, Camburn, and Pareja (2007) reported that principals lead activities alone 35% of the times, co-leading activities 33% of the times, and not leading activities 31.4% of the times. However, one of their most important roles is to be the instructional leader of the campus which require working with teachers on instructional issues such as training teachers on how to collect, manage, interpret, and use data. In fact, the

instructional leadership of the principal has been discussed and identified as a critical factor in increasing student achievement (Borg & Slate, 2014; Marzano et al., 2005; Nettles & Petscher, 2006). In one study, Kaplan et al. (2005) analyzed the relationship between principal quality and student achievement. They determined that the higher the quality of the principal the higher student achievement was. In addition, principals of schools with low student achievement data were perceived as less capable (Kaplan et al., 2005) than were principals of high performing schools.

The relationship between student performance and school size has been investigated by several researchers (e.g., Borland & Howsen, 2003; Leithwood & Jantzi, 2009; Riha, Slate, & Martinez-Garcia, 2013; Slate & Jones, 2005; Zoda, Combs, & Slate, 2011a, 2011b, 2011c) and produced some conflicting results. Slate and Jones (2005) articulated that in most of these studies three major concerns were observed. First, the studies conducted in schools were rife with methodological issues such as confusing correlational results with cause-and-effect relationships. They added that many researchers who utilized an advocacy researcher style failed to bracket their bias which could have influenced the results of their investigations. Of particular note was that the definition of large and small schools has been different from one study to another (Slate & Jones, 2005). In fact, Slate and Jones (2005) confirmed that very small and very large school are often negatively related to school quality because schools lack appropriate resources to serve students adequately.

In another elementary school analysis, Borland and Howsen (2003) examined the relationship of elementary school size on student academic achievement. They determined that the optimal elementary school size was approximately 760 students.

They suggested that school districts should move to school sizes to around 760 students and to encourage educational market competition among associated schools to improve student achievement. However, when advocating for an optimal size it is important to consider the demographic characteristics of the school's student enrollment because it can potentially be detrimental to certain students (Weiss, Carolan, & Baker-Smith, 2010). Zoda et al. (2011a) investigated Black student reading, mathematics, and writing performance as a function of elementary school size. Zoda et al. (2011a) analyzed student data on the state-mandated reading, mathematics, and writing examinations for five consecutive years. They categorized schools with less than 400 students as Very Small schools, schools with 400 to 799 students as Small schools, and schools with 800 to 1,199 students as Large schools. They determined that reading and mathematics passing rates for Black students were higher at Large elementary schools than in either Very Small or in Small elementary schools in all five school years. The writing passing rates of Black students were higher at Large elementary schools than in either Very Small or in Small schools in four of the five school years (Zoda et al., 2011a).

In a similar study, Zoda et al. (2011b) examined Texas statewide data on the relationships of elementary school size with Hispanic student reading, mathematics, and writing performance over a 5-year time period. Using the same school size definitions as in the 2011a investigation, they established that Hispanic students had higher reading and mathematics performance in Large elementary schools than in either Very Small or in Small elementary schools. The writing performance of Hispanic students was higher in Large elementary schools than in either Very Small or in Small elementary schools in four of the five school years of data they analyzed. Thus, in both the Zoda et al. (2011a)

and (2011b) investigations, the academic performance of Black and Hispanic students was statistically significantly higher in Large elementary schools than in either the Very Small or the Small elementary schools.

In a review of empirical evidence about school size effects, Leithwood and Jantzi (2009) examined 57 post 1990 empirical studies of school size effects on organizations and student performance. They determined that smaller schools worked better for students who were historically struggling or who were in poverty. They suggested that for students who were economically disadvantaged, an ideal size for elementary school would be 300 students or less and for a secondary school would be 600 students or less. Furthermore, for students who were relatively advantaged, the maximum size for an elementary school would be about 500 students and the maximum size for a secondary would be about 1,000 students. However, Leithwood and Jantzi (2009) indicated that although smaller schools might be an advantage to most students, some evidence was present to recommend larger schools for increasing student achievement in high schools.

In a conceptual analysis, Zoda et al. (2011c) reviewed the empirical literature concerning the relationship between elementary school size and student academic performance. The authors noted in their literature review that student achievement in reading and mathematics was poorer in some studies in large elementary schools. Zoda et al. (2011c) suggested rephrasing the question "What is the optimum school size?" with the question of "What is the optimal school size range for Hispanic students in elementary schools to achieve well academically?" The question they posed could obviously be modified for schools with high enrollments of Black students or students in poverty. Student demographic characteristics such as ethnic/racial groups and percentage

of low s students in poverty as well as the desired academic achievement outcome should be considered as part of determining the optimal size of a particular level of schools (Zoda et al., 2011c).

Statement of the Problem

School leaders are capable of having major and positive effects on student learning and achievement (Leithwood, Patten, & Jantzi, 2010). However, school principals have many responsibilities and duties they are required to accomplish and juggle every day. For example, they have to meet with parents, monitor student's attendance and discipline, manage staff members, and complete required paperwork. However, the principals structure their day and allocate a certain amount of time to each activity based on their preferences. In addition, often principals select the areas of training and coaching for teachers they feel the most important for their campuses.

Regarding school size, the number of students enrolled at a campus has been documented as a statistically significant factor influencing student academic performance (Zoda et al., 2011a, 2011b, 2011c). Nevertheless, an absence of research is present into the role of principals, the way they spent their time at work on certain tasks, and how they train their teachers as a function of the student enrollment at their campuses or school size. The assumption should not be made that principal behavior is the same regardless of the student enrollment at their campuses. Empirical analyses of principal behavior at different size school campuses, with respect to student enrollment, are essential to ascertain whether principals behave differently or similarly based upon the student enrollment at their campuses. As such, this study is important because information obtained herein may fill a void in the extant research literature.

Purpose of the Study

The purpose of this study was to analyze the relationship of school size with the way school principals report they spend their time during the school day and the way they train their teachers. The extent to which school size influences the way principals behave and train their teachers was investigated. Particularly, differences among principals with respect to the number of hours they spent on average per week working in instructional issues, in internal school management, in student discipline and attendance, in monitoring hallways, teaching, in talking and meeting with parents, and in required paperwork based on school size was addressed. In addition, differences among principals based on school size on how they train teachers in effective reading strategies, effective mathematics strategies, behavioral support, collecting and managing data, and interpreting and using data were examined. Through analyzing a national data, the extent to which trends were present between school size and principal emphasis or focus was determined.

Significance of the Study

School leaders have a complex job because of the diversity of tasks and functions of management. According to Whitaker (2012), school leaders should emphasize people and not programs by building capacity and developing teachers. Principals are only second to effective teachers in improving student achievement (Leithwood, Day, Sammons, Harris, & Hopkins, 2008). In addition, several studies (Zoda et al., 2011a, 2011b) were conducted on the influence of school size on student achievement. In this research investigation, the relationship of school size with what principals emphasize was addressed. Because a national dataset was analyzed herein, findings of this study should be generalizable to elementary school principals in the United States. Finally, findings

may have practical implications for school district leaders and policymakers to incorporate changes to their professional development, coaching, and mentoring programs for new principals along with developing preparation programs for prospective principals.

Research Questions

In this empirical investigation, the following overarching research questions were addressed: (a) What is the effect of school size on the number of hours school principals report they spend on average per week in different activities? and (b) What is the effect of school size on the way school principals train teachers? Research subquestions related to specific goals and objectives are: (i) What is the effect of school size on the number of hours principals report they spend on average per week on working with teachers in instructional issues?; (ii) What is the effect of school size on the number of hours principals report to spend on average per week in internal school management such as weekly calendars, vendors, office, and memos?; (iii) What is the effect of school size on the number of hours principals report to spend on average per week in student discipline and attendance?; (iv) What is the effect of school size on the number of hours principals report to spend on average per week in monitoring hallways, playground, lunchroom?; (v) What is the effect of school size on the number of hours principals report to spend on average per week in teaching?; (vi) What is the effect of school size on the number of hours principals report to spend on average per week in talking and meeting with parents?; (vii) What is the effect of school size on the number of hours principals report to spend on meeting with students?; (viii) What is the effect of school size on the number of hours principals report to spend on average per week in paperwork required by local,

state, or federal authorities?; (ix) What is the effect of school size on how principals train teachers in effective reading strategies?; (x) What is the effect of school size on how principals train teachers in effective mathematics strategies?; (xi) What is the effect of school size on how principals train teachers in behavior strategies?; (xii) What is the effect of school size on how principals train teachers in collecting and managing data?; and (xiii) What is the effect of school size on how principals train teachers in interpreting and using data?

Method

Research Design

A non-experimental, causal-comparative research design (Creswell, 2014; Johnson & Christensen, 2014) was used for this study. National archival data were analyzed to examine whether differences were present in the way school principals report they spend their time on average per week in different activities and specific areas of focus when training teachers as a function of the student enrollment of their campuses. The dependent variables of average number of hours spent on different activities and areas of training teachers had already occurred. Thus, in this non-experimental, causal-comparative research, no manipulation of the independent variable could have occurred (Johnson & Christensen, 2014).

The independent variable in this investigation was school size as determined by student enrollment and the dependent variables were the number of hours spent by week by school principals in different activities (i.e., working with teachers on instructional issues, internal school management, student discipline/ attendance, monitoring hallways, teaching, talking and meeting parents, meeting with students, and required paperwork)

and training options for teachers (i.e., train teachers in the delivery effective reading instruction, train teachers in the delivery of effective mathematics instruction, train teachers in the delivery of effective behavioral support, train teachers in collecting and managing assessment data, and train teachers in interpreting and using assessment data). School size groupings based on student enrollment were: Small-size schools were schools with less than 400 students, Moderate-size schools were schools with 400 to 799 students, and Large-size schools were schools with 799 or more students (Zoda et al., 2011a, 2011b).

Participants and Instrumentation

The unit of analysis used for this study was public and private school administrators of campuses across the United States. Principals, head of schools, or other administrators were asked to complete a questionnaire voluntarily as part of the survey for Early Childhood Longitudinal Study- Kindergarten Class 2010-2011 (ECLS-K) in the Spring of 2011 and Sspring of 2012 (National Center for Education Statistics, 2011, 2012, 2017b). The number of public and private school administrators who completed the administrator survey in the Spring of 2011 and Spring of 2012 was around 6,000.

The ECLS-K self-administered questionnaire was intended to collect information about the school, student achievement, student demographics, school policies, teachers, school climate, as well as demographic characteristics of the school's principal of headmaster. The ECLS-K School Administrator Questionnaire was administered in the Spring of 2011 and Spring of 2012 and was divided into eight sections. In the first section of the Spring 2011 questionnaire, the school characteristics section, school administrators were asked to enter the total school enrollment. In the last section of the

Spring 2011 questionnaire, the school administrator characteristics section, school administrators were asked to record the number of hours they spend on average per week in working with teachers on instructional issues; internal school management; student discipline/ attendance; monitoring hallways, playground, lunchroom; teaching; talking and meeting with parents; meeting with students; and paperwork required by local, state, or federal authorities. In the seventh section of the Spring 2012 School Administrator Questionnaire, school administrators were asked to record if they provided training for teachers in the delivery of effective reading instruction; in delivery of effective mathematics instruction; in delivery of effective behavioral supports; in collecting, organizing, and managing assessment data, or in interpretation and use assessment data to guide instruction.

Results

With respect to the first research question, the multiple dependent variables consisted of continuous and interval level data (i.e., working with teachers on instructional issues, internal school management, student discipline/attendance, monitoring hallways, teaching, talking and meeting parents, meeting with students, and required paperwork). As such, a multivariate analysis of variance (MANOVA) statistical analysis was conducted. However, prior to conducting any inferential statistical procedures, the underlying assumptions of the MANOVA procedure were checked. Specifically examined were data normality, Box's Test of Equality of Covariance and the Levene's Test of Equality of Error Variances. Although the majority of these assumptions were not met, the robustness of a MANOVA procedure made it appropriate to use on the data in this study (Field, 2013).

The MANOVA revealed a statistically significant difference, Wilks' $\Lambda = .91, p <$.001, partial $\eta^2 = .046$, in the number of hours spend per week by principals on different activities as a function of school size (i.e., Small-size, Moderate-size, and Large-size). Using Cohen's (1988) criteria, the effect size was small. Univariate follow-up analysis of variance procedures revealed statistically significant differences in the number of hours per week working with teachers, F(2, 8128) = 123.03, p < .001, partial $\eta^2 = .029$, a small effect size; on school management, F(2, 8128) = 13.20, p < .001, partial $\eta^2 = .003$, a below small effect size; the number of hours per week working on discipline and attendance, F(2, 8128) = 32.07, p < .001, partial $\eta^2 = .008$, a below small effect size; in the number of hours per week monitoring school areas, F(2, 8128) = 114.42, p < .001, partial $\eta^2 = .027$, a small effect size; in the number of hours per week spent on teaching, F(2,8128) = 41.76, p < .001, partial $\eta^2 = .018$, a small effect size; in the number of hours per week meeting with parents, F(2, 8128) = 89.45, p < .001, partial $\eta^2 = .021$, a small effect size; in the number of hours per week meeting with students, F(2, 8128) = 44.95, p <.001, partial η^2 = .022, a small effect size; and in the number of hours per week working on required paperwork, F(2, 8128) = 2.42, p < .001, partial $\eta^2 = .011$, a small effect size. With respect to the statistically significant differences, a small effect size was present for the number of hours per week working with teachers, monitoring school areas, and meeting with students. A below small effect size was present for the number of hours working on school management, discipline and attendance, spent teaching, meeting with parents, and working on required paperwork (Cohen, 1988).

To determine which pairs of school size groups differed from each other in the way school principals spent their time weekly on different activities, Scheffe' post hoc

procedures were conducted. These post hoc procedures revealed that statistically significant differences were present by school size in several areas of emphasis. Principals of Large-size schools spent more hours working with teachers, on school management, discipline and attendance, meeting with parents, meeting students, and on required paperwork than principals of Small-size schools and principals of Moderate-size schools. Interestingly, a stair-step effect was present for the amount of time spent working with teachers, on school management, discipline and attendance, meeting with parents, meeting with students, and required paperwork in that the greater the student enrollment number of the school the higher the amount of hours spent on each individual task. Tables 4.1, 4.2, and 4.3 contain the descriptive statistics for the number of hours spent by principals on different activities by their years of experience as principals. It is important to note that principals reported working a different total number of hours per week depending on their student enrollment. In fact, principals of Large-size schools reported spending more than 60 hours, principals of Moderate-size schools about 56 hours, and principals of Small-size schools about 49 hours per week working.

Insert Tables 4.1, 4.2, and 4.3 about here

Principals reported spending different numbers of hours on the administrator survey questionnaire. Accordingly, principals of Small-size schools reported spending about 49 hours, principals of Moderate-size schools almost 56 hours, and principals of Large-size schools more than 60 hours per week working on a variety of activities. Principals could have spent the same numbers hours in a particular task, yet those hours

could have represented different percentages of their total work because they spent less hours per week at work. Thus, the decision was made to transform their hours worked in each of the areas to a percentage of their total workweek. Furthermore, transforming the hours worked in each area to a percent of the total hours worked provides an alternative prospective and analysis of the way principals emphasize certain activities and goals.

After calculating these percentages, a MANOVA statistical analysis was conducted. Prior to conducting any inferential statistical procedures, the underlying assumptions of the MANOVA procedure were checked. Specifically examined were data normality, Box's Test of Equality of Covariance and the Levene's Test of Equality of Error Variances. Although the majority of these assumptions were not met, the robustness of a MANOVA procedure made it appropriate to use on the data in this study (Field, 2013).

The MANOVA revealed a statistically significant difference, Wilks' Λ = .935, p < .001, partial η^2 = .033, in the percentage of hours spend per week by principals on different activities as a function of school size (i.e., Small-size, Moderate-size, and Large-size). Using Cohen's (1988) criteria, the effect size was small. Univariate follow-up analysis of variance procedures revealed statistically significant differences in the percentage of hours per week working with teachers, F(2, 8128) = 45.99, p < .001, partial η^2 = .011, a small effect size; on school management, F(2, 8128) = 30.14, p < .001, partial η^2 = .007, a below small effect size; in the percentage of hours per week monitoring school areas, F(2, 8128) = 64.79, p < .001, partial η^2 = .016, a small effect size; in the percentage of hours per week spent on teaching, F(2, 8128) = 118.88, p < .001, partial η^2 = .028, a small effect size; in the percentage of hours per week meeting with students,

F(2, 8128) = 37.01, p < .001, partial $\eta^2 = .009$, a below small effect size. Statistically significant differences were also yielded in the percentage of hours per week working on discipline and attendance, F(2, 8128) = 3.40, p = .03, partial $\eta^2 = .001$, a below small effect size; in the percentage of hours per week meeting with parents, F(2, 8128) = 2.91, p = .05, partial $\eta^2 = .001$, a below small effect size; and in the percentage of hours per week working on required paperwork, F(2, 8128) = 5.59, p = .004, partial $\eta^2 = .001$, a below small effect size. Therefore, with respect to the statistically significant differences, a small effect size was present for the percentage of hours per week working with teachers, monitoring school areas, and teaching. A below small effect size was present for the percentage of hours working on school management, working on discipline and attendance, meeting with students, meeting with parents, and working on required paperwork (Cohen, 1988).

To determine which pairs of school size groups differed from each other in the area of emphasis, Scheffe' post hoc procedures were conducted. These post hoc procedures revealed that statistically significant differences were present by school size in several areas of emphasis. Principals of Large-size schools spent a larger percentage of their time working with teachers and on paperwork than Principals of either Small-size schools or Moderate-size schools. In contrast, Principals of Large-size Schools spent a smaller percentage of their hours working on discipline and attendance and monitoring areas than Principals of Small-size schools and Moderate-size schools. Interestingly, a stair-step effect was present for the percentage of time spent for working with teachers in that the greater the size of the school, the higher the percentage of hours spent on those tasks. Finally, Principals of Large-size schools spent roughly the same percentage of

time per week, almost 20% on school management as working with teachers. Delineated in Tables 4.4, 4.5, and 4.6 are the descriptive statistics for the percentage of hours spent by principals on different activities by their years of experience as principals.

Insert Tables 4.4, 4.5, and 4.6 about here

To answer the second research question regarding the effect of school size on the way school principals train teachers, Pearson chi-square procedures were calculated.

This statistical procedure was viewed as the optimal statistical procedure to use because frequency data were present for the way in which principals reported they trained their teachers and for school size. As such, chi-squares are the preferred statistical procedure when both variables are categorical (Field, 2013). Furthermore, with the large sample size, the available sample size per cell was more than five. Thus, the assumptions for utilizing a chi-square were met.

For training staff in effective reading teaching strategies, the result, $\chi^2(2) = 252.40$, p < .001, yielded an effect size, Cramer's V, that was small, .17 (Cohen, 1988). Regarding training staff in effective mathematics teaching strategies, the result was also statistically significant, $\chi^2(2) = 232.22$, p < .001. The effect size for this finding, Cramer's V, was small, .17 (Cohen, 1988). With respect to training staff in behavioral support, the result was statistically significant, $\chi^2(2) = 24.24$, p < .001. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). Concerning training staff in collecting and managing data, the result, $\chi^2(2) = 198.82$, p < .001, yielded an effect size, Cramer's V, that was small, .15 (Cohen, 1988). Regarding training staff in

interpreting and using data, the result was also statistically significant, $\chi^2(2) = 97.04$, p < .001. The effect size for this finding, Cramer's V, was small, .11 (Cohen, 1988). Effect sizes for these analyses were small for four training areas and below small in one training area.

As revealed in Table 4.7, for all five training areas, a stair-step effect was present for the percentage of principals who trained their staff in all five areas. The higher the student enrollment number was, the higher the percentage of principals who trained their staff. Principals of Large-size schools, Moderate-size schools, and Small-size schools placed a similar emphasis on training staff in behavioral support with 31.5%, 36.7%, and 37.6% respectively providing the training. Interestingly, the three training areas with the highest emphasis for all principals, regardless of student enrollment, were training staff in effective teaching of reading strategies, in collecting and managing data, and in interpreting and using data. On the other hand, training staff in behavioral support received the lowest emphasis regardless of student enrollment numbers. Revealed in Table 4.7 are the descriptive statistics for these analyses.

Insert Table 4.7 about here

Discussion

In this empirical national investigation, the way in which principals reporting spending their time at work was examined as a function of their school size, with respect to student enrollment. Analyses were conducted of principal responses obtained from the National Center for Education Statistics, a national dataset. Inferential statistical

procedures revealed statistically significant differences were present on how principals reported spending their time at work as function of their school size. Revealed in the findings were that principals of Large-size schools spent most of their time, about 23 hours per week working with teachers and on school management, substantially more than principals of either Small-size or Moderate-size schools. In addition, it is important to note that principals worked a different number of hours per week depending on the student enrollment number. In fact, principals of Large-size schools reported spending more than 60 hours, Moderate-size about 56 hours, and Small-size about 49 hours per week working on a variety of activities.

After converting work hours into a percentage of the total work week, principals of Large-size schools spent a larger percentage of their day working with teachers and on required paperwork than principals of either Small-size schools or Moderate-size schools. In contrast, principals of Large-size schools spent a smaller percentage of their day working on discipline and attendance and monitoring areas than principals of Small-size schools and Moderate-size schools. Additionally, when examining the areas of training of teachers, regardless of the student enrollment number, principals focused on training teachers in effective teaching of reading strategies, in collecting and managing data, and in interpreting and using data. However, a higher percentage principals of Large-size school indicated providing training teachers in all five training areas than principals of either Moderate-size school or Small-size schools.

Connection with Existing Literature

Extensive literature can be located on school size with researchers providing conflicting results regarding optimal school size and effect on student achievement

(Leithwood & Jantzi, 2009; Slate & Jones, 2005; Zoda et al., 2011a, 2011b, 2011c). Furthermore, several studies have been conducted on the duties of principals and the way they empathize or prioritize tasks (Henkel & Slate, 2013; Horng et al., 2010). However, an absence of studies is present into the way principals spent their work time on specific activities and how they train their teachers as a function of the student enrollment of their campuses.

Revealed in this investigation are the way principals spent their time at work on various tasks and the way they train their teachers. Principals of Large-size schools reported spending 20 hours per week working teachers, principals of Moderate-size schools about 19 hours, and principals of Small-size schools about 17 hours. Overall, principals indicated working different number of hours per week. In fact, principals of Large-size schools recorded spending more than 60 hours, principals of Moderate-size schools about 56 hours, and principals of Small-size schools about 49 hours per week. In this study, all principals, regardless of student enrollment, indicated the focus on training staff in effective teaching of reading strategies, in collecting and managing data, in interpreting and using data. A stair-step effect was present for the percentage of principals who trained their staff in all five areas in that the more students who were enrolled, the higher the percentage of principals who trained their staff.

Implications for Policy and for Practice

The role of principals keeps shifting and changing consistently. In fact, the job of a principal is becoming more complex and more demanding due to the increase of local, state, and federal accountability as well as the increase of the number of students in

poverty. Principals are asked to handle personnel issues, instruction, finance, paperwork, and public relation (Lynch, 2012).

Documented in this investigation was the presence of statistically significant relationship between student enrollment numbers and the number of hours spent working on a variety of activities. Principals of Large-size schools spend an average of 11 hours more the principals of Small-size schools at work weekly. Local districts officials should ensure that principals of Large-size schools are provided the proper compensation for the extra time and effort. In addition, they should provide them with the extra support and assistance to minimize the risk of burnout and possible turnover. Principals of Large-size schools have a larger number of teachers. Thus, they need to spend more time working, coaching, and developing teachers. As such, local district officials should minimize the paperwork requirements and the number of times principals get pulled for central office meetings.

Principals of Large-size schools spent more time at work and emphasized training their teachers more than Moderate-size and Small-size schools. Therefore, local district should tailor their professional development programs to include differentiated trainings for principals and for teachers based on the student enrollment number. Additionally, principals of Large-size schools should be provided with more instructional coaches and teacher development specialist to assist them in providing their teachers with the necessary training.

Recommendations for Future Research

Based upon the results of this empirical analysis, several recommendations for future research can be made. First, only one year of data were analyzed in the

investigations. Thus, analyzing several years of data could assist researchers in determining possible trends in areas of emphasis of principals and school enrollment. Second, broadening the scope of these examinations to include middle schools and high schools could beneficial. In fact, analyzing the difference in way principals spent their work time at the middle and high school level could provide local and state officials some recommendations to ameliorate their secondary principal preparation programs and campus support. Third, an evaluation of the cost of providing the necessary trainings for the teachers as a function of student achievement could provide relevant data with regard to the presence or not of desired student performance growth. Fourth, an evaluation of the differences that might exist in high school student graduation rate by the way principal emphasize training their teachers could extend the current literature that exists on graduation rates.

Conclusion

For the purpose of this empirical investigation, a national dataset was acquired from the National Center for Education Statistics. Specifically acquired were the hours spent by principals at work on various activities, training categories for teachers, and student enrollment number. Three school categories were generated based on student enrollment: Large-size schools, Moderate-size schools, and Small-size schools. Then, the areas principals emphasized and the way they trained their teachers were analyzed by school enrolment number. Statistically significant differences were revealed in the way principals spent their work time and how they trained their teachers as a function of student enrollment. Principals of Large-size schools spent more hours working weekly than principals of Moderate-size and Small-size schools. Moreover, principals of Large-

size schools spent a bigger percentage of their time working with teachers and on required paperwork than principals of Moderate-size and Small-size schools. In regard to areas of training teachers, a higher percentage of principals of Large-size schools emphasized training teachers than did principals of either Moderate-size or Small-size schools. Interestingly, principals emphasized mostly training staff in effective teaching of reading strategies, in collecting and managing data, in interpreting and using data regardless of student enrollment numbers.

References

- Borg, D., & Slate, J. R. (2014). Principals' leadership emphases as a function of school performance. *Frontiers in Education*, 2(1), 1-5.
- Borland, M. V., & Howsen, R. M. (2003). An examination of the effect of elementary school size on student academic achievement. *International Review of Education*, 49(5), 463-474. doi:10.1023/A:1026348922511
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.).

 Hillsdale, NJ: Lawrence Erlbaum.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- Field, A. (2013). Discovering statistics using SPSS (4th ed.). Thousand Oaks, CA: Sage.
- Henkel, B. L., & Slate, J. R. (2013). Differences in what public and private school principals emphasize in their schools. *Journal of Education Research*, 7(2), 103-110.
- Horng, E. L., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness. *American Journal of Education*, 116(4), 491-523
- Johnson, B., & Christensen, L. (2014). Educational research: Quantitative, qualitative, and mixed approaches (5th ed.). Los Angeles, CA; Sage.
- Kaplan, L. S., Owings, W. A., & Nunnery, J. (2005). Principal quality: A Virginia study connecting Interstate School Leaders Licensure Consortium standards with student achievement. NASSP Bulletin, 89, 28-44. doi:10.1177/019263650508964304

- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. Retrieved from http://dera.ioe.ac.uk/6967/1/download%3Fid%3D17387%26filename%3Dseven-claims-about-successful-school-leadership.pdf
- Leithwood, K., & Jantzi, D. (2009). A review of empirical evidence about school size effects: A policy perspective. *Review of Educational Research*, 79(1), 464-490. doi:10.3102/0034654308326158
- Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership influences student learning. *Educational Administration Quarterly*, 46(5), 671-706. doi:10.1177/0013161X10377347
- Lynch, J. J. (2012). Responsibilities of today's principal: Implications for principal preparation programs and principal certification policies. *Rural Special Education Quarterly*, 31(2), 40-47.
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). School leadership that works:

 From research to results. Alexandria, VA: Association for Supervision and
 Curriculum Development.
- National Center for Education Statistics. (2011). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Spring School Administrator Questionnaire.

 Retrieved from

 https://nces.ed.gov/ecls/pdf/kindergarten2011/Spring_K_School_Administrator.p

 df
- National Center for Education Statistics. (2012). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Spring School Administrator Questionnaire for

- New Schools. Retrieved from https://nces.ed.gov/ecls/pdf/firstgrade/Spring_2012_School_Admin_Questionnair e A.pdf
- National Center for Education Statistics. (2017). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Combined user's manual for the ECLS data files

 and electronic codebooks. Retrieved from

 https://nces.ed.gov/ecls/kindergarten2011.asp
- Nettles, S., & Petscher, Y. (2006, April). An examination of the relationship between the implementation practices of school principals and student achievement in reading. Paper presented at the annual American Educational Research Association, San Francisco, CA.
- O'Donnell, R. J., & White, G. P. (2005). Within the accountability era: Principals' instructional leadership behaviors and student achievement. *NASSP Bulletin*, 89, 56-71. doi:10.1177/019263650508964505
- Riha, M., Slate, J. R., & Martinez-Garcia, C. (2013). Middle school size and Hispanic student achievement. *Journal of Education Research*, 7(1), 73-82.
- Slate, J. R., & Jones, C. H. (2005). Effects of school size: Review of the literature with recommendations. *Essays in Education*, 13. Retrieved from http://edresearch.yolasite.com/resources/slate.pdf
- Spillane, J. J., Camburn, E. M., & Pareja, A. S. (2007). Taking a distributed perspective to the school principal's workday. *Leadership and Policy in Schools*, 6(1), 103-125. doi:10.1080/15700760601091200

- Texas Education Agency. (2016). Enrollment in Texas public schools, 2015-2016.

 Retrieved from the Texas Education Agency website:

 http://tea.texas.gov/acctres/enroll_2015-16.pdf
- Weiss, C. C., Carolan, B. V., & Baker-Smith, E. C. (2010). Big school, small school:

 (Re) testing assumptions about high school size, school engagement and mathematics achievement. *Journal of Youth and Adolescence*, 39(2), 163-176. doi:10.1007/s10964-009-9402-3
- Whitaker, T. (2012). What great principals do differently: 18 things that matter most (2nd ed.). Larchmont, NY: Eye on Education.
- Zoda, P. F., Combs, J. P., & Slate, J. R. (2011a). Black student performance and elementary school size: A 5-year statewide investigation. *The ACEF Journal*, 2(1), 43-64.
- Zoda, P. F., Combs, J. P., & Slate, J. R. (2011b). Public school size and Hispanic achievement in Texas: A 5-year statewide investigation. *Educational Research for Policy and Practice*, 10(3), 171-188. doi:10.1007/s10671-011-z
- Zoda, P. F., Combs, J. P., & Slate, J. R. (2011c). Elementary school size and student performance: A conceptual analysis. *International Journal of Educational Leadership Preparation*, 6(4), 1-20.

Table 4.1

Descriptive Statistics for the Number of Hours Spent per Week for Principals of Smallsize Schools

Area of Emphasis	М	SD
Working with Teachers	8.37	5.30
School Management	10.85	7.48
Discipline and Attendance	5.35	4.62
Monitoring School Areas	5.33	4.02
Teaching	1.86	4.53
Meeting with Parents	5.39	3.58
Meeting with Students	4.93	3.52
Working on Required Paperwork	6.97	5.75

Note. The number of principals of Small-size schools in this analysis was 2,628.

Table 4.2

Descriptive Statistics for the Number of Hours Spent per Week for Principals of

Moderate-size schools

Area of Emphasis	M	SD
Working with Teachers	10.62	8.08
School Management	10.54	7.23
Discipline and Attendance	6.28	5.75
Monitoring School Areas	7.32	6.09
Teaching	0.91	1.66
Meeting with Parents	6.03	3.58
Meeting with Students	6.32	4.92
Working on Required Paperwork	8.08	6.94

Note. The number of principals of Moderate-size schools in this analysis was 4,260.

Table 4.3

Descriptive Statistics for the Number of Hours Spent per Week for Principals of Large
Schools

Area of Emphasis	M	SD
Working with Teachers	11.83	7.40
School Management	11.77	7.87
Discipline and Attendance	6.58	5.70
Monitoring School Areas	6.42	4.79
Teaching	1.47	3.55
Meeting with Parents	6.65	5.03
Meeting with Students	6.47	4.86
Working on Required Paperwork	9.07	7.96

Note. The number of principals of Large-size schools in this analysis was 1,243.

Table 4.4

Descriptive Statistics for the percentage of Hours Spent per Week for Principals of Small-size schools

Area of Emphasis	М%	SD%
Working with Teachers	17.02	9.10
School Management	22.04	13.67
Discipline and Attendance	10.71	7.06
Monitoring School Areas	11.10	7.63
Teaching	4.01	1.01
Meeting with Parents	11.12	6.60
Meeting with Students	9.85	5.47
Working on Required Paperwork	14.15	10.10

Note. The number of principals of Small-size schools in this analysis was 2,628.

Table 4.5

Descriptive Statistics for the Percentage of Hours Spent per Week for Moderate-size schools

Area of Emphasis	М%	SD%
Working with Teachers	18.90	10.86
School Management	19.64	12.48
Discipline and Attendance	11.09	7.73
Monitoring School Areas	12.87	7.61
Teaching	1.65	2.78
Meeting with Parents	10.76	5.76
Meeting with Students	11.07	6.08
Working on Required Paperwork	14.02	9.07

Note. The number of principals of Moderate-size schools in this analysis was 4,260.

Table 4.6

Descriptive Statistics for the Percentage of Hours Spent per Week for Principals of

Large-size schools

Area of Emphasis	M%	SD%
Working with Teachers	20.10	12.27
School Management	19.99	11.01
Discipline and Attendance	10.60	5.66
Monitoring School Areas	10.87	6.19
Teaching	2.10	3.34
Meeting with Parents	10.91	5.81
Meeting with Students	10.41	5.13
Working on Required Paperwork	15.02	8.78

Note. The number of principals of Large-size schools in this analysis was 1,243.

Table 4.7

Frequencies and Percentages for the Training Areas by School Size

	Di	d Train	Did No	t Train
School Group	n	%	n	%
Small-size schools				
Reading Strategies	1,218	43.9	1,558	56.1
Mathematics Strategies	682	24.6	2,092	75.4
Behavioral Support	875	31.5	1,901	68.5
Collecting and Managing Data	1,153	41.5	1623	58.5
Interpreting and Using Data	1,258	45.3	1,518	54.7
Moderate-size schools				
Reading Strategies	2,406	54.2	2,037	45.8
Mathematics Strategies	1,706	38.5	2,722	61.5
Behavioral Support	1,625	36.7	2,802	63.3
Collecting and Managing Data	2,422	54.7	2,006	45.3
Interpreting and Using Data	2,421	54.7	2,007	45.3
Large-size schools				
Reading Strategies	890	70.6	370	29.4
Mathematics Strategies	589	46.7	671	53.3
Behavioral Support	480	37.6	795	62.4
Collecting and Managing Data	796	63.3	461	45.3
Interpreting and Using Data	769	60.3	506	39.7

CHAPTER V

DISCUSSION

The federal and state accountability standards for school campuses and school districts have been rising in the past few years, making it increasingly more difficult to meet. Thus, the role of principal is becoming more crucial to meet these standards. In fact, the role of school leaders may be second only to classroom teaching (Borg &Slate). However, the principal job is very complex and demanding. Principals are required to be instructional manage instruction, building maintenance, personnel, students, finance, and school image creating a higher principal turnover than in previous decades. In this journal-ready dissertation, the relationships of student achievement (i.e., reading; mathematics; science) and principal emphasis as with principal years of experience as well as the relationship of principal emphasis and areas of training for teachers with school size were addressed.

In this chapter, results across all three investigations are synthesized. In the first research investigation, the relationship of student achievement in reading, mathematics, and science with principal years of experience was determined. In the second study, the extent to which principal years of experience was related to the way principals emphasized various activities or spent their time at work was analyzed. Finally, in the third research article, the extent to which principals emphasized various activities and training areas for teachers as a function of school size, with respect to student enrollment.

Summary of Study One Results

In the first research article, student achievement in reading, mathematics, and science were analyzed as a function of principal years of experience. Revealed in Table

5.1 are the results of the statistical analysis. Inferential statistical procedures revealed the presence of statistically significant differences in the student achievement in reading, mathematics, and science as function of principal years of experience. Clearly, students who were enrolled at schools with Experienced Principals had higher reading, mathematics, and science performance than students who attended schools with either New Principals or Moderately Experienced Principals. This result was commensurate with the results of previous researchers (e.g., Azaiez & Slate, 2017; Brockmeier et al., 2013; Huff et al., 2011).

Table 5.1

Summary of Statistical Analyses of Reading, Mathematics, and Science Performance as a Function of Principal Years of Experience

Subject	Statistically Significant	Effect Size	Highest Performing Group
Reading	Yes	Below Small	Experienced Principal
Mathematics	Yes	Below Small	Experienced Principal
Science	Yes	Below Small	Experienced Principal

Summary of Study Two Results

In the second empirical investigation, the way principals spent their time at work or emphasize their activities were examined as a function of principal years of experience. Statistically significant differences in the way principal spent their time at work were present. Results of the statistical analysis are present in Table 5.2.

Experienced Principals emphasized working with teachers and working on paperwork more than New Principals and Moderately Experienced Principals. However, New Principals emphasized monitoring the school areas, teaching, and meeting with parents more than Experienced Principals and Moderately Experienced Principals. Furthermore, Experienced Principals reported working 53 hours per week, the smallest amount of time among all principal groups. On the other hand, New Principals reported working 58 hours a week, the highest amount of time among all principal groups.

Table 5.2

Summary of Statistical Analyses of Principal Areas of Emphasis as a Function of Principal Years of Experience

Principal Areas of Emphasis	Statistically Significant	Effect Size	Principal Group with Highest Emphasis
Working with Teachers	Yes	Below Small	Experienced Principal
School Management	Yes	Below Small	Moderately Experienced Principal
Discipline and Attendance	Yes	Below Small	Moderately Experienced Principal
Monitoring School Areas	Yes	Below Small	New Principal
Teaching	Yes	Below Small	New Principal
Meeting with Parents	Yes	Below Small	New Principal
Meeting with Students	Yes	Below Small	Moderately Experienced Principal
Working on Paperwork	Yes	Below Small	Experienced Principal

Summary of Study Three Results

In the third study of this journal-ready dissertation, principals' emphasis or the way they spent their time on various activities was examined by school size, with respect to student enrollment number. Statistically significant differences in principals' emphasis by school size were present. Readers are directed to Table 5.3 for a summary of the results of statistically analysis. Principals of Large-size schools spent more time working

with teachers and working on paperwork than principals of Small-size schools and Moderate-size schools. In contrast, principals of Small-size schools emphasized working on school management and meeting with parents more than principals of Large-size schools and principals of Moderate-size schools. Interestingly, principals of Large-size schools worked about 60 hours per week, 4 hours more than principals of Moderate-size schools, and 11 hours more than principals of Small-size schools.

Table 5.3

Summary of Statistical Analyses of Principal Areas of Emphasis as a Function of School
Size

Principal Areas of Emphasis	Statistically Significant	Effect Size	School Size Group with Highest Emphasis
Working with Teachers	Yes	Small	Large-size
School Management	Yes	Below Small	Small-size
Discipline and Attendance	No	Below Small	Moderate-size
Monitoring School Areas	Yes	Small	Moderate-size
Teaching	Yes	Small	Moderate-size
Meeting with Parents	Yes	Below Small	Small-size
Meeting with Students	No	Below Small	Moderate-size
Working on Paperwork	No	Below Small	Large-size

Regarding the way principals emphasized training of teachers emphasized by school size, with respect to student enrollment. Inferential statistical procedures revealed the presence of statistically significant differences in the areas of training that principals emphasized as a function of school size. Principals of Large-size schools emphasized training their teachers in all five areas more than principals of Small-size and principals of Moderate-size schools. Furthermore, all principals regardless of school size emphasized training their teachers in reading strategies, collecting and managing data, and interpreting and using data the most. Table 5.4 contains the summary results for this analysis.

Table 5.4

Summary of Statistical Analyses of Principal Areas of Training as a Function of School

Size

Training Areas	Statistically Significant	Effect Size	School Size Group with Highest Training
Reading Strategies	Yes	Small	Large-size
Mathematics Strategies	Yes	Small	Large-size
Behavior Support	Yes	Below Small	Large-size
Collecting and Managing Data	Yes	Small	Large-size
Interpreting and Using Data	Yes	Small	Large-size

Connection with Existing Literature

Revealed in this journal-ready dissertation was student achievement in reading, mathematics, and science differed as a function of principal years of experience, a finding that is consistent with current literature. In fact, several researchers (e.g., Azaiez & Slate, 2017; Brockmeier, 2013; Huff et al., 2013) documented that principal years of experience has a measurable influence on student academic performance. Commensurate with this study, Azaiez and Slate (2017) indicated students who were enrolled in schools with principals with more than 6 years of experience had statistically significantly higher reading and mathematics performance than students who were enrolled in schools with principals with 6 years or less of experience.

With respect to the way principals spent their work time or emphasized various activities as a function of principal years of experience, a lack of research studies was present in the literature. However, several researchers (e.g., Henkel &Slate, 2013; Horng et al., 2010; Lavigne et al., 2016) investigated principals' emphasis and the way they spend their time. Lavigne et al. (2016) indicated principals' days are complicated and include several daily tasks such as communicating with stakeholders, hiring teachers, appraising teachers, filing required paperwork to the district, meeting with parents, disciplining students, and dealing with crises. Moreover, principals reported spending an average of 59 hours per week on the job with a bigger emphasis on administrative tasks such as completing compliance requirement (Horng et al., 2010).

Regarding the areas of principal emphasis as a function of school size, with respect to student enrollment, a lack of empirical research literature exists. Several researchers (Borland & Howsen, 2003; Slate & Jones, 2005; Zoda et al., 2011a, 2011b)

have previously analyzed student achievement as a function of school size. In both Zoda et al. (2011a) and (2011b) investigations, the academic achievement of Black and Hispanic students was higher in Large elementary schools than in either Very Small or Small schools. However, Leithwood and Jantzi (2009) suggested smaller schools worked better for students who were struggling academically or who were in poverty. Thus, optimal school size should be determined based the student demographics, needs, and socioeconomic status (Zoda et al., 2011).

Implications for Policy and Practice

Principals are faced with a consistently increasing and changing federal and state accountability mandates. School district officials are growing increasingly anxious about quickly turning around schools and improving student achievement without allowing sufficient time, preparation, resources, assistance, and coaching to principals. However, despite concerted efforts at the local level to address principal retention, principal turnover continues to be a salient issue for most school districts, especially for districts with highest percentage of students who were economically disadvantaged (Fuller & Young, 2009). Therefore, many principals are burning out and leaving the principalship for less stressful assignments. As such, school district officials are encouraged to develop principal pathway academies to prepare a select cohort of leaders for the increasing challenges of the principalship by providing them with targeted, timely, and personalized professional development. The cohort will constitute a pool of prospective principals who are better equipped to take on the role of campus leader. In addition, school district officials are encouraged to provide a rigorous and personalized mentoring, support, and coaching opportunities for all new principals for their first three years.

School districts should differentiate their pay scale by ensuring that principals with more than six years of experience are receiving a bigger salary and possibly a retention bonus to encourage them to remain on the job for a longer period of time.

Principals are required to handle instruction, personnel issues, required paperwork, strategic planning, public relations, and finance as well as ensuring their campuses are meeting all local, state, and federal accountabilities (Lynch, 2012). Accordingly, principals have to emphasize and prioritize certain tasks that can bring the highest value added to the organization to improve student achievement. Furthermore, Experienced Principals spent most of their workweek working with teachers. Thus, local school districts in conjunction with state and federal agencies and resources should ensure that professional development efforts target how principals better manage their work load and how to focus more on working with teachers. In addition, state and federal agencies need to examine and reevaluate the mandates and their timelines that are facing principals. As such, they should provide principals with more flexibility and time to meet them as well as they need to minimize required paperwork and documentation to allow principals to spend more time working with teachers.

Principals of Large-size schools spend an average of 11 more hours at work weekly than the principals of Small-size schools. Local districts officials should ensure that principals of Large-size schools are provided the proper compensation for the extra time and effort. Principals of Large-size schools have a larger number of teachers. Moreover, they need to spend more time working, coaching, and developing teachers. As such, local district officials should minimize the number of times principals of Large-size schools are called into central office meetings and provide them with more instructional

coaches to assist with providing teachers with the necessary coaching. Finally, they should provide them with the extra support and assistance to minimize the risk of burnout and possible turnover

Recommendations for Future Research

Given the statistically significant results from the investigations in this journal-ready dissertation, several recommendations for future research can be made. First, because only one year of data were analyzed herein, future researchers are encouraged to analyze more years of data. Extending the study to include several years of data could assist in determining whether national trends are present. Moreover, analyzing several years of data could assist researchers in determining possible trends in areas of emphasis of principals and school enrollment. Second, principals' experience in this study was defined as their total years of experience rather than their years of employment at a particular campus. Accordingly, in future studies, researchers are encouraged to examine the influence of principal years of experience at the same campus on student achievement and on the way principals spent their work time or the activities they emphasized. Third, because the research presented in this journal ready dissertation is based on elementary school data, future studies should include an analysis the influence of principal years of experience on student achievement at the middle and high school level.

Fourth, researchers are recommended to examine whether differences might be present in the way principals spent their work time at the middle and high school level. The degree to which the results of this study would be generalizable to secondary is not known. In fact, analyzing the difference in way principals spent their work time at the middle and high school level could provide local and state officials some

recommendations to ameliorate their secondary principal preparation programs and campus support. Lastly, an examination of the differences that might exist in high school student graduation rate by principal years of experience and by the way principal spent their work time or emphasis could provide relevant data on the influence principal years of experience on the success of high schools. Finally, an analysis of the extent to which differences might exist in high school student graduation rate by the way principal spent their work time or emphasis.

Conclusion

The purpose of this journal-ready dissertation was to determine the relationship of principal years of experience with student achievement (i.e., reading, mathematics, science), relationship of principal years of experience with principal emphasis, and relationship of school size with principal emphasis and area of training for teachers.

After obtaining and analyzing the national dataset from the National Center for Education Statistics, statistically significant differences were revealed in all three studies. Students who were enrolled at campuses with Experienced Principals had higher reading, mathematics, and science performance than students who were enrolled at campuses with either New Principals or Moderately Experienced. In addition, Experienced Principals emphasized more working with teachers and on required paperwork than New Principals and Moderately Experienced Principals.

Regarding school size, principals of Large-size schools emphasized more working with teachers and on required paperwork than principals of Moderate-size schools and Small-size schools. Moreover, principals of Large-size schools placed more emphasis on training their teachers on reading strategies, mathematics strategies, behavioral support,

collecting and managing data, and interpreting and using data than principals of Moderate-size and Small-size schools.

REFERENCES

- Alvoid, L., & Black, W. L. (2014). The changing role of the principal: How high achieving districts are recalibrating school leadership. Washington, DC: Center for American Progress. Retrieved from https://cdn.americanprogress.org/wp-content/uploads/2014/06/PrincipalPD-FINAL.pdf
- Azaiez, H., & Slate, J. R. (2017). Student achievement as a function of principal longevity. *Journal of Advances in Education Research*. 2(3), 157-162. doi:10.22606/jaer.2017.23003
- Baker, B. D., Punswick, E., & Belt, C. (2010). School leadership stability, principal moves, and departures: Evidence from Missouri. *Educational Administration Quarterly*, 46, 523-557. doi:10.1177/0013161X10383832
- Béteille, T., Kalogrides, D., & Loeb, S. (2012). Steeping stones: Principal career paths and school outcomes. *Social Science Research*, *41*, 904-919. doi:10.106/j.ssresearch.2012.03.003
- Borg, D., & Slate, J. R. (2014). Principals' leadership emphases as a function of school performance. *Frontiers in Education*, 2(1), 1-5.
- Borland, M. V., & Howsen, R. M. (2003). An examination of the effect of elementary school size on student academic achievement. *International Review of Education*, 49(5), 463-474. doi:10.1023/A:1026348922511
- Botha, R. J. (2013). Time management abilities of school principals according to gender:

 A case study in selected Gauteng schools. *Africa Education Review*, 10(2), 364-380. doi:10.1080/18146627.2013.853532

- Branch, G. F., Hanushek, E. A. & Rivkin, S. G. (2008, December). *Principal turnover* and effectiveness. Paper presented at the American Economic Association, San Francisco, CA.
- Brockmeier, L. L., Staar, G., Green, R., Pate, J. L., & Leech, D. W. (2013). Principal and school-level effects on elementary school student achievement. *NCPEA International Journal of Education Leadership Preparation*. 8(1), 49-61.

 Retrieved from http://files.eric.ed.gov/fulltext/EJ1013001.pdf
- Bryk, A., Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Coelli, M. M., & Green, D. G. (2012). Leadership effects: School principals and student outcomes. *Economics of Education Review*, 31(1), 92-109. doi:10.1016/j.econedurev.2011.09.001
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- Deal, T. E., & Peterson, K. D. (1999). Shaping school culture: The heart of leadership.

 San Francisco, CA: Jossey-Bass.
- DeAngelis, K. J., & White, B. R. (2011). *Principal turnover in Illinois public schools*, 2001-2008. Illinois Education Research Council. Retrieved from https://ia600209.us.archive.org/28/items/ERIC_ED518191/ERIC_ED518191.pdf

- DiPaola, M., Tschannen-Moran, M., & Walther-Thomas, C. (2004). School principals and special education: Creating the context for academic success. *Focus On Exceptional Children*, 37(1), 1-10.
- Drake, T. L., & Roe, W. H. (2003). *The principalship* (6th ed.). Upper Saddle, NJ: Merrill Prentice Hill.
- Every Student Succeeds Act: A progress report on elementary and secondary education.

 (2015). Retrieved from

 https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/ESSA_Progre
 ss Report.pdf
- Farver, A. R., & Holt, C. R. (2015). Value of coaching in building leadership capacity of principals in urban schools. *NCPEA Education Leadership Review of Doctoral Research*, 2(2), 67-76. Retrieved from http://files.eric.ed.gov/fulltext/EJ1105730.pdf
- Field, A. (2013). Discovering statistics using SPSS (4th ed.). Thousand Oaks, CA: Sage.
- Fuller, E., & Young, M. D. (2009). Tenure and retention of newly hired principals in

 Texas. *Texas High School Project*. Retrieved from

 https://www.researchgate.net/publication/228660740_Tenure_and_Retention_of_

 Newly_Hired_Principals_in_Texas
- Gieselmann, S. S. (2009). Principals and school factors that impact elementary school student achievement. *Mid-Western Educational Researcher*, 22(2), 16-22.
- Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central

- importance of managerial skills. *American Educational Research Journal*, 48(5), 1091-1123. doi:10.3102/0002831211402663
- Harris, D. N., Rutledge, S. A., Ingle, W. K., Thompson, C. C. (2010). Mix and match: What principals really look for when hiring teachers. *Education Finance and Policy*, *5*(2), 228-246.
- Henkel, B. L., & Slate, J. R. (2013). Differences in what public and private school principals emphasize in their schools. *Journal of Education Research*, 7(2), 103-110.
- Hess, F. M., & Kelly, A. P. (2007). Learning to lead: What gets taught in principal-preparation programs. *Teachers College Record*, 109(1), 244-274.
- Horng, E. L., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness. *American Journal of Education*, 116(4), 491-523.
- Huff, T. S., Brockmeier, L. L., Leech, D. W., Martin, E. P., Pate, J. L., & Siegrist, G.(2011). Principal and school-level effects on student achievement. *National Teacher Education Journal*, 4(2), 67-79.
- Johnson, B., & Christensen, L. (2014). Educational research: Quantitative, qualitative, and mixed approaches (5th ed.). Los Angeles, CA; Sage.
- Kaplan, L. S., Owings, W. A., & Nunnery, J. (2005). Principal quality: A Virginia study connecting Interstate School Leaders Licensure Consortium Standards with student achievement. NASSP Bulletin, 89, 28-44.
 doi:10.1177/019263650508964304
- Lavigne, H. J., Shakman, K., Zweig, J., & Greller, S. L. (2016). Principals' time, tasks, and professional development: an analysis of schools and staffing survey data.

- Regional Education Development Center, Inc. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL 201720.pdf
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. Retrieved from http://dera.ioe.ac.uk/6967/1/download%3Fid%3D17387%26filename%3Dseven-claims-about-successful-school-leadership.pdf
- Leithwood, K., & Jantzi, D. (2009). A review of empirical evidence about school size effects: A policy perspective. *Review of Educational Research*, 79(1), 464-490. doi:10.3102/0034654308326158
- Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership influences student learning. *Educational Administration Quarterly*, 46(5), 671-706. doi:10.1177/0013161X10377347
- Levine, A. (2005). *Educating school leaders*. New York, NY: The Education Schools Project.
- Lynch, J. J. (2012). Responsibilities of today's principal: Implications for principal preparation programs and principal certification policies. *Rural Special Education Quarterly*, 31(2), 40-47.
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39(3), 370-397. doi:10.1177/0013161X03253412
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). School leadership that works:

 From research to results. Alexandria, VA: Association for Supervision and
 Curriculum Development.

- Mascall, B., & Leithwood, K. (2010). Investing in leadership: The district's role in managing principal turnover. *Leadership and Policy in Schools*, *9*, 367-383. doi:10.1080/15700763.2010.493633
- Miller, A. (2013). Principal turnover and student achievement. *Economics of Education Review*, *36*, 60-72. doi:10.1016.2013.05.004
- National Center for Education Statistics. (2011). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Spring School Administrator Questionnaire.

 Retrieved from

 https://nces.ed.gov/ecls/pdf/kindergarten2011/Spring_K_School_Administrator.p

 df
- National Center for Education Statistics. (2012). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Spring School Administrator Questionnaire for

 New Schools. Retrieved from

 https://nces.ed.gov/ecls/pdf/firstgrade/Spring_2012_School_Admin_Questionnair

 e A.pdf
- National Center for Education Statistics. (2017a). Early Childhood Longitudinal Program Overview. Retrieved from https://nces.ed.gov/ecls
- National Center for Education Statistics. (2017b). Early Childhood Longitudinal Study,

 Kindergarten class of 2010-2011 Combined user's manual for the ECLS data files

 and electronic codebooks. Retrieved from

 https://nces.ed.gov/ecls/kindergarten2011.asp
- National Center for Education Statistics. (2017c). *National Center for Education-About*Us. Retrieved from https://nces.ed.gov/about

- Nettles, S., & Petscher, Y. (2006, April). An examination of the relationship between the implementation practices of school principals and student achievement in reading. Paper presented at the annual American Educational Research Association, San Francisco, CA.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 1001, 115 Stat. 1425 (2002).
- O'Donnell, R. J., & White, G. P. (2005). Within the accountability era: Principals' instructional leadership behaviors and student achievement. *NASSP Bulletin*, 89, 56-71. doi:10.1177/019263650508964505
- Papa Jr., F., & Baxter, I. (2008). Hiring teachers in New York's public schools: Can the principal make a difference? *Leadership & Policy in Schools*, 7(1), 87-117. doi:10.1080/15700760701655524
- Partlow, M. C., & Ridenour, C. S. (2008). Frequency of principal turnover in Ohio's elementary schools. *Mid-Western Educational Researcher*, 21(2), 15-23.
- Principal [Def. 1]. (2017). *Merriam-Webster Online*. In Merriam-Webster. Retrieved from https://www.merriam-webster.com/dictionary/principal
- Riha, M., Slate, J. R., & Martinez-Garcia, C. (2013). Middle school size and Hispanic student achievement. *Journal of Education Research*, 7(1), 73-82.
- Ringel, J., Gates, S. M., Chung, C., Brown, A., & Ghosh-Dastidar, B. (2004). *Career paths of school administrators in Illinois: Insights from an analysis of state data*.

 Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/pubs/technical_reports/TR123.html
- School Leaders Network. (2014). *Churn: The high cost of principal turnover*. Retrieved from http://connectleadsucceed.org/sites/default/files/principal_turnover_cost.pdf

- Searby, L. J. (2010). Preparing future principals: Facilitating the development of a mentoring mindset through graduate coursework. *Mentoring and Tutoring:*Partnership in Learning, 18(1), 5-22. doi:10.1080/13611260903448292
- Seashore-Louis, K., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010).

 **Learning from leadership: Investigating the links to improved student learning.*

 New York, NY: Wallace Foundation. Retrieved from

 http://www.wallacefoundation.org/knowledge-center/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf
- Shatzer, R. H., Caldarella, P., Hallam, P. R., & Brown, B. L. (2013). Comparing the effects of instructional and transformational leadership on student achievement:

 Implications for practice. *Educational Management Administration and Leadership*, 42, 445-459. doi:10.1177/1741143213502192
- Slate, J. R., & Jones, C. H. (2005). Effects of school size: Review of the literature with recommendations. *Essays in Education*, *13*. Retrieved from http://edresearch.yolasite.com/resources/slate.pdf
- Smith, J. A., & Slate, J. R. (2014). Private school principals of high and low achieving schools and student achievement and teacher collaboration. *Journal of Education Research*, 8(4), 197-202.
- Spillane, J. J., Camburn, E. M., & Pareja, A. S. (2007). Taking a distributed perspective to the school principal's workday. *Leadership and Policy in Schools*, 6(1), 103-125. doi:10.1080/15700760601091200

- Texas Education Agency. (2016). Enrollment in Texas public schools, 2015-2016.

 Retrieved from the Texas Education Agency website:

 http://tea.texas.gov/acctres/enroll_2015-16.pdf
- Tomàs-Folch, M., & Ion, G. (2015). Exploring the management of principal responsibilities in secondary schools in Barcelona: A case study. *International Journal of Educational Organization and Leadership*, 21(3/4), 1-11.
- Valentine, J. W., & Prater, M. (2011). Instructional, transformational, and managerial leadership and student achievement: High school principals make a difference.

 NASSP Bulletin, 95(1), 5-30. doi:10.1177/019263665511404062
- Wallace Foundation. (2013). The school principal as leader: Guiding schools to better teaching and learning. New York, NY: Author. Retrieved from http://www.wallacefoundation.org/knowledge-center/Documents/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning-2nd-Ed.pdf
- Weiss, C. C., Carolan, B. V., & Baker-Smith, E. C. (2010). Big school, small school: (Re) testing assumptions about high school size, school engagement and mathematics achievement. *Journal of Youth and Adolescence*, 39(2), 163-176. doi:10.1007/s10964-009-9402-3
- Whitaker, T. (2012). What great principals do differently: 18 things that matter most (2nd ed.). Larchmont, NY: Eye on Education.
- Zoda, P. F., Combs, J. P., & Slate, J. R. (2011a). Black student performance and elementary school size: A 5-year statewide investigation. *The ACEF Journal*, 2(1), 43-64.

- Zoda, P. F., Combs, J. P., & Slate, J. R. (2011b). Elementary school size and student performance: A conceptual analysis. *International Journal of Educational Leadership Preparation*, 6(4), 1-20.
- Zoda, P. F., Combs, J. P., & Slate, J. R. (2011c). Public school size and Hispanic achievement in Texas: A 5-year statewide investigation. *Educational Research for Policy and Practice*, 10(3), 171-188. doi:10.1007/s10671-011-z

APPENDIX



Institutional Review Board Office of Research and Sponsored Programs 903 Bowers Blvd, Huntsville, TX 77341-2448

Phone: 936.294.4875 Fax: 936.294.3622 irb@shsu.edu

www.shsu.edu/~rgs www/irb/

DATE: June 30, 2017

TO: Hafedh Azaiez [Faculty Sponsor: Dr. John Slate]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: Differences in Student Achievement and Principal Behavior as a Function

of Years of Principal Experience: A National Investigation [T/D]

PROTOCOL #: 2017-06-30208

SUBMISSION TYPE: INITIAL REVIEW

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: June 30, 2017

REVIEW CATEGORY: Category 4—research involving existing, publicly available data usually has

little, if any, associated risk, particularly if subject identifiers are removed

from the data or specimens.

Thank you for your submission of Initial Review materials for this project. The Sam Houston State University (SHSU) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

* What should investigators do when considering changes to an exempt study that could make it nonexempt?

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research. In this case, please make available sufficient information to the IRB so it can make a correct determination.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

Donna Desforges IRB Chair, PHSC

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

VITA

Hafedh Azaiez

EDUCATIONAL HISTORY

Doctorate of Education – Educational Leadership, December 2017

Sam Houston State University, Huntsville, TX

Dissertation: Differences in Student Achievement and Principal Behavior as a Function of Years of Principal Experience: A National Investigation

Master of Education in Administration, EC-12, May 2008 *University of Saint Thomas, Houston, TX*

Bachelor of Science, May 1998 La Faculté des Sceinces Mathématiques Physiques et Naturelles de Tunis, Tunis, Tunisia

PROFESSIONAL EXPERIENCE

Assistant Superintendent of Middle Schools, Spring ISD, March 2015-present Lead Principal, Revere Middle School, Houston ISD, August 2013-March 2015 Principal, Revere Middle School, Houston ISD, June 2010-July 2013 Assistant Principal, Johnston Middle School, Houston ISD, July 2007- June 2010, Teacher- Science, Pin Oak Middle School, Houston ISD, 2005-2007 Teacher- Science, Fonville Middle School, Houston ISD, 2002-2005

RECOGNITIONS

New Principal of the Year Award Nominee, 2011
Harvard University Graduate School of Education Leadership Institute, "Leadership: An Evolving Vision", July 2011
National Blue Ribbon of excellence Award, U.S. Department of Education, 2010
Houston ISD Secondary Teacher of the Year Award Winner, 2007

SCHOLARLY RESEARCH ACTIVITY

Publications

Azaiez, H., & Slate, J. R. (2017). Student achievement as a function of principal longevity. *Journal of Advances in Education Research*, 2(3), 157-162. doi:10.22606/jaer.2017.23003

PRESENTATIONS

Azaiez, H., & Slate, J. R. (2017, October). Student achievement as a function of principal longevity. Paper presented at the annual Texas Council of Professors of Educational Administration Graduate Research Exchange, Houston, TX

Azaiez, H., & Slate, J. R. (2017, February). Student achievement as a function of principal longevity. Poster presented at the American Association of Behavioral and Social Sciences, Las Vegas, NV.

PROFESSIONAL AFFILIATIONS

Association for Supervision and Curriculum Development (ASCD), 2016-present Texas Association of School Administrators, 2016-present