Middle School Principals' Time-on-Tasks and the Relationship to School Performance

Lisa A. Harris

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Travis W. Twiford, Doctoral Committee Chair
Carol S. Cash
John E. Smith
N. Wayne Tripp

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Abstract

The daily, weekly, and unscheduled tasks for school administrators have increased in number and scope over the years, however surprisingly little is known about what principals do on a day-to-day basis and how this varies across schools. Since the effect of principal leadership behaviors, specifically how principals manage their time to accomplish important tasks, is one key to the success of schools, it is important to understand what effective principals do to accomplish this. The purpose of this study was to find out what the differences are in how principals in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance. In the literature review, the researcher identified seven categories of time use to collect and classify time-on-tasks data. The categories include: (a) administration/operations, (b) organization management, (c) day-to-day instruction, (d) instructional program, (e) internal relations, (f) external relations and (g) other (Horng, Klasik, & Loeb, 2010). The researcher collected time-on-tasks data from principals of high and low-performing middle schools in Virginia and analyzed the data to determine what relationships exist between the principal's time-on-tasks and school performance. Data analyses revealed that there are significant differences in the amount of time principals at high-performing schools devote to each of the time-on-tasks categories, as compared to the amount of time allocated by their counterparts at low-performing schools. In this study, principals as a whole and principals in the high-

performing subgroup spend the largest percentage of time on tasks related to administration and operations, while principals in the low-performing subgroup spend the largest percentage of time on day-to-day instruction. Data also suggest that time spent on tasks related to internal relations is positively correlated with student performance on mathematics and reading tests. When demographic factors are combined with the time-on-tasks categories, a regression analysis suggests that the strongest contributing factor to mathematics and reading test scores is the socioeconomic status of the school with a strong negative correlation between the percentage of students on free/reduced lunch and test scores for mathematics and reading.

Dedication

This work is dedicated to my grandmother, Jane Elizabeth Kelley. While gone from this world in body, her spirit is ever present with a guiding force that reverberates still today. Together with my grandfather, Samuel T. Kelley, Sr., my grandmother modeled the values and morals which I hold dear and which I hope to pass on to others. Her faith in me laid the foundation for the faith I have in myself, and started me on the journey that led to the successful completion of this work.

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No one completes this journey alone, and there are many individuals who deserve acknowledgement. I could not have reached this point without the support and encouragement of family, friends, colleagues, and classmates.

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I am indebted to my family, especially my children and my brothers for their steadfast support and belief in me. My family walked this path with me and propped me up when discouraging thoughts loomed.

Finally, I owe a very special thank you to my daughter Heather, who provided encouragement as well as technical assistance with editing.

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Chapter 1

Introduction

No single individual is more important to initiating and sustaining improvement in middle grades school students' performance than the school principal (Jackson & Davis, 2000, p.157).

Context

The daily, weekly, and unscheduled tasks for school administrators have increased in number and scope over the years. In fact, according to Sergiovanni (1987, 2005), the one constant with regard to the principalship is that the role continues to expand. While attempting to manage the growing list of required duties, it is important to remember that "effective instructional leadership is not something principals achieve by following a checklist of tasks or a step-by-step program" (Quinn, 2002, p. 462). According to one recently published report, while "the importance of the principal for school operations is widely acknowledged, surprisingly little is known about what principals do on a day-to-day basis and how this varies across schools" (Horng, Klasik, & Loeb, 2010, p. 491). Considering the influence of the building leader on school climate and student success, it is important to find out just how building administrators spend their time.

Equally important is the question of what if any relationship exists between how principals spend their time and the school's performance level. A study by Horng et al. (2010) revealed that increased time spent on the category of organization management activities is positively associated with school outcomes. Other recent studies have revealed significant differences in how school administrators rank the importance of the

tasks they perform and the corresponding amount of time dedicated to performing those tasks (Black, 2000; Whitaker & Turner, 2000). This conflict in desired activities versus time constraints imposed by required tasks leads to the question of just how school administrators spend their time, and if there is a difference in this time allocation between demographically similar schools with varying performance levels.

Overview of Study

In the literature review, the researcher investigated answers to questions such as: (a) What does the current research say about how middle school administrators spend their time; (b) What issues do middle school administrators face on a daily, weekly, or other regular basis; (c) How do the time management practices of middle school administrators affect school performance indicators; and (d) How do the concepts of time and task management fit in with current theories of educational leadership?

To further expand on this knowledge base from the current research, this study expands on the topic of how middle school principals spend their time by adding the additional element of correlating time-on-tasks with school performance. The researcher recorded and categorized the percentage of time middle school principals spend on categories of time use that were identified in the literature review and analyzed the data to reveal relationships between the principals' time-on-tasks and school performance outcomes in high and low-performing middle schools.

Historical Perspective

The role of the principal has evolved greatly in the last century. "In the early 1900s, the principalship gained professional recognition. In 1917, the First Annual Meeting of the National Association of Secondary School Principals was held, and in

1918, the Report of the National Education Association Commission on the Reorganization of Secondary Education was issued" (Goodwin, Cunningham & Eagle, 2005, p.3). Findings reported in Goodwin et al.'s overview of the changing role of the principal detailed the evolutionary importance that principals played in the development of secondary education programs. From the small schools with no principal at all, to today's large schools with multiple layers of administration, the role of the principal has continued to evolve. As the role has evolved, the number and types of tasks that principals must perform have also changed.

In 1987, Gottfredson and Hybl found the principal's role as being primarily a supervisor of other personnel. The primary responsibilities included observing and evaluating staff, providing feedback, assessing school needs, and planning for school improvement. These tasks continue through today, along with others that have added additional layers to the role.

Other research supports this change in roles to one of multi-tasking manager. According to research findings, in addition to the managerial and political tasks already in place, principals have also been charged with becoming instructional leaders while managing all the variables that affect student performance, even if they happen outside the school building. In 2000, Portin found that, "As new responsibilities are added, principals report their time and attention stretched in multiple directions; neither does it appear that any slowing in principal role change is on the horizon" (p. 494). Grubb and Flessa found in 2006 that "the initiative for developing support services to help low-income students usually falls on the principal" (p. 519), adding further complexity to an already complex job. When these growing expectations are added to the additional

burden of meeting local, state, and national accountability measures, the school

administrator becomes likened to someone who must be "a jack of all trades and a master

of all trades" (Rayfield & Diamantes, 2004, p. 711).

Accountability measures are not new, nor are the concepts of how principal

leadership behaviors affect student outcomes (Hallinger & Heck, 1996). Looking back at

the post-Sputnik time period and continuing into the present time, reformers have looked

at ways to increase student academic achievement. The National Defense Education Act

of 1958, the Elementary and Secondary Education Act of 1965, and the 1983 report on

"A Nation at Risk" have all had an impact on how the school administrator performs the

duties of running a school.

The No Child Left Behind Act (NCLB), of 2001 placed greater emphasis on the

use of standardized testing for schools to document student achievement and to meet

Adequate Yearly Progress (AYP) benchmarks set by the United States Department of

Education (USDOE) that highlight the achievement of students in designated subgroups

(USDOE, 2001). In describing the circumstances of today's principal in the era of No

Child Left Behind, Goodwin et al. (2005) stated:

> Principals are faced with administering batteries of annual tests, assisting
>
> struggling sub-groups of children to meet artificial goals, dealing with more rigid
>
> hiring procedures, considering scientifically based research that provides valid
>
> curricular information, and encouraging parents to become more involved in their
>
> children's education. (p. 9)

This point was repeated in other studies. Researchers in general agree that the need to

meet this standard has changed the way schools, districts, and state education agencies do

business, placing an even greater burden on school administrators to demonstrate the effectiveness of their schools through student achievement (Smith, 2005).

Statement of the Problem

Much has been written about the concept of principal leadership behaviors. Many of the studies focused on the various theories of leadership and the effect on school outcomes. Transformational leadership, instructional leadership, organizational leadership, distributed leadership, and blended leadership styles are all addressed and cited as having varying degrees of effectiveness. The experts tend to emphasize the importance of instructional leadership as the primary way principals can improve teaching and learning (Black, 2000; Leithwood & Jantzi, 2005; Leithwood & Jantzi, 2008; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004; Marks & Printy, 2003; Robinson, Lloyd, & Rowe, 2008).

Principal leadership has been widely recognized as one factor that makes a difference in school performance levels. While researchers vary in their conclusions about the effect sizes of principal leadership behaviors on student achievement, there is a broad consensus that the principal plays a key role in creating the conditions for learning (Branch, 2008; Hallinger & Heck, 1996; Jackson & Davis, 2000; Leithwood & Jantzi, 2008;Robinson et al., 2008). Experts also agree that instructional leadership is just one aspect of the principal's job. From analyzing the work life of a single principal to the statewide study of administrator attitudes towards school-related tasks, the consensus is that the job of the administrator is complex and demanding (Barker, 2007; Marks & Printy, 2003; O'Donnell & White, 2005;).

Recent findings outlined in reports generated as part of the Wallace Foundation's *Learning from Leadership* project supported the conclusions drawn about the complexity and importance of the principal's job (Seashore Louis, Leithwood, Wahlstrom, & Anderson, 2010). This extensive six-year study by researchers from the University of Minnesota and the University of Toronto was published in phases as it attempted to pinpoint the key leadership factors linked to student achievement and how those leadership factors interact with student and family background, school conditions, classroom conditions, and major stakeholders. A key finding listed in much of the above literature was the influence of leadership on learning, ranking a principal's leadership as second in strength only to classroom instruction when considering factors that influence student achievement. Of even greater interest is the finding that a leader's contribution to student learning "depends a great deal on their judicious choice of what parts of their organization to spend time and attention on" (Leithwood, Seashore Louis, et al., 2004, p.13).

Given the complexity of leadership, it is understandable that many researchers attempt to quantify the elusive qualities and behaviors that separate those leaders who inspire and those who do not. However, the literature still leaves unanswered the question of "what is missing from those schools that continually fail to provide an exceptional education for all students" (Quinn, p. 462). After noting the gaps in the literature, this study attempted to address the problem of how principal leadership behaviors affect school performance, with a focus on the behaviors surrounding time management. Specifically, the study examined if there are differences in how administrators in high and low-performing schools spend their time, and if so, what those differences are.

Significance of the Study

States around the country are struggling with performance in middle schools. A review of the AYP data for 2006-07 obtained from the U.S Department of Education website shows that no state achieved the goal of 100% of schools meeting AYP. In fact the percentages ranged from a low of 24.6% in Idaho to a high of 95.6% in Wisconsin. Just 28 states had greater than 70% of all schools meeting the mark, with Virginia coming in at 74.1%. This left 69 schools in Virginia alone that were listed as schools identified for improvement in 2007-08 (USDOE, 2009). A further review of the Virginia list of accredited schools showed that 95% of Virginia Schools were listed as meeting state accreditation requirements in 2009, leaving 54 schools listed as accredited with warning; 36 schools conditionally accredited; and 5 schools denied accreditation. Of the 54 schools listed in 2009 as being accredited with warning, 33 of them (61%) were middle schools (VDOE, 2009).

The accreditation status for middle schools improved greatly in 2010. Of the 343 regular program middle schools, only four failed to make full accreditation (VDOE, 2010a). While this news sounds good on the surface, the increase is negated by the dramatic increase in the number of middle schools that failed to make the targets for Adequate Yearly Progress (AYP) as listed in the No Child Left Behind Act. In the 2010 rankings for AYP listed in the Virginia Schools Report Card, 229 middle schools, 62% of all middle schools in Virginia, failed to make AYP based on the school year 2009-10 student Standards of Learning assessment results. In addition, 143 of the schools who failed to make AYP in 2010 also failed to meet the mark in 2009 (VDOE, 2010b). This increase in middle schools failing to achieve AYP is in spite of the required proficiency

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mark, 81% for reading and 79% for mathematics, remaining the same as the previous year.

A review of eighth grade student performance as measured by the National Assessment of Education Progress (NAEP), also gives pause as to the current performance of Virginia middle schools. Based on 2009-10 assessments, 24% of all Virginia eighth grade students who participated in the NAEP assessments scored at below basic level on the mathematics assessment, and 22% scored below basic on the reading assessment. Additionally only 8% of students who took the assessment scored at the advanced level in mathematics, and only 2% scored at the advanced level in reading (VDOE, 2010a).

Given the current situation with middle school performance ratings, it is vital that educators look for leadership behaviors that have been proven successful and share this information with others. By sharing this information, educators increase the likelihood that successful behaviors can be replicated.

Purpose of the Study

Middle school administrators are faced with issues that make an already challenging task an even more daunting one. "Job demands are expanding, the average number of hours worked in a week is rising, and accountability is intensifying" (Petzko & Clark et al, 2002, p.11). From high-stakes testing to dealing with gang issues, the principal at the middle school level must constantly make decisions on where to focus his or her time and energy. The purpose of this study was to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to

determine what relationships exist between the principal's time-on-tasks and school performance.

Justification of the Study

This study adds to the existing body of knowledge and data on principal time management behaviors, specifically the allocation of time-on-tasks by middle school principals. It will be useful to principals seeking to implement changes on a personal level that could impact school performance. With information on the relative use of time, principals can review and make better informed decisions about their own time management behaviors. Current and future principals may find the results useful for identifying time-management behaviors that could better promote an atmosphere of teaching and learning. The results may also be useful to supervisors in developing criteria for the evaluation and development of principals in the domain of leadership as it pertains to student outcomes.

Research Questions

In order to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance, the researcher explored the answers to the following related research questions:

1. What percentage of work time do middle school principals devote to each of the seven identified categories of time use?

2. What are the differences in the amount of time middle school principals allocate to the seven identified categories of time use in high and low-performing schools?

3. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and demographic factors such as the principal's gender, the principal's years of experience in administration, the school's socioeconomic status, the student population's size and ethnicity, and the school's location?

4. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and AYP performance indicators at high and low-performing schools?

Theoretical Framework

Previous studies on the role of the principal examined leadership styles, such as transformational leadership, instructional leadership, blended leadership, and other common theories related to the style administrators use to perform their job functions. This study focused on the mechanics related to one specific aspect of those functions, that is, how administrators spend their time. While previous studies have focused on the preferred time-management style of the leader (Larry, 2003; Spillane, Camburn, & Pareja, 2007), gleaning insights as to how the school leader accomplished the required tasks, this study examined the allocation of time to those tasks.

Using the framework proposed in the Wallace Foundation's Learning from Leadership project (Seashore Louis et al, 2010) that illustrates the pathways of the principal's leadership influence on student learning (See Figure 1), this study began with the conceptual framework that demonstrates the types of areas over which the building leader, or principal, has a direct influence, and through which the principal influences student learning. This study attempted to both support the conceptual framework and
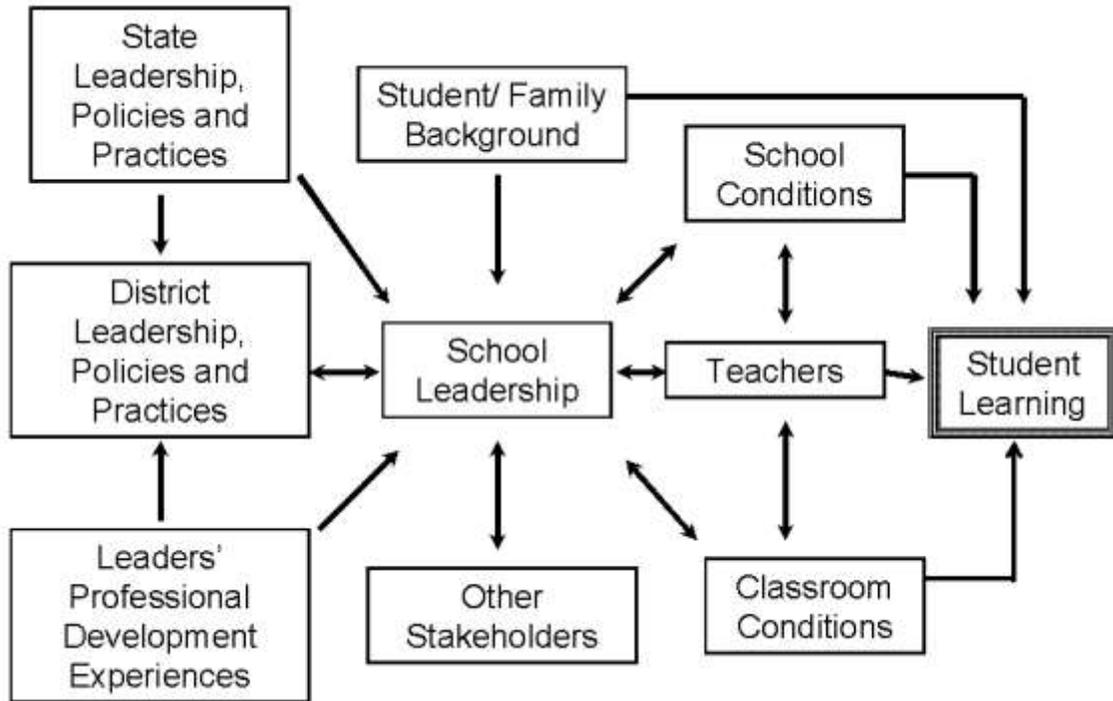
Figure 1. Leadership Influences on Student Learning.

Note: From "Learning from Leadership: Investigating the Links to Improved Student Learning," by K. Seashore Louis, K. Leithwood, K. Wahlstrom, and S. Anderson, 2010, *Final Report of Research to the Wallace Foundation*, p.14. Copyright 2010 by the University of Minnesota. Reprinted with permission.

expand upon it by investigating what relationship, if any, the amount of time a principal spends on these areas has with student learning as measured in the federal and state benchmarks.

Definition of Terms

Since the topic of meeting Adequate Yearly Progress (AYP) is at the forefront of education reform efforts, the researcher used this rating as the basis for the designations of selected schools as high or low-performing schools. These terms have been used in

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other research to provide parameters and delimitations for various conclusions. A report in the National Middle School Association's journal (Styron & Nyman, 2008) defines high and low-performing middle schools in terms of their two-year performance on the federal Adequate Yearly Progress indicators. This study incorporated that basic definition and added Virginia specific criteria.

For the purposes of this study, the key terms are defined as follows:

1. Adequate Yearly Progress (AYP) – "Adequate Yearly Progress represents the minimum level of improvement that schools and school divisions must achieve each year as required by ESEA" (VDOE, 2010a).

2. High-performing Middle School – middle schools making adequate yearly progress for all three consecutive school years preceding the study.

3. Low-performing Middle School – middle schools not making adequate yearly progress for all three consecutive years preceding the study.

4. School Accreditation - a rating assigned to individual public schools in the state of Virginia based on the percentage of students who achieve a score of proficient or better in the content areas of English/reading, mathematics, history/social science, and science.

5. Standards of Learning (SOL) Assessment – a Virginia assessment given at the end of selected courses to determine student proficiency for those courses.

6. Time-on-tasks – the number of minutes and/or percentage of available work time spent on a defined set of school-related tasks in predetermined categories.

Limitations/Delimitations

Data collection was heavily reliant on the willingness of middle school principals to return the electronic survey instrument within the specified period of time. Every effort was made to ensure an adequate percentage of surveys were collected. The surveys were distributed electronically with scheduled reminders, but the number of actual surveys in the final collection was limited by the voluntary response of the selected participants, as well as their willingness and ability to participate in the electronic survey method.

The responses within the self-reported surveys were subject to perception and memory biases on the part of the respondents. This is an additional limitation. The survey data are limited to the extent that respondents provide accurate, honest, and complete answers to the survey questions. The study design was limited to middle schools in the Commonwealth of Virginia that met the criteria of either a high or low-performing middle school as defined in the operational definition described earlier.

Organization of Study

This study is organized into five chapters. Chapter 1 includes an introduction that sets the context of the study, the statement of the problem and research questions, a list of definitions and terms, the conceptual framework, the purpose and significance of the study, and an overview of the study. Chapter 2 includes a literature review and synthesis of key findings from the literature. Chapter 3 details the methodology, population, data collection, and research design. Chapter 4 presents the results of the data analysis, and Chapter 5 includes a summary of the findings and related discussion, as well as implications for the field and recommendations for future research.

Chapter 2

Review of Literature

"Things which matter most must never be at the mercy of things which matter least" (Johann Wolfgang von Goethe).

The purpose of this study was to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance. The study focused on high and low-performing middle schools in the Commonwealth of Virginia. Chapter 1 includes an introduction to set the context of the study, the statement of the problem and research questions, a list of definitions and terms, the conceptual framework, the purpose and significance of the study, and an overview of the study.

Included in Chapter 2 is a review of related literature. The search for articles and papers included the use of the Virginia Tech library online databases including Google Scholar, EBSCOhost, and Education Research Complete. The researcher began with single term searches using the key terms: principal, time-management, time analysis, time-on-tasks, leadership behaviors, role of the principal, school principals, and principal leadership. Combining the terms school principal and time-management narrowed the search to fewer than 20,000 hits. The addition of the term time-on-tasks narrowed the search further. While reviewing the available literature, the researcher focused primarily on empirical studies from the last 10 years. Older studies were evaluated for reference based on relevance to the topic and contribution to the overall understanding of the concept under review.

Based on the themes from the related research, this literature review is outlined using the following sections: (a) the role of the principal, (b) leadership behaviors, (c) time management practices, (d) time-on-tasks, and (e) a synthesis and summary of the related literature.

The Role of the Principal

There is a general belief among educators that the principal is a major influence on school effectiveness and improvement (Cotton, 2003; Hallinger & Heck, 1998; Leithwood, Seashore Louis, et al, 2004). A 2008 study by Leithwood, Harris, and Hopkins claimed that school leadership is not just a factor, but that it is second only to classroom teaching among the factors that influence student achievement. Hallinger and Heck also expressed this view in their 1998 article that summarizes the empirical literature from 1980 to 1995 on principal effects.   In exploring the role of the principal in school performance, Hallinger and Heck noted that research supports the belief that "principals exercise a measurable, though indirect effect on school effectiveness and student achievement" (p.186). Their literature review gave definition to how the principal accomplishes this effect by concluding that the principal's primary means of effecting student achievement is by shaping the vision, mission, and goals of the school, a finding that was further substantiated in Powell's 2004 dissertation on leadership and school success.

The conclusions reached by Hallinger and Heck are supported by other research from that era, and some studies went into more detail as to the specific role the principal plays. The Center for the Study of Evaluation at the University of California published a number of articles related to the role of the principal. Eighteen years before the

implementation of the No Child Left Behind Act (NCLB) of 2001, University of California researcher N. Glasman (1984) published an article in the Educational Evaluation and Policy Analysis journal that discussed the relationship between student achievement and the school principal. This article, though now more than 25 years old, is significant in that it synthesized earlier work from the 1950s through the 1970s. Glasman (1984) concluded even then principals believed that a primary function of school principals was to show evidence of student gains and evidence of the "personal efforts of the principals in facilitating these gains" (p. 289).

Later studies also expanded on the personal efforts of principals in shaping the vision, mission, and goals of the school; as well as on how they create the conditions for the vision to be accomplished. A report from Research in Middle Level Education outlined some key characteristics of middle school performance (Styron & Nyman, 2008). This report concluded that principal efforts that lead to school improvement include: dedicating time to design effective professional development for teachers, communicating regularly with teachers, encouraging collaboration between teachers, soliciting teacher input regarding instructional decisions, and designing schedules that allow for interdisciplinary teams to meet and discuss student data.

While the belief that principals can and do affect student achievement has been widely discussed in the research and has held steady throughout the years leading to our current era of school accountability, what has changed significantly is the amount of time principals dedicate to school related tasks, as well as the nature and complexity of those tasks (Day, 2000; Petzco, Clark, et al, 2002; Portin, 2000). In fact, the principalship has changed significantly over the past 20 years, and has become a role that is "complex,

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imbued with conflict, and far reaching" (Portin, 2000, p. 494). Portin (2000) noted that

the role of principal is imbued with new responsibilities at a rate that shows no sign of

slowing, causing principals to report their time and attention to be stretched in many

different directions.

With the addition of accountability standards imposed by NCLB, and as states

continue to add additional student testing requirements, the pressure of meeting

proficiency standards "further defines the principal roles as they seek to provide

resources, be instructional leaders, and ensure professional development for teachers"

(Portin, 2000, p. 495). Principals reported their job "has changed in both complexity and

the number of tasks on hand" (p. 500) and that the job often requires them to shift

attention from focusing on teaching and learning to focusing on managerial requirements

and dealing with everyday crises.

When viewing the role of principal and attempting to categorize the types of tasks

to which they must attend, it becomes apparent that the role is significantly different than

that of the principal from just 20 years ago. As summed up in an article that researched

the changing role of the secondary principal, the research clearly showed that "the

contemporary principal faces increased expectations for school improvement, demanding

social pressures, and conflict between the roles of instructional leader, organizational

leader, community leader, and strategic leader" (Goodwin, Cunningham & Eagle, 2005,

p. 7). Although numerous studies have outlined the increasingly complex role of the

principal, the mandates of NCLB to produce ever increasing levels of student

performance require the principal to remain focused on their primary responsibility, that

is, "to facilitate effective teaching and learning with the overall mission of enhancing student achievement" (O'Donnell & White, 2005, p. 56).

Leadership Behaviors

Most of the leadership behaviors listed in research are tied to specific leadership theories, such as transformational leadership, instructional leadership, transactional leadership, and others. While the research agrees that the role of the principal is complex and demanding (Barker, 2007; Marks & Printy,2003; O"Donnell & White, 2005), there is no clear consensus on which specific leadership behaviors have a positive correlation to student achievement outcomes, though both transformational and instructional leadership emerge as the two most often linked to improved student outcomes. Quinn (2002) stated that no one leadership style will fit all school settings, while a Mid-Continent Research for Education and Learning (McCrel) working paper promoted the concept of balanced leadership by incorporating key elements from several leadership theories into a composite leadership framework (Waters, Marzano, & McNulty, 2003).

In a study of leadership types, Robinson et al. (2008) analyzed findings from 27 studies that referenced principal leadership and student outcomes. The meta- analysis compiled by Robinson et al. rated the behaviors associated with instructional leadership as having a mean effect size that is three to four times greater than those associated with transformational leadership. Robinson et. al. compiled their findings into categories of leadership dimensions that were grouped without consideration to task or relationship skills, thereby separating them from the leadership theories that distinguish between these two aspects of the behaviors. The five leadership dimensions that emerged as a result of the study are: (1) establishing goals and expectations, (2) resourcing strategically, (3)

planning, coordinating, and evaluating teaching and the curriculum, (4) promoting and

participating in teacher learning and development, and (5) ensuring an orderly and

supportive environment. Of the five leadership dimensions, Robinson et al. found that

the one most strongly associated with student achievement is Dimension 4, promoting

and participating in teacher learning and development.

A large-scale, multi-year study from the Wallace Foundation (Seashore Louis et

al., 2010) supported the belief that principal leadership behaviors, particularly shared or

distributed leadership, have an effect on student outcomes. Specifically, Seashore Louis

et al. cited leadership behaviors that are geared towards improving instruction as having a

significant indirect effect on student achievement. Their research also found that

principals who share leadership have stronger working relationships with teachers and

higher student achievement outcomes. However, they also concluded that there is no

single best way to distribute or share leadership.

The above finding is somewhat at odds with the findings of other studies that

emphasized the importance of the principal's role in vision, mission, and goal setting,

although Robinson et al. noted that leaders have a primary responsibility for ensuring that

teacher professional development is aligned to goals. Other studies supported various

leadership behaviors as associated with specific leadership theories (Leithwood & Jantzi,

2005; Leithwood & Riehl, 2003; Marks & Printy, 2003). Leithwood and Jantzi's

(2005)found that there is evidence of modest positive effects of transformational

leadership behaviors on student engagement. Still another study suggested that a

combination of transformational and instructional leadership, a style the authors refer to

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as integrated leadership, yields the most positive effects on student outcomes (Marks &

Printy, 2003).

While leadership theories comprise a large part of the current research with no

clear consensus on any one best leadership style, some studies did further delve into the

specific leadership behaviors that help lead to increased student academic success.

Powell (2004) noted that the primary job of the principal is that of instructional leader,

and cited the following key behaviors and practices as contributors to school success: (a)

the principal articulates a clear vision, (b) the principal protects time for teaching, (c) the

principal provides programs to support individual students, (d) the principal understands

when to make decisions unilaterally and when to make decisions collaboratively and acts

accordingly, and () the principal uses effective management skills.

Leithwood & Riehl (2003) also listed a set of leadership behaviors. While the

authors agreed with other reports that concluded leadership effects are mostly indirect,

they also agreed with the earlier studies which found that school leaders can effect

change when they promote vision and goals, and put in place structures that support

teaching and learning. The 2003 Leithwood and Riehl report identified a set of core

leadership practices that "form the basics of successful leadership and are valuable in

almost all educational contexts" (p. 5). The core practices consist of three domains, each

with a subset of associated behaviors. Table 1 outlines the core leadership practices from

this study.

A 2005 report by O'Donnell and White in the National Association of Secondary

School Principals' (NASSP) Bulletin also links instructional leadership behaviors to

student achievement. The report referenced behaviors related to promoting the school

Table 1

Core Leadership Categories and Practices

Category	Practices
Setting Directions	Identifying and articulating a vision
	Creating shared meanings
	Creating high performance expectations
	Fostering the acceptance of group goals
	Monitoring organizational performance
	Communicating
Developing People	Offering intellectual stimulation
	Providing individualized support
	Providing an appropriate model
Developing the Organization	Strengthening school culture
	Modifying organizational structure
	Building collaborative processes

Note: From *What We Know About Successful School Leadership* by K.
Leithwood and C. Riehl, 2003, Laboratory for Student Success.

learning climate as detailed in Halinger and Murphy's (1985) Principal Instructional
Management Rating Scale (PIMRS). Halinger and Murphy's scale listed five functions
and, similar to the Leithwood and Riehl study, associated specific leadership tasks and
behaviors to each function. The five functions identified by Halinger and Murphy

include: (a) protect instructional time, (b) maintain high visibility, (c) provide incentives to teachers, (d) promote professional development, and (e) provide incentives for learning.

The findings by O'Donnell and White elevated the behaviors associated with promoting the school learning climate above those related to vision, mission, and goal setting. Based on their findings, O'Donnell and White recommended that principals focus their efforts on those activities that will provide quality support to teachers, including maintaining a presence in the classroom and giving feedback to help teachers develop engaging lessons.

The concept of leadership behaviors, along with the related topic of leadership traits, was discussed in great detail in a book from the Association for Curriculum and Supervision (Cotton, 2003). Cotton (2003) identified 26 essential traits and behaviors for principals. Citing 81 key research articles over the last 20 years, Cotton concluded that principals of high-achieving schools are effective at, among others: (a) creating a safe and orderly school environment, (b) setting and promoting goals for high levels of student learning, (c) establishing high expectations, (d) being visible and accessible, (e) communicating effectively, (f) sharing leadership, (g) providing instructional feedback to teachers, (h) providing appropriate professional development opportunities, and (i) promoting a positive school culture. Cotton concluded that strong administrative leadership and instructional leadership are key components at schools that have high levels of student academic achievement (Cotton, 2003).

Halinger and Murphy's (1985) and Cotton's (2003) inclusion of visibility is supported by other researchers who specifically listed this as a high-leverage instructional

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support behavior. The importance of visibility was the subject of an article by an assistant professor of education leadership at the State University of West Georgia (Fiore, 2000). Visibility is distinct from behaviors discussed in other studies due to the specificity given to the behavior by the researcher. Fiore established a link between school culture and student achievement, and between principal visibility and positive school culture. This indirect link between principal visibility and student achievement was the crux of the case made by Fiore for principals to increase their visibility. Fiore supported this assertion with findings from a study of 261 schools in Illinois and Indiana where visibility was identified as a factor that led to positive school climate (Fiore, 1999).

Visibility was also mentioned in Wahlstrom and Seashore Louis' (2008) national study of teacher perceptions of principal leadership. Principal visibility in the classroom was cited as a significant factor in building teacher capacity and thereby improving student learning. The researchers noted, however, that in all but the smallest schools, time constraints would interfere with the direct classroom presence of the principal on a sustained basis.

While visibility was seen as a specific desired behavior, Cross and Rice (2000) noted:

> It is often difficult for principals, burdened by budgetary concerns, hiring staff, repairing a leaking roof, attending evening parent and community activities, and maintaining discipline, to make time to review student work or to reflect on the academic health of the school. Nevertheless, both activities should be among the principal's highest priorities. (p. 62)

Visibility is therefore supported with additional leadership behaviors that involve more indirect types of instructional leadership practices. This support structure requires the principal to engage in trust building and shared responsibility with others in the school (Fiore, 2000). An added benefit to this shared responsibility was detailed by Marks and Printy (2003) who concluded that shared instructional leadership has a significantly positive effect on pedagogy.

The principal's leadership behaviors are clearly of great importance to the success of a school. The specific leadership theories and behaviors may vary, but overall "it is the principal's passionate commitment to the students' academic achievement that will make the difference between a highly successful school and one that is content with the status quo" (Cross & Rice, 2000, p.61). Findings in the Wallace Foundation report, the self-proclaimed largest in-depth study of school leadership to date, supported the conclusions that principals are most effective when they work collaboratively with others to meet clearly articulated goals, engage in collective leadership that involves many stakeholder groups and provide strong instructional leadership that strengthens a school's professional learning community (Seashore Louis et al., 2010).

Time Management Practices

Most researchers agree that principal leadership behaviors are essential for successful school performance, but the larger question is how to accomplish all the desired tasks in the available time (O'Donnell & White, 2005). When Portin (2000) queried principals about additional job responsibilities, the respondents indicated that there was simply not enough time to attend to both instructional leadership and

management activities. Portin also reported that principals felt significant pressure to reorient their time.

Researchers agree in general that principals should spend the majority of their time in classrooms talking to teachers and students, and engaging in the most essential instructional leadership tasks (Cross & Rice, 2000; O'Donnell & White, 2005). Leithwood and Riehl (2003) posed some significant questions pertaining to time management and the role of the principal, including:

How can educational leaders balance their leadership and managerial responsibilities in ways that move their schools forward? If leadership functions are indeed distributed across many formal and informal roles in a school, how are these roles coordinated and who takes responsibility for what? (p. 10)

These questions are key to understanding how principals use their leadership styles to guide their leadership behaviors, including time management practices.

The ability to prioritize and develop time limits to handle the myriad of tasks brings order to task performance (Larry, 2003). In 1999, Robertson conducted a research study on time management practices of school principals in the United States. In this random sample of 400 principals in schools with some combination of grades PreK – 12, Robertson determined that there is a need for principals to use time-management practices that reduce what she refers to as time wasters, and that would help them to delegate time to more important tasks.   In her analysis, Robertson noted the frequency with which principals used the identified categories of time-management. She designated these categories as: (a) contact practices, (b) delegation practices, (c) practices for managing meetings, (d) interruptions and, (e) establishing priorities. While principals in

the study were able to use effective time management practices in some areas, Robertson noted that there is a need for more training to assist principals in managing time in the categories of handling interruptions, scheduling contacts, and managing paperwork.

Handling interruptions is one specific category that was addressed by Thomas and Ayers in their 1998 investigation of principals' time management. Their findings were in direct contrast to time management literature that noted interruptions as a time wasting practice. In fact, the principals in the Thomas and Ayers study viewed the interruptions as an essential part of their daily work and planned accordingly. This finding is significant in that there is very little research on the specific category of interruptions, although it is one task that takes up a considerable amount of time, with principals in the study reporting that they spend from 48 to 110 minutes per day dealing with interruptions. The idea of interruptions as time invested rather than time wasted is a concept that is deeply embedded in the higher level views of time management, where it is seen as one task among many. The task itself may be seen as having a negative impact on efficiency, but the relationship element that is supported through the way a principal handles the interruptions is part of a broader picture of effectiveness (Wilson, 1999). In support of this finding, a study of principals in Australia offered the following observation:

> An unexpected outcome was the identification of principals' 'interruptibility' – the willingness to be interrupted because of the value placed on quality interpersonal relationships, to enable principals to attend to others' concerns, and to allow the person interrupting to feel valued in terms of his/her concern taking

priority over whatever else the principal was doing. (Parkes & Thomas, 2005, p. 204)

Time management is a challenge for principals at all levels. Engels, Hotton, Devos, Bouckenooghe, & Aelterman (2008) stated that "time management, lack of time and setting priorities seem to be the most important problems experienced by principals" (p. 163). In this comparison of principals at schools identified as having either positive or problematic school cultures, Engels et al. noted that the principals at schools with the highest positive cultures share the common traits of being able to devote their time to their preferred roles and tasks, and that "their time management is remarkable" (p. 170).

Many principals say "there isn't enough time in the day to do all of the things that are demanded of me" (Larry, 2003, p. 4). Knowing that the scheduled tasks may frequently have to give way to unscheduled tasks requires principals to utilize multiple leadership behaviors, including flexibility and time management skills (Lovett, 2000). This leads to research on what time management practices principals find most helpful. Larry's (2003) study on time management use and preferred time management practices identified five time management practices as being the most helpful to principals. The five most helpful practices identified by Larry were: (a) setting weekly administrative staff meetings, (b) using electronic mail as a method for corresponding, (c) allowing assistants to make decisions that relate to their area of responsibility, (d) keeping a daily log of activities, and (e) obtaining all facts each time before making a decision.

Principals who use effective time management practices are able to spend more time on their preferred tasks. The preferred tasks of principals considered strong instructional leaders include those most strongly related to improving the educational

programs of the school (Smith & Andrews, 1989). The strong instructional leaders not only preferred the tasks related to educational program improvement, they actually spent most of their time (41%) on those tasks. This is in contrast to those principals who were perceived to be average in the Smith and Andrews study. The average principals recognized that instructional leadership is the highest priority, but spend most of their time (39% on average) on management behaviors.

Most research finds there are few differences in leadership behaviors and practices based on demographic characteristics of schools and principals (Engels et al., 2008 & Larry, 2003). Taylor's 2007 dissertation, however, did note some statistically significant differences between demographic groups. Taylor found that principals in schools with student populations over 1000 in number spend more time on management tasks than do their counterparts at smaller schools. Taylor also found that female principals report spending more time on instructional leadership tasks than do male principals. Taylor made recommendations in areas considered to be time wasters in an effort to provide principals with strategies to help them balance their time in a more efficient manner.

Time-on-tasks

In order to manage time effectively, principals must first determine what tasks take priority, that is, to be able to put first things first (Covey, 1989). Covey (1989) asserted that by creating a list of things that need to be accomplished, one can better manage the time needed to accomplish those tasks. In addition, principals must balance their own priorities with the priorities imposed upon them by others (Whitaker & Turner, 2000).

While the need for principals to manage time and prioritize tasks is widely recognized, there are few specific studies that show what principals do on a day-to-day basis (Horng, Klasik, & Loeb, 2010). In 1987 the U. S. Office of Educational Research and Improvement sponsored a study of the school principal's job (Gottfredson & Hybl, 1987). This study outlined 14 job factors related to the principalship. The factors outlined came as the result of a job analysis survey compiled from a national sample of principals using a structured task analysis inventory, and include:

1. Staff Direction/ Visibility

2. Observation and Feedback

3. Planning and Action

4. Personnel Management

5. Policy Development

6. Keeping Up-to-Date

7. Instructional Management

8. Student Interaction and Social Control

9. Parent and Community Relations

10. School-System Interaction

11. Coping with Disorder

12. Budget Management

13. Co-Curricular Activities

14. Union Negotiation (Gottfredson & Hybl, 1987, p. 13)

In additional to the 14 job factors, Gottfredson & Hybl (1987)also summarized the tasks reported by principals to be the most important aspects of their jobs. These

tasks, which include only those that were rated as both important and time consuming, are:

1. Plan staff meetings
2. Formally assess the needs, problems, or goals of the school
3. Review student records and other information to gain an understanding of a student's problems
4. Assign teaching responsibilities to teachers
5. Hold faculty or staff meetings
6. Assign duties and responsibilities to staff
7. Observe teachers' instructional and classroom management practices
8. Watch the schoolyard or bus arrival and departure to ensure orderliness and safely
9. Tour the school to establish your presence
10. Discuss formal performance evaluations with staff
11. Review teacher performance with individual teachers in a formal evaluation
12. Mention observed strengths and weaknesses in classroom teaching to the teacher at the time of observation
13. Praise students who are doing well in school (Gottfredson & Hybl, 1987, pp. 46-47)

The information from the 1987 Gottfredson and Hybl study, though now more than 20 years old, is important as it helps to establish a baseline for comparison of tasks that are reported in more recent studies. Establishing a baseline allows for researchers to note not only what principals consider of high importance today, but what, if anything, has changed in what principals consider to be of high priority. Gottfredson and Hybl

noted that few tasks were rated as unimportant by principals, lending further support to the belief that the principal's job is both complex and demanding.

In 2004, Rayfield and Diamantes conducted an updated task analysis of secondary school principals' jobs. In their study, the tasks were simply listed and not categorized into domains or leadership factors. The researchers used a focus group approach to identify general job categories which they then disaggregated into a list of 25 specific job tasks. The tasks identified by Rayfield and Diamantes showed how the role is perceived to have changed since the time of the Gottfredson and Hybl study. The tasks as identified by Rayfield and Diamantes consist of:

1. Selection of teachers

2. Evaluation of instructional staff

3. Assignment of faculty to courses

4. Leading professional development

5. Development of a master schedule

6. Working to develop a cooperative relationship

7. Enforcement of contract provisions

8. Making the school safe

9. Dealing with disruptive students

10. Dealing with attendance concerns

11. Working with parents relative to student behavior

12. Curriculum development or alignment

13. Accepting accountability for instructional program

14. Compliance with state mandates

15. Special education supervision

16. Publication of newsletters

17. Attendance at community events

18. Awards recognition programs

19. Budget development

20. Budget management

21. Fundraising

22. Selection of coaches

23. Evaluation of supplemental personnel

24. Supervision/Attendance at extra-curricular activities

25. Facilities maintenance personnel supervision (Rayfield and Diamantes, 2004, pp. 710-711)

The task list identified by Rayfield and Diamantes both added to and replaced many of the items noted in earlier studies, supporting the conclusion that the role of the principal continues to expand over time. McPeale (2006) found that principals spend a mean time on the job of 60.3 hours per week. This finding is in line with the steady increase in the principal's work time as reported in the literature. According to McPeale, the average principal work hours have increased from an average of 49.31 hours per week in the 1960s, to 52.8 hours per week in the 1990s, and 61.1 hours per week in the 2000's. The current average of 60.3 hours recorded by McPeale for principals who participated in the 2006 study is very close to the average time recorded by other researchers.

McPeale (2006) also found that principals spend the most time on the area of school management, with a mean time of 12.2 hours per week. This amount represents a 57.5% increase in the time allotted to this task category over the previous three-year period. The least amount of time was spent on community relations, with a mean of 2.6 hours per week. When asked to identify reasons for the increased time on management related tasks, 50% of respondents indicated that meeting the requirements of NCLB was a primary cause for the increase.

As demonstrated in the Rayfield and Diamantes study, the growing complexity of the role of principal has been noted for some time. In 1991, The NASSP Bulletin published a research brief questioning whether principals had time to do all that is required of them (Campbell & Williamson, 1991). In this study, the researchers noted significant differences in the amount of time principals believe they should spend on designated priority tasks and the amount of time they actually spend. The finding from this research study led Campbell and Williamson to conclude:

- Principals do not have sufficient time to provide the quality leadership expected of them by their various constituents.

- Principals should avail themselves of the latest information in the area of time management.

- Principals should concentrate on delegating authority and duties to subordinates, thus creating more time for those tasks considered most important (Campbell & Williamson, 1991, p.115).

Campbell and Williamson conceded that principals do indeed have a complex and demanding job, and recommended that they seriously evaluate how to allocate the time that they have.

In another report from the National Association of Secondary School Principals, a survey of 1081 principals from Indiana ranked principals' priorities (Whitaker & Turner, 2000). The analysis of the survey echoed the earlier findings by Campbell and Williamson (1991) that there are many disparities between what principals perceive to be priorities and their actual priorities. The only consistent areas between both perceived and actual task priorities were those related to school climate, curriculum expansion, and building staff morale. The number one priority identified in both the perceived and actual priority scales was establishing a positive school climate for students and staff. Interestingly, the researchers found, as Gottfredson and Hybl did in 1987 that in almost all cases principals believed they should be spending more time on all of the identified tasks, regardless of where they fell on the priority scale. This substantiates the belief that principals feel torn about how to manage their time. Specific findings from the Whitaker & Turner study include:

- Principals felt that all the responsibilities of their jobs are important.
- No matter how much principals actually emphasized a task, they felt that they should be doing even more in that area.
- School climate was the highest priority among principals.
- Principals recognized the need for improving their time management.
- The numerous responsibilities of principals make the job tremendously stressful (Whitaker & Turner, 2000, p. 20).

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Whitaker and Turner (2000) stressed that principals must carefully consider those items over which they have control, and that they must also develop, refine, and improve their time management skills. Whitaker and Turner also suggested that principals must take into consideration their own personal care when managing and allocating their time, in spite of the daunting number of categories and related tasks that must be accomplished.

The findings and recommendations regarding prioritization of tasks are not unique to researchers in the United States. In a study from Queen's University in Belfast, researchers Neil, Carlisle, Knipe and McEwen (2001) found:

Most of the principals' time is spent on dealing with tasks which are regarded as of little value. There is insufficient delegation of such tasks, for a variety of reasons, and, as such, principals do not have the time available to focus on activities which they say are important for them as school leaders. (p. 52)

Neil et al's research report focused on principals in Ireland and evaluated their time-on-tasks in three broad domains of administration, management tasks, and leadership issues. These domains were then subdivided into specific tasks. An analysis of time-on-tasks showed that principals spend the majority of their time on low level administrative tasks deemed of minimal importance, thereby leading the researchers to recommend that principals seek out ways to change their focus from the managerial aspects of the job to a more leadership oriented approach.

Other recent studies have narrowed the number of categories from those identified by Gottfredson and Hybl in 1987. While the number of tasks did not decrease, the number and type of categories to which those tasks were assigned have changed. In 2007, Spillane, Camburn, and Pareja looked at data collected from 52 principals in a

large urban school district. The principals participating in the study responded to real-

time queries as to what specific task they were engaged in at the time. In lieu of the 14

job factors identified by Gottfredson and Hybl, the specific tasks used for the study by

Spillane et al. were coded and grouped into four broad categories: (a) administrative, (b)

instruction and curriculum, (c) professional growth, and (d) fostering relationships.

While Spillane et al. did not attempt to correlate the time-on-tasks analysis to school

performance, the four categories they identified form the basis of the study conducted by

other researchers who attempted to show the relationship between time-on-tasks and

student outcomes (Grissom & Loeb, 2009; Horng et al., 2010).

Grissom and Loeb (2009) took the categories developed by Spillane et al. and

expanded them by adding a specific list of 42 tasks to go with the four broad categories,

and by adding a fifth category to the list. One finding of interest in the Grissom and Loeb

study is the relationship between organizational management and school performance.

Grissom and Loeb noted that only the organizational management domain, and the tasks

associated with it, has a direct positive correlation with student achievement. The

researchers stopped short of contradicting earlier studies on the importance of

instructional leadership by stating that organizational management is part of instructional

leadership, and that:

> …effective instructional leadership combines an understanding of the
>
> instructional needs of the school with an ability to target resources where they are
>
> needed, hire the best available teachers, provide teachers with the opportunities
>
> they need to improve, and keep the school running smoothly. (Grissom & Loeb,
>
> 2009, p. 32)

Grissom and Loeb (2009) further explained this relationship by stating that " principals devoting significant time and energy to becoming instructional leaders in their schools are unlikely to see improvement unless they increase their capacity for organization management as well" (p. 32).

This concept was expanded and supported in a 2010 follow-up study by Horng, Klasik, & Loeb that specifically examined the relationship between the time principals spend on different types of activities and school performance indicators. Horng et al. used trained researchers to shadow principals and collect data on activities and locations of principals throughout the day. The researchers concluded that principals spend the most time on administration activities and organizational management tasks. Principals spend the least amount of time on instruction related activities, spending fewer than eight percent of the school day in classrooms. Horng et al. also found that principals in the highest performing schools spend more time on organizational management as opposed to administrative activities.

While Horng et al. found no direct positive correlation between time spent on day-to-day instruction and student achievement, they also stated that there are a number of activities within the organizational management domain that are central to instructional leadership. For example, spending time on hiring qualified personnel is cited as one of the most influential tasks a principal can perform with respect to the instructional program. The researchers concluded there is some evidence that "a single-minded focus on principals as instructional leaders operationalized through direct contact with teachers may be detrimental if it forsakes the important role of principals as organizational leaders" (p.520). When compared to the finding of Robinson et al. (2008)

the findings of Horng et al. supported similar notions of instructional leadership having a broader context than that of day-to-day instructional activities in the classroom. Robinson et al. stressed the importance of instructional leadership through promoting teacher professional learning, an activity that could be easily classified as one of organizational management.

Synthesis

Since the effect of principal leadership behaviors, specifically how principals manage their time to accomplish important tasks, is one key to the success of schools, it is important to understand what effective principals do to accomplish important tasks in the available work time (Smith, Guarino, Strom, Reed, Lamkin, & Rushforth, 2003). The areas noted by Robertson (1999) indicate a need for training in categories related to management, and principals report that they spend most of their time in management practices. This empahisis on management tasks suggests a need to understand why principals spend so much time on management practices and to find out if the amount of time principals report spending on tasks is in line with how they actually spend their time (Smith et al., 2003). When the focus is narrowed to just those principals whose profiles suggest they are effective in promoting positive school culture, the data indicate that principals are more effective in managing their time in such a way as to allow for a focus on their preferred tasks (Engels et al. 2008).

The literature review revealed a number of intriguing areas on the topic of time management in relationship to school leadership. The main themes that emerged focus on the principal behaviors in terms of leadership theory; however fewer articles focused on the narrower construct of time management practices. There are also a few studies

that addressed administrator time constraints by examining some alternative structures to the traditional school principalship (Barker, 2007; Engels et al., 2008).

In a 2008 study, Engels et al. analyzed a variety of schools with non-traditional approaches. Some findings from this study suggested the concept that different leadership arrangements are possible and they have a range of potential benefits, including: closer attention to instructional practices, more attention to support services, and greater availability to parents and students. One other finding suggested that alternative approaches have the potential for resolving the overload on principals. While an intriguing concept, the reality of alternative structures is a long way from becoming standard practice, as this model is difficult to replicate on a large scale and does not answer the immediate need to assist many struggling schools.

Still other studies suggested that the answer may lie in places other than principal leadership. "The Leadership Paradox: Can School Leaders Transform Student Outcomes?" (Barker, 2007) is one such study. In this study the researcher sought to answer questions about the effect that transformational school leaders have and how their behaviors impact on student outcomes. The author's stated purpose was to "challenge rather than confirm the theory that certain types of leadership necessarily produce improved student attainment" (Barker, 2007, p. 22).

Barker (2007) noted that previous research tended to be quantitative attempts to confirm a positive relationship between leadership and outcomes. The author referenced several studies including Hallinger and Heck (1998) and Leithwood and Levin (2005) that found "significant indirect effects" on student performance. He also cited Miller and

Rowan (2006) as a recent large-scale study that concluded that leadership had no significant effect on achievement growth.

Although competing theories have emerged as to exactly what effect principal leadership behaviors have on student outcomes, the broad consensus is that what principals do plays a key role in school performance indicators and outcomes (Seashore Louis et al., 2010). Researchers also agree that the role of a principal is transforming and becoming ever more complex (Whitaker & Turner, 2000). What researchers do not agree on is exactly how principals should focus and prioritize their available time. Instructional leadership is the current focus of policy makers, and an article published in the American School Board Journal goes so far as to recommend that districts rewrite job descriptions for principals to reflect the role of principal as instructional leader at the building level, and that districts insist that principals spend a majority of their time, including staff meetings, on instruction (Black, 2000).

Throughout the research, authors consistently cited the need for more detail and further definition of what specific leadership behaviors look like in practice. This need for additional research led to the further investigation undertaken with this study, to determine if there are differences in how administrators in high and low-performing schools spend their time, and if so, what those differences are.

Chapter 3

Methodology

As states rush toward further student testing, proficiency testing of teachers, or propose linking educator pay to student outcomes, the pressure of accountability further defines principal roles as they seek to provide resources, be instructional leaders, and ensure professional development for teachers" (Portin, 2000, p. 495) .

The purpose of this study was to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance. To guide the study, the researcher sought to answer the following research questions:

1. What percentage of work time do middle school principals devote to each of the seven identified categories of time use?

2. What are the differences in how middle school principals allocate their time on the seven identified categories of time use in high and low-performing schools?

3. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and demographic factors such as the principal's gender, the principal's years of experience in administration, the school's socioeconomic status, the student population's size and ethnicity, and the school's location?

4. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and AYP performance indicators at high and low-performing schools?

Earlier studies established a link between principal leadership behaviors and student outcomes. Since time-management is an often mentioned leadership behavior, then in theory, the decisions a principal makes on how to prioritize and allocate time-on-tasks should have a measurable influence on school performance indicators. Therefore it is important to find out if there are differences in how administrators in high and low-performing schools spend their time, and if so, what those differences are.

Methodology

Research design. To further expand on the current understanding of how principals spend their time, this study incorporated a quantitative design that began with an analysis of public domain school performance data from the Virginia Department of Education web site. The researcher used electronic surveys to collect data on principals' time-on-tasks. Principal survey data was used to search for correlations between principals' time-on-tasks and school performance ratings.

This research design is similar to the study of one district's high school principals conducted by Stanford University researchers Horng, Klasik, and Loeb (2010) in which principals completed similar self-reporting surveys that were then triangulated with on-site observations using a paging system.

In this study, time-on-tasks data were collected from principals of high and low-performing middle schools in Virginia via an electronic survey of self-reported time-on-tasks. The electronic survey was based on the instrument used by Horng, Klasik, and

Loeb (2010) and was field tested by the researcher via site visits to two middle schools. During the site visits, the researcher determined that the existing categories and task lists were comprehensive enough to suit the needs of the study so no changes were made to the content of the instrument.

Using the above survey instrument, the researcher set out to answer the four research questions outlined in Chapter 1. The answers to the research questions are descriptive in nature as they describe the time-on-tasks of principals in each of the six specified categories in the survey instrument in relationship to school performance data. Descriptive research has a long history and is well defined in the *Handbook in Research and Evaluation* (Isaac & Michael, 1971). This authoritative reference on research and evaluation method is designed for the education or behavioral science researchers and defines descriptive research as describing "the facts and characteristics of a given population or area of interest, factually and accurately" (Issac & Michael, 1971, p. 18).

Population. The population for this study was middle school principals in Virginia who were in place at schools that met the classification criteria of a high or low-performing middle school. Additionally, the study included only those middle schools which had a grade configuration of six through eight and were not classified as a specialty or magnet school, and whose principal had been in place for at least three years. The researcher used data on school accreditation and AYP status (VDOE, 2010a, 2010b) to categorize the 343 traditional middle schools in Virginia as either high or low-performing according to the operational definition described in Chapter 1. In order to be classified in the high-performing subgroup, schools had to have made Adequate Yearly Progress (AYP) as outlined in the No Child Left Behind Act (NCLB) for all three

consecutive reporting years just prior to the study. In order to be classified in the low-performing subgroup, schools had to have failed to make AYP for all three of the consecutive reporting years just prior to the study. Schools that did not meet the criteria for either the high or low-performing categories were placed in a general category of average-performing and excluded from the study.

Using the preset criteria, the researcher identified 59 Virginia middle schools as high-performing schools and 75 as low-performing schools. With a population of 134 middle schools that met the criteria for one of the two designations, the researcher sent the survey to all eligible principals in order to have the best opportunity to obtain a representative sample from the high and low-performing categories.

Survey instrument. The study used categories and tasks from existing survey instruments (Figure 2) to create a new online survey. In addition to the six categories shown in Firgure 2, Horng, Klasik & Loeb (2010) added a seventh category, other, to account for those tasks not included in the six main categories. Those seven categories with the associated tasks formed the basis of the survey instrument for this study. Using the previously validated task domains and tasks, a new survey instrument was developed to address the specific information needed to conduct the study. The survey instrument (see Appendices A and B) was reviewed by an expert group made up of candidates in the doctoral program in Educational Leadership and Policy Studies at Virginia Polytechnic Institute and State University, who were experienced in writing and reviewing surveys. The expert group was asked to rate the survey instrument and individual questions for clarity, validity, and ease of use (see Appendix C for rating instrument). Information

from the expert group was used to make slight changes to the survey format as seen in the

online survey instrument in Appendix A.

Administration	Organization Management	Day-to-Day Instruction	Instructional Program	Internal Relations	External Relations
• Fulfilling compliance requirements • Managing school schedules • Managing student discipline • Managing student services • Managing student attendance • Preparing and implementing standardized tests • Supervising students • Fulfilling Special Education requirements	• Managing budgets, resources • Hiring personnel • Dealing with concerns from teachers • Managing non-instructional staff • Networking with other principals • Managing personal schedule • Maintaining campus facilities • Developing and monitoring a safe school environment	• Informally coaching teachers to improve instruction • Formally evaluating teachers • Conducting classroom observations • Implementing required professional development • Using data to inform instruction • Teaching students	• Developing an educational program across the school • Evaluating curriculum • Using assessment results for program evaluation and development • Planning professional development for teachers • Planning professional development for prospective principals • Releasing or counseling out teachers • Planning or directing supplementary or after school instruction • Utilizing school meetings	• Developing relationships with students • Communicating with parents • Interacting socially with staff about non-school related topic • Interacting socially with staff about school-related topic • Attending school activities • Counseling staff • Counseling students and/or parents • Informally talking to teachers about students, not related to instruction	• Working with local community members or organizations • Fundraising • Communicating with the district office to obtain resources (initiated by principal) • Utilizing district office communications (initiated by district)

Figure 2: Principals' time use categories and associated tasks.

Note: From "Principal's Time Use and School Effectiveness", E. L. Horng, D. Klasik, & S

Loeb, 2010, *American Journal of Education*, 116(4), p. 495. Copyright 2010 by the

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Timeline. The surveys were distributed electronically with a request for completion

within two weeks. Ten days after the initial surveys were sent, a reminder email was sent to

all the original recipients. The email reminder went to all recipients

rather than just non-respondents as this was a blind survey and the online survey system did not provide a feature that allowed for sending reminder emails only to non-respondents. Three weeks after the initial survey, a final email was sent to all recipients, including a thank you for those who had already responded, and a reminder to complete the survey for those who had not yet responded. In order to encourage responses from selected principals, the researcher offered to share survey findings with all who responded within the requested timeframe.

The researcher received a total of 39 survey responses at the end of the collection period. Of the 39 total responses, five were removed from the participant pool as the principals were at their respective schools for fewer than three years. Of the remaining 34 responses, 18 were from schools designated as high-performing and 16 were from schools designated as low-performing.

Data analysis. Data received from the online principal self-reporting survey responses were recorded into an Excel spreadsheet. Spreadsheet results were then recorded in SPSS software for analysis. Descriptive statistics were used to identify differences in time use patterns, and t-tests were used to determine the statistical significance of those differences. The researcher also conducted Pearson Product Moment Correlations to determine the strength and statistical significance of relationships between variables.

Multiple regression analyses were used to look for relationships between the time allocated to various task categories and school outcomes. The researcher chose regression since this method is useful when the researcher wants to allow for a prediction

about one variable based on data from other variables (Howell, 2007). The multiple

regression method allowed for correlation results between multiple time-on-tasks

categories and the school performance data.

Confidentiality. The researcher obtained approval from the Virginia Polytechnic

Institute and State University Institutional Review Board (IRB) before beginning any

data gathering or review. The researcher will continue to maintain the confidentiality of

participants at all times. The researcher sent letters to division superintendents requesting

permission to survey middle school principals of selected schools. Research was

undertaken using any specific requirement outlined by the participating districts.

Demographic characteristics were recorded in such a way as to not reveal the identities of

specific schools or principals. The researcher avoided using demographic descriptions

that would tend to identify schools or principals.

Data were collected on the anonymous online survey system and recorded on

Excel spreadsheets. The data were recorded exclusively in password protected files on

the researcher's personal computer. Paper files are stored in a locked file cabinet drawer

in the home of the researcher. Paper and electronic files will be destroyed after

successful defense of the researcher's final dissertation.

Summary

The purpose of this study was to find out what the differences are in how

administrators in high and low-performing middle schools spend their time and to

determine what relationships exist between the principal's time-on-tasks and school

performance. The population consisted of middle school principals in Virginia who led

schools designated as high or low-performing middle schools. Information from the

Virginia Department of Education website was used to classify schools and survey data

was collected to analyze principal time-on-tasks. The results of the data analysis were

used to provide descriptive answers to the research questions and to describe the

relationship of principal time-on-tasks to school performance.

Chapter 4

Presentation of Data

To walk in the shoes of a principal for a day, I think, is an eye opener for our business community, and it makes, I think, the business community appreciate so much what those ladies and men do. Everybody is saying, 'I had no idea how much a school principal really does and what they deal with.' It really does make them understand the system" (Kessel Stelling, CEO Synovus Financial Corp).

Included in Chapter 4 is a brief introduction restating the purpose and population of this study, and the research questions used to guide the study. Also included are the presentation of data and a summary of results.

The purpose of this study was to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance. The population for this study was middle school principals in Virginia who were in place at schools that met the classification criteria of a high or low-performing middle school as defined by the researcher.

In order to be classified in the high-performing subgroup, schools had to have made Adequate Yearly Progress (AYP) as outlined in the No Child Left Behind Act (NCLB) for all three consecutive reporting years just prior to the study. In order to be classified in the low-performing subgroup, schools had to have failed to make AYP for all three of the consecutive reporting years just prior to the study. Schools that did not meet the criteria for either the high or low-performing categories were placed in a general category of average-performing and excluded from the study.

The following research questions guided this study:

1. What percentage of work time do middle school principals devote to each of the seven identified categories of time use?

2. What are the differences in how middle school principals allocate their time on the seven identified categories of time use in high and low-performing schools?

3. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and demographic factors such as the principal's gender, the principal's years of experience in administration, the school's socioeconomic status, the student population's size and ethnicity, and the school's location?

4. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and AYP performance indicators at high and low-performing schools?

For the purpose of this study, middle schools in Virginia were placed into categories using criteria established by the researcher. Descriptive data on AYP status and SOL passing rates, provided by the Virginia Department of Education (VDOE) were downloaded into an Excel database. Using the score data, schools who met the established criteria were classified as high, average or low-performing and included or excluded in the population based on these classifications. Only the schools meeting the criteria for the high or low-performing categories were included in the study.

Presentation of Data

The presentation of data includes four sections. First, there is a description of the participants, including demographic features of the schools, characteristics of the

principals, and mean frequency of use for each time-on-tasks category. Next, a correlation matrix is provided to display relationships between the variables. The correlation matrix is followed by the results of the regression analyses and a summary of data results for each time-on-tasks category.

Descriptive data. Descriptive statistics were calculated to represent the demographic features of participating middle schools and the characteristics of the principals. Demographic features included in the descriptive statistics are: school location, number of students, the number of students receiving free/reduced lunch, and the primary ethnic makeup of the school's student body. Principal characteristics included in the descriptive statistics are: sex, years at the current school, years of experience and hours in the work week.

Demographic features of schools. Of the 134 principals in the population, a total of 39 principals completed and submitted the online survey. Of the 39 respondents, five were from principals with fewer than three years' experience in their current school. These five respondents were excluded from the analysis. Of the remaining 34 respondents, 18 were from schools designated as high-performing and 16 were from schools designated as low-performing.

Table 2 displays the demographic features of the respondents' schools. Percentages were used to describe categorical data, such as school location, school size, socioeconomic status and racial makeup of the student body.

Table 2

Descriptive Statistics of Schools

Demographic feature	All		High performing		Low-performing	
	N	P	N	P	N	P
School location						
Urban	13	38.2	2	11.1	11	68.8
Suburban	18	52.9	15	83.3	3	18.8
Rural	3	8.8	1	5.6	2	12.5
# of students						
301-599	5	14.7	4	22.2	1	6.2
600-999	16	47.1	8	44.4	8	50
1000+	13	38.2	6	33.3	7	43.8
% Free/reduced lunch						
<20%	9	26.5	7	38.9	2	12.5
20-39%	11	32.4	10	55.6	1	6.2
40-59%	6	17.6	0	0	6	37.5
60%+	8	23.5	1	5.6	7	43.8
Predominant race						
White	23	67.6	18	100	5	31.2
Black	10	29.4	0	0	10	62.5
Hispanic	1	2.9	0	0	1	6.2

Of the responding principals, 18 described their schools as suburban, 13 as urban, and three as rural. In the high-performing sub-group, 15 of the 18 principals described their schools as suburban, two as urban, and one as rural. In the low-performing sub-group, three principals described their schools as suburban, 11 as urban, and two as rural. Thirteen of the 14 principals that reported a free/reduced lunch population of 40% or higher are in the low-performing sub-group. Twenty-three of the 34 schools in the sample have a predominantly White student body, 10 have a predominantly Black student body, and one has a predominantly Hispanic student body. For the high-performing subgroup, all 18 schools have a majority White student body. For the low-performing subgroup, 10 have a majority Black student body, five have a majority White student body and one has a majority Hispanic student body.

In addition to demographic characteristics, the survey asked principals to describe the makeup of their administrative team. The administrative team makeup varied across the schools and the only consistent determiner of the number of members on the administrative team was school size. All principals reported having a least one assistant principal and 20 of the principals reported having two assistant principals. Two principals reported having deans of students on the administrative team, and six principals reported that department chairs assisted with observations.

Characteristics of Principals. Background characteristics of the participating principals are displayed in Table 3. The information displayed represents the characteristics of the group as a whole, as well as for each performance sub-group. As a whole, principals reported a work week with a mean of 57.29 hours. Principals at schools designated as high-performing reported working an average of 55.53 hours per week,

while principals at schools designated as low-performing reported an average work week of 59.28 hours.

Table 3

Characteristics of Participating Principals

	All		High performing		Low performing	
Characteristic	M	SD	M	SD	M	SD
Years at current school	6.24	5.19	8.33	6.41	3.88	1.31
Total years as principal	8.09	6.02	10.72	6.96	5.13	2.65
Hours in contract week	39.85	.82	39.97	.118	39.72	1.19
Extra hours worked per week	17.44	6.05	15.55	6.62	19.56	4.66
Total work hours per week	57.29	5.92	55.53	6.62	59.28	4.42

Of the thirty four responding principals, 20 are male and 14 are female. Fifty-six percent (19 of 34) of principals reported being at their current school for fewer than five years, 32% (11 of 34) reported being at their current school for between five and ten years, and just under 12% (four of 34) have been at their school for more than ten years. The average total years of experience for the entire group is 8.09 years. The high-performing group reported an average of 10.72 years and the low-performing group reported an average of 5.13 years. This difference between sub-groups is mirrored in years of experience at the current school. The mean years at the current school for the group as a whole is 6.24 years. Principals at the schools designated as high-performing

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reported an average of 8.33 years at the current school, while principals at the schools

designated as low-performing reported an average of 3.88 years at the current school.

Percentage of time-on-tasks. The first two research questions posed in this study

address the allocation of time to the seven identified time-on-tasks categories. Research

Question 1 asks: What percentage of work time do middle school principals devote to

each of the seven identified categories of time use? Data results for this question are

displayed in Table 4.

Table 4

Percentage of Time Allocated to Time-on-tasks Categories

Category	All		High performing		Low performing	
	M	SD	M	SD	M	SD
Administration and operations	26.82	15.25	33.11	17.23	19.75	8.63
Day-to-day instruction	20.71	9.35	15.55	5.11	26.50	9.75
Internal relations	12.97	3.66	14.72	4.01	11.00	1.86
Organization management	16.35	8.13	17.55	10.17	15.00	4.94
Instructional program	15.09	9.40	11.28	7.55	19.37	9.63
External relations	5.88	2.31	5.33	2.42	6.50	2.06
Other	3.35	2.44	4.55	2.57	2.00	1.36

The data revealed that principals as a whole divide their time among the categories in the following order: administration and operations (26.82%), day-to-day instruction (20.71%), organization management (16.35%), instructional program (15.09%), internal relations (12.97%), external relations (5.88%) and other (3.35%).

Research Question 2 asks: What are the differences in how middle school principals allocate their time on the seven identified categories of time use in high and low-performing schools? This question focuses on the differences between the high and low-performing sub-groups. Figure 3 displays the percentage of available work time in a typical week allocated to seven time-on-tasks categories by principals in the sample population as a whole and in the two subgroups of high and low-performing schools.
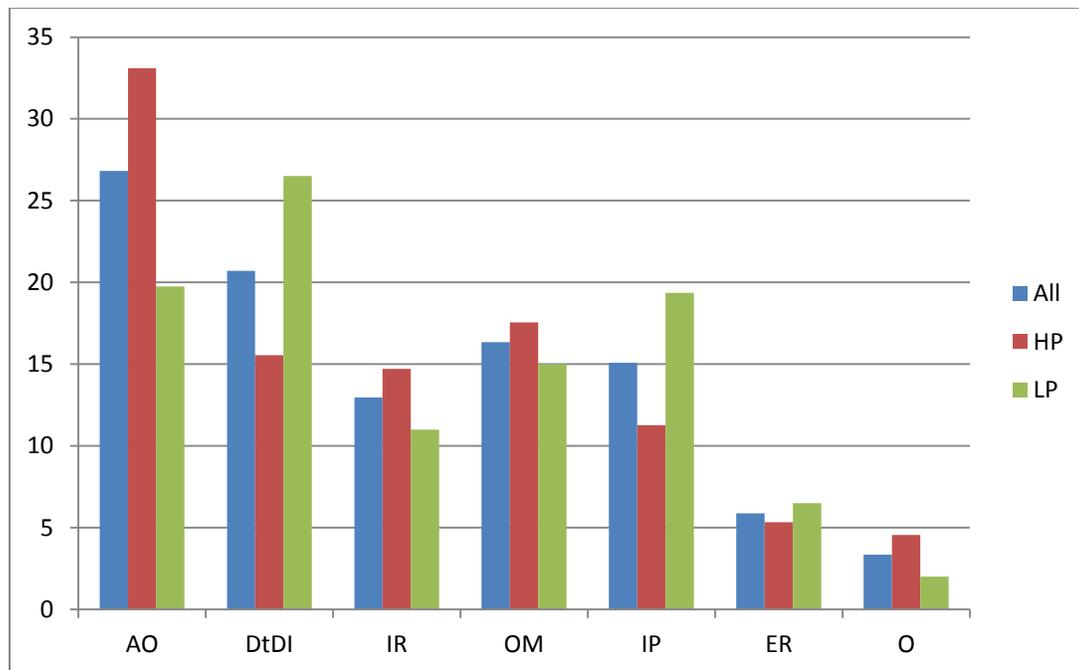
Figure 3. *Comparison of Time Allocated to Time-on-tasks Categories by Performance Subgroup*

The descriptive statistics revealed a number of differences in the percentage of time spent on each time-on-tasks category by principals at high and low-performing schools; administration and operations (13.36%), day-to-day instruction (-10.94%), organization management (2.56%), instructional program (-8.10%), internal relations (3.72%), external relations (-1.17%) and other (2.56%). To see if any of the differences were significant for this population, the researcher ran a series of t-tests for each time-on-tasks category with the AYP performance category as the grouping variable. Two of the tests indicate differences in the mean between the two subgroups that are significant at the $p < .5$ level; percentage of time spent on instructional program and external relations. Table 4 includes percentages for each time-on-tasks category for the entire group as well as for each sub-group.

Four of the tests indicate differences in the mean that are significant at the $p < .01$ level; percentage time spent on administration and operations, day to day instruction, internal relations, and other. The test for organization management indicates that the mean difference in time spent on this category is not significant for this sample population.

Correlation between variables. Research Question 3 builds on the descriptive statistics by adding the element of relationships between variables. Question 3 asks: What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and demographic factors such as the principal's years of experience in administration, the school's socioeconomic status, the student population's size and ethnicity, and the school's location**?**

The researcher conducted Pearson Product Moment Correlations to determine the strength and statistical significance of relationships between variables. The correlation results are displayed in the correlation matrix table in Appendix D. The table notes both positive and negative correlations. In the correlational matrix, a positive number means that a relationship exists where as one variable increases, the related variable also increases. A negative number means that a relationship exists where as one variable decreases, the related variable also decreases. The results of the correlation analysis were used to determine the order in which independent variables were entered into the regression analyses.

Initial correlation results display moderate to large correlations between five of the seven time-on-tasks categories and the two dependent variables (standards of learning pass rates for mathematics and reading) as shown in Table 5.

Table 5

Correlations between SOL Passing Rates and Time-on-Tasks Categories (n=34)

Time-on-tasks category	Math	Reading
1. % Admin. and operations	.40*	.43*
2. % Org. management	.20	.21
3. % Day-to-day instruction	-.58**	-.62**
4. % Instructional program	-.41*	-.45**
5. % Internal relations	.50**	.48**
6. % External relations	-.31	-.33
7. % Other	.45**	.44**

$*p < .05.$ $**p < .01.$

The largest effect is between the percentage of time the principal spends on day-to-day instruction and reading pass rates (-.62). There is also a strong negative correlation between the percentage of time the principal spends on day-to-day instruction and mathematics pass rates (-.58). Both of these findings are significant at the $p < .01$ level. There is also a significant negative correlation between the time spent on the instructional program and mathematics pass rates (-.41) and the percentage of time spent on the instructional program and reading pass rates (-.45). Significant positive correlations are also noted between administration and operations and mathematics (.40), internal relations and mathematics (.50), and other and mathematics (.45). For reading, significant correlations are noted between administration and operations and reading (.43), internal relations and reading (.48) and other and reading (.44).

In order to include the non-scale demographic variables in the analyses, demographic sub-groups were assigned place holder numbers. For the purposes of this study, the following place holders were assigned: urban-1, suburban-2 and rural-3; Caucasian-1, Black-2 and Hispanic-3. The remaining school characteristic variables were scale variables and were therefore ordered based on increasing size. The analysis revealed significant correlations between the demographic variables and both dependent variables as displayed in Table 6. The largest correlation is between free/reduced lunch status and the dependent variables of both mathematics pass rates and reading pass rates (-.61). Other significant negative correlations were found between racial makeup and mathematics pass rate (-.59) and racial makeup and reading pass rates (-.63), all of which are significant at the $p < .01$ level. Small to medium positive correlations were noted between school location and mathematics pass rates (.39), the principal's years at the

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school and mathematics pass rates (.35) the principal's total years of experience and

reading pass rates (.35) and the principal's total years of experience and mathematics pass

rates (.39), all of which are significant at the $p < .05$ level. One additional positive

correlation was noted between school location and reading pass rates (.50), which is

significant at the $p < .01$ level.

Table 6

Correlations between SOL Passing Rates and Demographic Variables (n=34)

	Math	Reading
1. School location	.39*	.50**
2. School size	-.12	-.13
3. Free/reduced lunch	-.61**	-.61**
4. Racial makeup	-.59**	-.63**
5. Principal years at school	.35*	.31
6. Principal total exp.	.39*	.35*
7. Principal work hours	-.26	-.30

*$p < .05$. **$p < .01$.

Using the results of the full correlational matrix in Appendix D, the time-on-tasks

categories were ranked by effect size into the following order:

1. Day-to-day instruction

2. Internal relations

3. Other

4. Instructional program

5. Administration and operations

6. External relations

7. Organization management

The correlation analysis also revealed a number of strong relationships between the time-on-tasks categories. This caused a concern that highly correlated variables might result in small changes in data that lead to large changes in the estimates of the coefficients. The strongest relationship is between administration and operations and day-to-day instruction (r = .65). This relationship is significant at the $p < .01$ level. Other statistically significant relationships were revealed by the correlation analysis between internal relations and other (r = .62), administration and operations and instructional program (r = .56), administration and operations and external relations (r = .51), and organization management and internal relations (r = .45). Additional medium to strong correlations were noted between principal characteristics subgroups and between school demographic subgroups.

The concern of multicollinearity was addressed by adding a collinearity diagnosis to the multiple regression analysis. Step one involved entering all independent variables into the regression analysis for the dependent variable of mathematics passing rates using the enter method and requesting statistics for coefficients and a collinearity diagnosis. The initial ANOVA table listed a sum of squares that indicated more than two-thirds of the variance between mathematics passing rates could be attributed to the model at a significance of $p < .01$. While this looked initially positive for the model, a review of the coefficients table indicated many non-significant variables, as well as a number of low tolerance numbers. The small tolerances show that a high percentage of the variance in a

given predictor can be explained by the other predictors and indicated a serious problem with multicollinearity. The collinearity diagnostics also revealed a number of low eigenvalues. More than half of the predictor variables had an eigenvalue close to zero, indicating a high intercorrelation. The researcher addressed this concern by using a hierarchical regression for the time-on-tasks categories, followed by a series of stepwise regressions that added the demographic variables.

Results of regression analyses. Research Question 4 asks: What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and AYP performance indicators at high and low-performing schools?

Hierarchical, or blockwise, multiple regression analysis was used to determine the extent to which the percentage of time principals spend on each of the time-on-tasks categories can explain the percentage passing rate for mathematics and reading assessments. Independent variables were entered into the regression equation in an order based on the strength of their correlations to the dependent variable as shown in the correlation matrix.

The first series of regressions used only the time-on-tasks categories and the dependent variable of mathematics passing rates. The hierarchical regression analysis for time-on-tasks categories and mathematics pass rates yielded only one statistically significant relationship. The category of Internal Relations has an R^2 of .49 that is significant at the $p < .05$ level. None of the other time-on-tasks categories yielded a statistically significant relationship. Table 7 displays the results of this analysis for variables predicting pass rates on the mathematics test.

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The second series of regressions used only the time-on-tasks categories and the dependent variable of reading passing rates. The collective and separate effects of the time-on-tasks categories on reading passing rates were analyzed.

Table 7

Summary of Hierarchical Regression Analysis for Variables Predicting Pass Rates on SOL Mathematics Tests

Step	Variable	R	R^2	Adj. R^2	S_{est}	Increase in R^2	B	β	t	Sig.
1	DtD	.584	.341	.321	8.682	.341	.014	.013	.039	.969
2	IR	.702	.493*	.461	7.736	.152	1.497	.521	2.592	.015
3	O	.705	.497	.446	7.838	.003	.854	.198	1.055	.301
4	IP	.723	.523	.457	7.762	.026	.192	.172	.637	.529
5	AO	.745	.554	.475	7.635	.031	.383	.555	1.314	.200
6	ER	.765	.585	.493	7.501	.031	-1.068	-.234	-1.541	.135
7	OM	.771	.595	.486	7.554	.010	.206	.159	.788	.438

*$p < .05$

Similar to the results for the mathematics pass rates, the hierarchical regression analysis for time-on-tasks categories and reading pass rates yielded only one statistically significant relationship. The category of Internal Relations has an R^2 of .51 that is significant at the $p < .05$ level. None of the other time-on-tasks categories yielded a statistically significant relationship. Table 8 displays the results of this analysis for variables predicting pass rates on the reading test.

After completing the hierarchical regression analysis for the time-on-tasks

categories, the researcher added all the demographic variables to the regression analysis.

Table 8

Summary of Hierarchical Regression Analysis for Variables Predicting Pass Rates on SOL

Reading Tests

Step	Variable	R	R^2	Adj. R^2	S_{est}	Increase in R^2	B	β	t	Sig.
1	DtD	.617	.381	.362	8.616	.381	-.162	-.141	-.451	.655
2	IR	.718	.516*	.485	7.740	.135	1.279	.434	2.225	.035
3	O	.721	.519	.471	7.843	.003	.679	.805	.153	.407
4	IP	.749	.561	.500	7.623	.042	.022	.300	.019	.941
5	AO	.759	.575	.500	7.630	.014	.254	.290	.359	.390
6	ER	.782	.612	.525	7.430	.036	-1.150	.689	-.246	.107
7	OM	.786	.618	.515	7.514	.006	.165	.260	.124	.532

*$p < .05$

The new regression analysis was conducted using the stepwise method of entering the

variables to allow for the entry and removal of variables in a manner that would correct

for the multicollinearity. The final model includes only those variables that remained

significant after factoring for collinearity. The results of the stepwise regression between

all independent variables and mathematics pass rates are displayed in Table 9.

In the final model, four independent variables remain significant in combination

as a predictor for passing rates on the mathematics test: free/reduced lunch, instructional

program, size of the school and external relations. This set of variables in combination accounts for 70% of the variance in mathematics pass rates.

Table 9

Summary of Stepwise Regression Analysis for Variables Predicting Pass Rates on SOL Mathematics

Step	Variable	R	R^2	Adj. R^2	S_{est}	Increase in R^2	B	β	t	Sig.
1	SES	.61	.37	.35	8.47	.37	-7.26	-.78	-7.57	.000
2	IP	.74	.55	.53	7.25	.18	-.40	-.35	-3.68	.001
3	Size	.82	.67	.64	6.31	.12	-4.96	-.33	-3.15	.004
4	ER	.86	.74	.70	5.73	.07	-1.22	-.27	-2.72	.011

Similar to the mathematics model, four independent variables remain significant in combination as a predictor for pass rates on reading tests: instructional program, free/reduced lunch, size of the school and external relations. The predominate racial makeup of the school was initially included in the model, however it failed to remain significant after the addition of the free/reduced lunch variable and so was subsequently dropped from the regression equation. The remaining variables in combination account for 76% of the variance in reading pass rates. The results of the stepwise regression between all independent variables and reading pass rates are displayed in Table 10.

Results by time-on-tasks category. The results of the data analysis for each of the time-on-tasks categories are presented below. These results are reported in light of

the background characteristics of the participants. The percentage of time spent on each

category is described in terms of demographic characteristics and sub-group.

Table 10

Summary of Stepwise Regression Analysis for Variables Predicting Pass Rates on SOL

Reading Tests

Step	Variable	R	R^2	Adj. R^2	S_{est}	Increase in R^2	B	β	t	Sig.
1	Race	.63	.39	.38	8.52	.39	-12.46	-.63	-4.57	.000
2	IP	.72	.52	.48	7.74	.12	-.45	-.39	-4.54	.000
3	SES	.78	.61	.57	7.03	.09	-7.46	-.78	-8.47	.000
4	-Race	.77	.59	.56	7.13	-.02	-4.60	-.23	-1.38	.177
5	Size	.84	.71	.69	6.05	.12	-5.17	-.33	-3.57	.001
6	ER	.89	.79	.76	5.26	.08	-1.34	-.29	-3.25	.003

The percentage of time allotted is presented for each category along with the standard

deviation. This percentage represents the amount of time allocated to each category as

reported by participating principals.

   Administration and operations. For this category, principals were asked to

allocate the percentage of available work time they devoted to tasks related to school

administration and operations. The relevant tasks for this category include:

   1. fulfilling compliance requirements (NOT including special education),

   2. managing school schedules,

   3. managing personal, school-related schedule,

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4. managing student discipline,

5. managing student services (records, reporting, activities, etc.),

6. managing student attendance-related activities,

7. preparing, implementing, and administering standardized tests,

8. supervising students as a scheduled daily activity (lunch duty, bus duty, etc),

9. maintaining campus facilities, and

10. developing and monitoring a safe school environment.

The category of administration and operations ranks first in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 26.82%. This category ranks first in percentage of time allotted by the high-performing subgroup (33.11%) and second by the low-performing subgroup (19.75%).

Of the tasks listed in the category of administration and operations, only number eight, supervising students as a scheduled daily activity, was included as a routine weekly task by all principals. Numbers 2, 3, 4, 9 and 10 were included by 30 of the 34 principals. The least reported tasks are number five, managing student services (17 of 34) and number seven, preparing, implementing and administering standardized tests (16 of 34). Of the 16 principals who report task seven, preparing, implementing and administering standardized tests as a regular weekly task, two are from the high-performing subgroup and 14 are from the low-performing subgroup. An ANOVA test reveals this variance is significant at the $p < .01$ level. The 17 principals reporting task seven as a regular weekly task are divided nearly evenly between the two performance subgroups.

The percentage of time allocated to administration and operations is nearly even for male (26.20%) and female (27.71%) principals. Principals with the highest number of years at the current school spend an average of 7.28% more time on this category than principals with the least number of years. An ANOVA test on this variance was significant at the $p < .05$ level. When looking at total years of experience, each of the three subgroups spend close to the same percentage of time on administration and operations. When looking at principal's total work hours, the group with the shortest average work week spends the most time on this category (32.30%) compared to those who report the longest week (17.50%). There is a mean difference of 14.80 % in time spent on this category between the principals with the shortest reported work week and those with the longest reported work week. An ANOVA test on this variance was significant at the $p < .05$ level. Table 11 displays the percentage of time allocated to the category of administration and operations in light of the principals' characteristics.

For school location, principals of rural school schools spend the most time administration and operations (48.66%) compared to principals of suburban schools (29.33%) and urban schools (18.31%). An ANOVA test revealed this variance is significant at the $p < .01$ level. Principals of smaller schools spend an average of 12 % more time on this area than principals of larger schools. The time spent on this category by principals with a low percentage of students with free/reduced lunch (31.44%) is close to the time spent by those at schools with a high percentage of students with free/reduced lunch (29.12%).

Table 11

Percentage of time allocated to administration and operations by principal

characteristics

	N	M	SD
Sex of Principal			
Male	20	26.20	15.75
Female	14	27.71	15.06
Principal's Years at Current School			
< 5 years	19	25.47	14.29
5 – 10 years	11	26.65	17.33
> 10 years	4	33.75	16.00
Principal's Total Years of Experience			
< 5 years	15	27.60	13.71
5 – 10 years	8	26.00	23.37
> 10 years	11	26.36	10.97
Principal's Total Work Hours			
< 55 hours per week	10	32.30	19.65
55 – 60 hours per week	18	26.88	13.16
> 60 hours per week	6	17.50	9.35

Principals at schools with a majority White student body spend an average of

nearly 13% more time than those at schools with a majority Black student body. An

ANOVA test reveals this variance is significant at the *p* < .01 level. Table 12 displays the percentage of time allocated to the category of administration and operations in light of the schools' demographic characteristics.

   Organization management. For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to managing resources within the school. The relevant tasks for this category include:

1. managing budgets, resources,

2. hiring personnel,

3. managing instructional staff,

4. managing non-instructional staff,

5. planning/participating in scheduled school meetings,

6. participating in district meetings or other communications initiated by the district office,

7. interacting/networking with other principals,and

8. engaging in self-improvement/ professional development.

   The category of organization management ranks third in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 16.35%. This category ranks second in percentage of time allotted by the high-performing subgroup (17.55%) and fourth by the low-performing subgroup (15.00%). Of the tasks listed in the category of organization management, only number three, managing instructional staff and number five, planning/participating in scheduled meetings are included as routine weekly tasks by all 34 principals. Numbers 1, 3, 4 and 6 are included by 31 of the 34

Table 12

Percentage of time allocated to administration and operations by school demographic

characteristics

	N	M	SD
School Location			
Urban	13	18.31	4.71
Suburban	18	29.33	14.48
Rural	3	48.66	26.10
School Size			
301 – 599 students	5	36.66	24.55
600 – 999 students	16	24.25	10.72
1000+ students	13	26.23	15.69
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	31.44	16.50
20% - 39% Free/Reduced Lunch	11	26.36	10.97
40% - 59% Free/Reduced Lunch	6	17.67	5.20
60% + Free/Reduced Lunch	8	29.12	22.11
Predominant Race			
White	23	31.26	16.40
Black	10	18.80	4.59
Hispanic	1	5.00	-

principals. The least reported tasks are number seven, interacting/networking with other

principals (20 of 34) and number eight, engaging in self-improvement/ professional

development (19 of 34). Table 13 displays the percentage of time allocated to the

category of organization management in light of the principals' characteristics.

Male principals spend an average of 19.10% of time on this category and female

principals spend an average of 12.42% of time. An ANOVA test revealed this variance is

significant at the $p < .05$ level. The percentage of time allocated decreases as years of

service at the current school increase, from 17.58 for principals with fewer than five

years, 15.18 for principals with five to ten years, and 13.75 for principals with more than

ten years at the current school. When looking at total years of experience, principals with

fewer than five years spend an average of 18.93% of available time on this category,

principals with five to ten years spend 12.12% of time, and principals with more than ten

years total experience spend an average of 15.90% of time on this area. Principals with a

reported work week of 60+ hours spend the highest percentage of time on this category

(21.67%) compared to those with a reported work week of between 55 and 60 hours

(14.38%) and fewer than 55 hours (16.70%).

Table 14 displays the percentage of time allocated to the category of organization

management in light of the schools' demographic characteristics. For school location,

principals of suburban schools spend the highest percentage of time on this category

(18.00%) compared to principals of urban schools (15.23%) and rural schools (11.33%).

Principals of schools with fewer than 600 students spend an average of 11.40% of time

on this area, compared to principals of schools with 600-900 student (15.12%) and

principals of schools with more than 1000 students (19.77%). The percentage of time

spent on this

Table 13

Percentage of Time Allocated to Organization Management by Principal

Characteristics

	N	M	SD
Sex of Principal			
male	20	19.10	9.44
female	14	12.42	3.05
Principal's Years at Current School			
< 5 years	19	17.58	9.80
5 – 10 years	11	15.18	6.03
> 10 years	4	13.75	2.50
Principal's Total Years of Experience			
< 5 years	15	18.93	10.60
5 – 10 years	8	12.12	4.19
> 10 years	11	15.90	4.90
Principal's Total Work Hours			
< 55 hours per week	10	16.70	5.37
55 – 60 hours per week	18	14.38	4.53
> 60 hours per week	6	21.67	16.33

Table 14

Percentage of Time Allocated to Organization Management by School Characteristics

	N	M	SD
School Location			
Urban	13	15.23	5.05
Suburban	18	18.00	10.00
Rural	3	11.33	4.04
School Size			
301 – 599 students	5	11.40	3.51
600 – 999 students	16	15.12	4.72
1000+ students	13	19.77	11.18
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	19.33	13.55
20% - 39% Free/Reduced Lunch	11	15.91	4.91
40% - 59% Free/Reduced Lunch	6	19.17	4.17
60% + Free/Reduced Lunch	8	11.50	3.07
Predominant Race			
White	23	16.65	9.29
Black	10	15.80	5.53
Hispanic	1	15.00	-

category by principals at schools with a low percentage of students on free/reduced lunch (19.33%) is almost eight percentage points higher than those at schools with the highest percentage of students on free/reduced lunch (11.50%). There is fewer than one percentage point difference in the time spent by principals at schools with a primarily White student body (16.65%) and those at schools with a primarily Black student body (15.80%). None of the variances in the percentage of time spent on organization management within school demographic subgroups are statistically significant.

Day-to-day instruction. For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to overseeing the day-to-day instruction at the school. The relevant tasks for this category include:

1. fulfilling Special Education requirements,
2. informally coaching teachers to improve instruction or their teaching in general,
3. formally evaluating teachers and providing feedback to support improvement,
4. planning to conduct or conducting classroom observations/ walk-throughs,
5. implementing required professional development, and
6. using data to inform instruction, and
7. teaching students.

The category of day-to-day instruction ranks second in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 20.71%. This

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category ranks third in percentage of time allotted by the high-performing subgroup (15.55%) and first by the low-performing subgroup (26.50%).

Three of the seven tasks listed in the category of day-to-day instruction, numbers 2, 3 and 4, are included as routine weekly tasks by all principals. Numbers 1, 5 and 6, are included by 28 of the 34 principals. The least reported task is number seven, teaching students (12 of 34). Of the principals reporting number seven as a routine weekly task, three are from the high-performing subgroup and nine are from the low-performing subgroup. Seventeen percent of principals in the high performing subgroup report teaching students as a routine weekly task, compared to 56% of principals in the low-performing subgroup. An ANOVA test revealed this difference is significant at the $p <$ .05 level.

Male principals spend an average of 20.20% of time on this category and female principals spend an average of 21.43% of time. The percentage of time allocated for this category is 21.00 for principals with fewer than five years, 22.27 for principals with five to ten years, and 15.00 for principals with more than ten years at the current school.

When looking at total years of experience, principals with fewer than five years spend an average of 20.27% of available time on this category, while principals with five to ten years spend slightly more time (25.00%) and principals with more than ten years total experience spend an average of 18.18% of time on this area. Principals with a reported work week of 60+ hours spend the highest percentage of time on this category (23.33%) compared to those with a reported work week of between 55 and 60 hours (22.17%) and fewer than 55 hours (16.50%). Of the variances in time spent on day-to-day instruction by principal characteristics subgroups, only principal's total work hours is

statistically significant ($p < .05$). Table 15 displays the percentage of time allocated to the category of day-to-day instruction in light of the principals' characteristics.

Table 15

Percentage of Time Allocated to Day-to-Day Instruction by Principal

Characteristics

	N	M	SD
Sex of Principal			
Male	20	20.20	9.03
Female	14	21.43	10.08
Principal's Years at Current School			
< 5 years	19	21.00	9.74
5 – 10 years	11	22.27	10.09
> 10 years	4	15.00	0
Principal's Total Years of Experience			
< 5 years	15	20.27	9.26
5 – 10 years	8	25.00	13.89
> 10 years	11	18.18	3.37
Principal's Total Work Hours			
< 55 hours per week	10	16.50	5.29
55 – 60 hours per week	18	22.17	11.09
> 60 hours per week	6	23.33	7.53

Table 16 displays the percentage of time allocated to the category of day-to-day instruction in light of the schools' demographic characteristics.

Table 16

Percentage of Time Allocated to Day-to-Day Instruction by School Characteristics

	N	M	SD
School Location			
Urban	13	26.46	9.39
Suburban	18	17.78	6.24
Rural	3	13.33	14.43
School Size			
301 – 599 students	5	14.00	8.21
600 – 999 students	16	24.68	9.74
1000+ students	13	18.38	7.32
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	16.67	8.29
20% - 39% Free/Reduced Lunch	11	18.18	3.37
40% - 59% Free/Reduced Lunch	6	23.17	3.65
60% + Free/Reduced Lunch	8	26.87	15.10
Predominant Race			
White	23	16.96	7.18
Black	10	28.40	9.10
Hispanic	1	30.00	-

For school location, principals of urban school schools spend the most time on this category (26.46%) compared to principals of suburban schools (17.78%) and rural schools (13.33%). This difference is significant at the $p < .01$ level. Principals of schools with fewer than 600 students spend an average of 14.00% of time on this area, compared to principals of schools with 600-900 student (24.68%) and principals of schools with more than 1000 students (18.38%). This difference is significant at the $p < .05$ level.

For this category, as the percentage of students with free/reduced lunch increases, the percentage of time principals reported spending on tasks in this area also increase, from a low of 16.67% at schools with fewer than 20% of students on free/reduced lunch, to a high of 26.87% at schools with more than 60% of students on free/reduced lunch. This difference was not statistically significant.

Principals at schools with a majority Black student body spend an average of 11.44% more time (28.40%) on this area than those at schools with a primarily White student body (16.96%). The sole participating principal at a school with a predominately Hispanic student body reported spending 30% of time on this area. This difference is significant at the $p < .01$ level.

Instructional program. For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to development of the instructional program at the school. The relevant tasks for this category include:

1. developing an educational program across the school,
2. evaluating curriculum,

3. using assessment results for program evaluation and development,

4. planning or facilitating professional development for teachers,

5. planning or facilitating professional development for prospective principals,

6. releasing or counseling out teachers, and

7. planning or directing supplementary, after school, or summer school instruction.

The category of instructional program ranks fourth in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 15.09%t. This category ranks fifth in percentage of time allotted by the high-performing subgroup (11.28%) and third by the low-performing subgroup (19.37%).

Of the tasks listed in the category of instructional program, only number three, using assessment results for program evaluation and development, is included as a routine weekly task by all principals. Numbers 1, 2 and 4 are included by 25 of the 34 principals. The least reported tasks are number six, releasing or counseling out teachers, and number seven, planning or directing supplementary, after school, or summer school instruction, with 15 principals reporting each of these as a regular weekly task. Principals who reported tasks six and seven as part of their regular weekly tasks are closely split between the high and low-performing subgroups.

Table 17 displays the percentage of time allocated to the category of instructional program in light of the principals' characteristics.

Table 17

Percentage of time allocated to instructional program by principal characteristics

	N	M	SD
Sex of Principal			
Male	20	13.65	8.05
Female	14	17.14	11.04
Principal's Years at Current School			
< 5 years	19	16.84	10.57
5 – 10 years	11	14.81	7.70
> 10 years	4	7.50	2.89
Principal's Total Years of Experience			
< 5 years	15	14.00	8.49
5 – 10 years	8	19.12	12.72
> 10 years	11	13.63	7.77
Principal's Total Work Hours			
< 55 hours per week	10	9.80	4.98
55 – 60 hours per week	18	16.67	8.22
> 60 hours per week	6	19.16	14.97

Male principals spend an average of 13.65% of time on this category and female principals spent an average of 17.14% of time. This difference is not statistically

significant. The percentage of time allocated for this category is 16.84 for principals with

fewer than five years, 14.81 for principals with five to ten years, and 7.50 for principals

with more than ten years at the current school. This difference is not statistically

significant. When looking at total years of experience, principals with fewer than five

years spend an average of 14.00% of available time on this category, while principals

with five to ten years spent 19.12% of time and principals with more than ten years total

experience spent an average of 13.63% of time on this area. This difference is significant

at the $p < .01$ level. There is a gap of close to 10% between time spent on this category by

principals with the shortest work week and those with the longest reported work week.

Principals with a reported work week of 60+ hours spend the highest percentage of time

on this category (19.16%) compared to those with a reported work week of between 55

and 60 hours (16.67%) and fewer than 55 hours (9.80%). This difference is significant at

the $p < .01$ level.

Table 18 displays the percentage of time allocated to the category of instructional

program in light of the schools' demographic characteristics. For school location,

principals of urban school schools spend the most time on this category (18.46%)

compared to principals of suburban schools (13.33%) and rural schools (11.00%).

Principals of schools with fewer than 600 students spend an average of 19.60% of time

on this area, compared to principals of schools with 600-900 student (10.94%) and

principals of schools with more than 1000 students (18.46%). The six principals at

schools with a 40-59% free/reduced lunch rate spend the most time on this area (22.50%).

The percentage of time spent on this category by principals at schools with a low

percentage of students with free/reduced lunch (15.00%) is close to the time spent by

those at schools with the highest percentage of students with free/reduced lunch

(11.62%).

Table 18

Percentage of time allocated to instructional program by school characteristics

	N	M	SD
School Location			
Urban	13	18.46	9.65
Suburban	18	13.33	9.07
Rural	3	11.00	8.54
School Size			
301 – 599 students	5	19.60	9.53
600 – 999 students	16	10.94	3.75
1000+ students	13	18.46	12.31
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	15.00	13.69
20% - 39% Free/Reduced Lunch	11	13.64	7.78
40% - 59% Free/Reduced Lunch	6	22.50	6.12
60% + Free/Reduced Lunch	8	11.62	5.04
Predominate Race			
White	23	13.83	10.20
Black	10	18.00	7.53
Hispanic	1	15.00	-

Principals at schools with a majority White student body spend an average of 13.83% of time on this category and those at schools with a primarily Black student body spend an average of 18.00% of time. The principal of the school with a primarily Hispanic student body reported spending 15.00% of time on this area. None of the variances in the percentage of time spent on the instructional program within school demographic subgroups are statistically significant.

Internal relations. For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to interactions with students and staff at the school. The relevant tasks for this category include**:**

1. developing relationships with students,

2. communicating with parents,

3. interacting socially with staff about school-related topics (shop talk),

4. interacting socially with staff about non-school topic,

5. attending school activities,

6. counseling staff about conflicts with other staff members, and

7. counseling or in-depth conversation with students.

The category of internal relations ranks fifth in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 12.97%. The internal relations category ranks fourth in percentage of time allotted by the high-performing subgroup (14.72%) and fifth by the low-performing subgroup (11.00%).

Of the tasks listed in the category of internal relations, only number one, developing relationships with students, is included as a routine weekly task by all principals. Numbers 2, 3 and 5 are included by 32 of the 34 principals. The least reported task is number 6, counseling staff about conflicts with other staff members (18 of 34). Twenty-eight percent of principals from the high-performing subgroup reported counseling staff about conflicts as a regular weekly task in the category of internal relations and 81% of principals from the low-performing subgroup included this task. This difference is significant at the $p < .05$ level.

Male principals spend an average of 12.80% of time on this category and female principals spend an average of 13.21% of time. This difference is not statistically significant. The percentage of time allocated for this category is 12.67 for principals with fewer than five years, 10.75 for principals with five to ten years, and 15.00 for principals with more than ten years at the current school. This difference is significant at the $p < .01$ level.

When looking at total years of experience, principals with fewer than five years spend an average of 12.67% of available time on this category, while principals with five to ten years spend slightly less time (10.75%) and principals with more than ten years total experience spend an average of 15.00% of time on this area. This difference is significant at the $p < .05$ level. Principals with a reported work week of 60+ hours spend the highest percentage of time on this category (14.17%) compared to those with a reported work week of between 55 and 60 hours (12.28) and fewer than 55 hours (13.50%). This difference is significant at the $p < .01$ level. Table 19 displays the

percentage of time allocated to the category of internal relations in light of the principals'

characteristics.

Table 19

Percentage of time allocated to internal relations by principal characteristics

	N	M	SD
Sex of Principal			
Male	20	12.80	4.36
Female	14	13.21	2.49
Principal's Years at Current School			
< 5 years	19	12.37	3.49
5 – 10 years	11	13.27	3.16
> 10 years	4	15.00	5.78
Principal's Total Years of Experience			
< 5 years	15	12.67	3.71
5 – 10 years	8	10.75	3.01
> 10 years	11	15.00	3.16
Principal's Total Work Hours			
< 55 hours per week	10	13.50	4.74
55 – 60 hours per week	18	12.28	2.42
> 60 hours per week	6	14.17	4.91

Table 20 displays the percentage of time allocated to the category of internal relations in light of the schools' demographic characteristics.

Table 20

Percentage of time allocated to internal relations by school characteristics

	N	M	SD
School Location			
Urban	13	12.00	3.72
Suburban	18	14.44	2.91
Rural	3	8.33	2.89
School Size			
301 – 599 students	5	12.00	4.47
600 – 999 students	16	13.19	3.47
1000+ students	13	13.08	3.84
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	14.44	3.91
20% - 39% Free/Reduced Lunch	11	15.00	3.16
40% - 59% Free/Reduced Lunch	6	10.00	0
60% + Free/Reduced Lunch	8	10.75	3.01
Predominant Race			
White	23	13.91	3.98
Black	10	10.60	1.26
Hispanic	1	15.00	-

For school location, principals of suburban school schools spend the most time on this category (14.44%) compared to principals of urban schools (12.00%) and rural schools (8.33%). This difference is significant at the $p < .01$ level.

Principals of schools with fewer than 600 students spend an average of 12.00% of time on this area, compared to principals of schools with 600-900 students (13.19%) and principals of schools with more than 1000 students (13.08%). This difference is not statistically significant. The percentage of time spent on this category by principals at schools with a low percentage of students on free/reduced lunch (14.44%) is higher than the percentage of time spent by those at schools with the highest percentage of students with free/reduced lunch (10.75%).

For the predominant race demographic, principals spend 13.91% of time on this area at schools that are majority White, 10.60% at schools that are majority Black, and 15.00% at the sole responding school that is majority Hispanic. This difference is significant at the $p < .05$ level

External relations. For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to interacting with division personnel, community members, and others outside the school. The relevant tasks for this category include:

1. working with local community members or organizations,

2. fundraising,

3. communicating with the district office to obtain resources (initiated by principal),

4. recruiting students to attend school,

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5. publicizing school events and achievements, and

6. recruiting school volunteers from the community.

The category of external relations ranks sixth in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 5.88%. This category ranks sixth in percentage of time allotted by the high-performing subgroup (5.33%) and sixth by the low-performing subgroup (6.50%).

Of the tasks listed in the category of external relations, no one task is included as a routine weekly task by all principals. Numbers 1, 2 and 3 are included by 21 of the 34 principals. The least reported tasks are number six; recruiting school volunteers from the community (12) and number four; recruiting students to attend school (4). There were no statistically significant differences between school in the high and low-performing subgroups regarding tasks four and six.

Table 21 displays the percentage of time allocated to the category of external relations in light of the principals' characteristics. Male principals spend an average of 5.80% of time on this category and female principals spend an average of 6.00% of time. This difference is not statistically significant. The percentage of time allocated for this category is 6.48 for principals with fewer than five years, 4.63 for principals with five to ten years, and 6.50 for principals with more than ten years at the current school. This difference is not statistically significant. When looking at total years of experience, principals with fewer than five years spend an average of 6.40% of available time on this category; principals with five to ten years spend 6.20% of time and principals with more than ten years total experience spend an average of 5.75

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Table 21

Percentage of Time Allocated to External Relations by Principal Characteristics

	N	M	SD
Sex of Principal			
Male	20	5.80	2.14
Female	14	6.00	2.60
Principal's Years at Current School			
< 5 years	19	6.48	2.65
5 – 10 years	11	4.63	1.21
> 10 years	4	6.50	1.73
Principal's Total Years of Experience			
< 5 years	15	6.40	2.27
5 – 10 years	8	6.20	2.62
> 10 years	11	5.75	2.96
Principal's Total Work Hours			
< 55 hours per week	10	5.20	1.93
55 – 60 hours per week	18	5.22	1.73
> 60 hours per week	6	9.00	2.00

percentage of time on this area. This difference is not statistically significant. Principals

with a reported work week of 60+ hours spend the highest percentage of time on this

category (9.00%) compared to those with a reported work week of between 55 and 60

hours (5.22%) and fewer than 55 hours (5.20%). This difference is significant at the $p <$ .01 level.

For school location, principals of urban school schools spend the most time on this category (6.61%) compared to principals of suburban schools (5.50%) and rural schools (5.00%). Principals of schools with fewer than 600 students spend an average of 4.20% of time on this area, compared to principals of schools with 600-900 student (6.25%) and principals of schools with more than 1000 students (6.08%). The percentage of time spent on this category by principals with a low percentage of students on free/reduced lunch (6.55%) is close to the time spent by those at schools with the highest percentage of students with free/reduced lunch (5.75%).

For the predominant race demographic, principals spend 5.87% of time on this area at schools that are majority White, 6.00 at schools that are majority Black, and 5.00 at the sole responding school that is majority Hispanic. None of the variances in the percentage of time spent on external relations within school demographic subgroups are statistically significant. Table 22 displays the percentage of time allocated to the category of external relations in light of the schools' demographic characteristics.

Other. For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to tasks not associated with any of the six main categories. The relevant tasks for this category include:

1. personal time (e.g., bathroom, lunch, personal calls and emails),

2. transition between activities, and

3. any other task not listed in any category above.

Table 22

Percentage of Time Allocated to External Relations by School Characteristics

	N	M	SD
School Location			
Urban	13	6.61	1.90
Suburban	18	5.50	2.28
Rural	3	5.00	4.00
School Size			
301 – 599 students	5	4.20	1.79
600 – 999 students	16	6.25	1.70
1000+ students	13	6.08	2.93
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	6.55	3.47
20% - 39% Free/Reduced Lunch	11	5.54	1.21
40% - 59% Free/Reduced Lunch	6	5.67	1.63
60% + Free/Reduced Lunch	8	5.75	2.55
Predominant Race			
White	23	5.87	2.62
Black	10	6.00	1.63
Hispanic	1	5.00	-

The category of other ranks seventh in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 3.35%. This category ranks seventh in percentage of time allotted by the high-performing subgroup (4.55%) and seventh by the low-performing subgroup (2.00%).

Of the tasks listed in the category of other, only number two, transition between activities, is included as a routine weekly task by all principals. Number one, personal time (e.g., bathroom, lunch, personal calls and emails) is reported as a routine task by 25 principals, and no principals reported items for number three, other tasks not listed in any category above.

Table 23 displays the percentage of time allocated to the category of Other in light of the principals' characteristics. Male principals spend an average of 4.05% of time on this category and female principals spend an average of 2.36% of time. The percentage of time allocated for this category is 2.05 for principals with fewer than five years, 4.09 for principals with five to ten years, and 7.50 for principals with more than ten years at the current school. When looking at total years of experience, principals with fewer than five years spend an average of 2.13% of available time on this category, while principals with five to ten years spend an average of 2.12% and principals with more than ten years total experience spend an average of 5.90% of time on this area. Principals with a reported work week of fewer than 55 hours spend the highest percentage of time on this category (5.60%) compared to those with a reported work week of between 55 and 60 hours (2.50%) and those who report working more than 60 hours (2.16%).

Table 23

Percentage of Time Allocated to Other by Principal Characteristics

	N	M	SD
Sex of Principal			
Male	20	4.05	2.58
Female	14	2.36	1.86
Principal's Years at Current School			
< 5 years	19	2.05	1.47
5 – 10 years	11	4.09	1.58
> 10 years	4	7.50	2.89
Principal's Total Years of Experience			
< 5 years	15	2.13	1.24
5 – 10 years	8	2.12	1.95
> 10 years	11	5.90	2.02
Principal's Total Work Hours			
< 55 hours per week	10	5.60	2.63
55 – 60 hours per week	18	2.50	1.42
> 60 hours per week	6	2.16	2.32

None of the variances in the percentage of time spent on the category of other within principal characteristics subgroups are statistically significant.

For school location, principals of rural school schools spend 2.33% of time on this category, principals of suburban schools spend 3.78% of time and principals of urban schools spend 3.00% of time. Principals of schools with fewer than 600 students spend an average of 4.20% of time on this area, principals of schools with 600-900 students spend an average of 4.19% of time and principals of schools with more than 1000 students spend an average of 2.00% of time in this area. The percentage of time spent on this category by principals at schools with a low percentage of students on free/reduced lunch (2.33%) is close to the time spent by those at schools with the highest percentage of students with free/reduced lunch (2.12%). Principals at schools with a majority White student body spend an average of 4.04%of time on other, those at schools with a primarily Black student body spend 1.90% of time, and the sole principal of a predominately Hispanic school reports spending 2.00% of time in this area. None of the variances in the percentage of time spent on the category of other within school demographic subgroups are statistically significant. Table 24 displays the percentage of time allocated to the category of other in light of the schools' demographic characteristics.

Summary

The purpose of this study was to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance. The population consists of middle school principals in Virginia who lead schools designated as high or low-performing middle schools. Information from the

Table 24

Percentage of Time Allocated to Other by School Characteristics

	N	M	SD
School Location			
Urban	13	3.00	3.16
Suburban	18	3.78	1.83
Rural	3	2.33	2.31
School Size			
301 – 599 students	5	4.20	1.79
600 – 999 students	16	4.19	2.79
1000+ students	13	2.00	1.53
Percentage Free/Reduced Lunch			
< 20% Free/Reduced Lunch	9	2.33	2.12
20% - 39% Free/Reduced Lunch	11	5.91	2.02
40% - 59% Free/Reduced Lunch	6	1.83	.41
60% + Free/Reduced Lunch	8	2.12	1.25
Predominant Race			
White	23	4.04	2.70
Black	10	1.90	.32
Hispanic	1	2.00	-

Virginia Department of Education website was used to classify schools and survey data was collected to analyze principal time-on-tasks.

Descriptive statistics were calculated to represent the demographic features of participating middle schools and the characteristics of the principals. The descriptive statistics reveal a number of differences in the percentage of time spent on each time-on-tasks category by principals at high and low-performing schools. To see if any of the differences are significant for this population, the researcher ran a series of t-tests for each time-on-tasks category with AYP performance as the grouping variable. ANOVA and t-tests were used to determine if there are any statistically significant differences in time use within demographic subgroups.

The researcher next conducted Pearson Product Moment Correlations to determine the strength and statistical significance of relationships between variables. The results of these tests were used to rank the time-on-tasks categories in the order they would be entered into the regression analyses Hierarchical, or blockwise, multiple regression analysis was used to determine the extent to which the percentage of time principals spend on each of the time-on-tasks categories can explain the percentage passing rate for mathematics and reading assessments. Demographic variables were then entered into the multiple regressions with a stepwise entry method to account for multicollinearity.

This chapter presented the results of the data analysis for each of the research questions. Findings, implications, and discussion in light of the data analysis are included in Chapter 5.

Chapter 5

Findings, Discussion, and Implications

"In the not-too-distant past, responsibility for school success was something principals could 'share around' with other educators, with parents, and with students themselves. The principal served as production manager. Quality control was somebody else's job. But now it's gotten personal" (Bottoms & O'Neill, 2001, p. 5).

Introduction

Included in Chapter 5 is a brief introduction restating the purpose and population of this study, and the research questions used to guide the study. Findings from the data analysis are presented in terms of their relevance to the research questions and the seven time-on-tasks categories. Also included is a discussion of conclusions in light of the findings, implications, limitations of the study, and recommendations for future research.

The purpose of this study was to find out what the differences are in how administrators in high and low-performing middle schools spend their time and to determine what relationships exist between the principal's time-on-tasks and school performance. The population for this study was middle school principals in Virginia who were in place at schools that met the classification criteria of a high or low-performing middle school as defined by the researcher. A total of 134 schools in Virginia met the criteria for inclusion. Thirty-nine principals from that group completed and submitted the online survey. Of the 39 respondents, five were from principals with fewer than three years of experience in their current school. These five responses were excluded from the analysis. Of the remaining 34 responses, 18 were from schools designated as high-performing and 16 were from schools designated as low-performing.

In order to be classified in the high-performing subgroup, schools had to have made Adequate Yearly Progress (AYP) as outlined in the No Child Left Behind Act (NCLB) for all three consecutive reporting years just prior to the study. In order to be classified in the low-performing subgroup, schools had to have failed to make AYP for all three of the consecutive reporting years just prior to the study. Schools that did not meet the criteria for either the high or low-performing categories were placed in a general category of average-performing and excluded from the study.

The following research questions guided this study:

1. What percentage of work time do middle principals devote to each of the seven identified categories of time use?

2. What are the differences in how middle school principals allocate their time on the seven identified categories of time use in high and low-performing schools?

3. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and demographic factors such as the principal's gender, the principal's years of experience in administration, the school's socioeconomic status, the student population's size and ethnicity, and the school's location?

4. What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and AYP performance indicators at high and low-performing schools?

For the purpose of this study, middle schools in Virginia were placed into categories using criteria established by the researcher. Descriptive data on AYP status

and SOL passing rates, provided by the Virginia Department of Education (VDOE) were downloaded into an Excel database. Using the score data, schools that met the established criteria were classified as high, average or low-performing and included or excluded in the population based on these classifications. Only the schools meeting the criteria for the high or low-performing categories were included in the study.

Summary of Data Analysis

Descriptive statistics were calculated to represent the demographic features of participating middle schools and the characteristics of the principals. The descriptive statistics revealed a number of differences in the percentage of time spent on each of the time-on-tasks category by principals at high and low-performing schools. To see if any of the differences were significant for this population, the researcher ran a series of t-tests for each time-on-tasks category with AYP performance as the grouping variable. ANOVA and t-tests were used to determine if there were any statistically significant differences in time use within demographic subgroups.

The researcher next conducted Pearson Product Moment Correlations to determine the strength and statistical significance of relationships between variables. The results of these tests were used to rank the time-on-tasks categories in the order they would be entered into the regression analyses.

Hierarchical, or blockwise, multiple regression analysis was used to determine the extent to which the percentage of time principals spend on each of the time-on-tasks categories can explain the percentage passing rate for mathematics and reading assessments. Demographic variables were then entered into the multiple regressions with a stepwise entry method to account for multicollinearity.

Population

      School characteristics. Of the 34 principals in the sample population, 18 are from schools designated as high-performing and 16 are from schools designated as low-performing. Of the 18 schools in the high-performing subgroup, 15 schools are classified as suburban schools. Two schools in the high-performing subgroup are classified as urban, and one school is classified as rural. Of the 16 schools in the low-performing subgroup, 11 schools are classified as urban, three are classified as suburban, and two are classified as rural.

      Of the 18 schools in the high-performing subgroup, 17 schools have a free/reduced lunch rate of fewer than 39%. Of the 16 schools in the low-performing subgroup, 13 schools have a free/reduced lunch rate of more than 40%. Seven of the schools have a free/reduced lunch rate of more than 60%.

      Of the 18 schools in the high-performing subgroup, all 18 schools have a majority White student population. Of the 16 schools in the low-performing subgroup, 11 schools have a majority Black or Hispanic student population and five schools have a majority White population.

      There are a number of strong relationships among school demographic variables. The strongest relationship is between the school's racial composition and the number of students on free/reduced lunch (r = .71). This relationship is significant at the $p < .01$ level. Also statistically significant at this level is the relationship between the school's racial composition and school location, (r = .57). All schools in the sample had student populations that were majority Black, Hispanic, or White and were classified by location as urban, rural, or suburban.

Principal characteristics. Of the 34 responding principals, 20 are male and 14 are female. Nineteen of the 34 principals reported being at their current school for fewer than five years, 11 principals reported being at their current school for between five and ten years, and four principals had been at their schools for more than ten years. The average total years of experience as a principal for the entire group at the time of the study were 8.09 years. Principals at high-performing schools had an average of 8.33 years at their current school, while principals at low-performing schools had an average of 3.88 years at their current school. The mean difference in the principal's years of service at their current school between high and low-performing schools is 4.45 years. Principals at high-performing schools had an average of 10.72 total years experience as a principal, while principals at low-performing schools had an average of 5.13 total years experience as a principal. The mean difference in total years of service between high and low-performing schools is 5.59 years.

The average work week reported for all principals in the sample is 57.29 hours. This is consistent with findings from an earlier study that reported a steady increase in the principal's work week, from an average of 49.31 hours in the 1960's, to 52.8 hours in the 1990's, and 61.1 hours in the 2000's (McPeale 2006). Principals in the high-performing subgroup reported an average of 55.53 hours and principals in the low-performing subgroup reported an average of 59.28 hours. The average reported work week for principals in the low-performing subgroup is nearly two hours longer than the mean for the group as a whole and 3.75 hours longer than the work week for principals in the high-performing subgroup.

There are a number of strong relationships among principal characteristics variables. The strongest relationship is between the length of the principal's reported work week and the principal's total years of experience (r = -.75). This relationship is significant at the *p* < .01 level. Other statistically significant relationships at this level are between the principal's years at the current school and the length of the principal work week (r = .66), the principal's total years of experience and the size of the school (r = -.48), principal's years at the current school and principal's total years' experience (r = .92).

Findings and Discussion

Research question #1. Research question one asks, "What percentage of work time do middle school principals devote to each of the seven identified categories of time use"? To answer this question, the researcher used descriptive statistics to find the average percentage of time principals spend on each of the identified time-on-tasks categories and to rank the categories in order of average time allocated.

Finding # 1. Of the middle school principals who participated in this study, principals overall spend the largest percentage of time on tasks related to administration and operations.

The data reveal that principals who participated in this study divide their time among the categories in the following order: administration and operations (26.82%), day-to-day instruction (20.71%), organization management (16.35%), instructional program (15.09%), internal relations (12.97%), external relations (5.88%) and other (3.35%). Principals spend the most time on administration and operations in both the group as a whole and in the high-performing subgroup. This rank and percentage agree

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with the findings reported by Horng et al (2010), who reported administration and operations as the highest ranking category with an average percentage of 27.46 for the principals in their sample population. The category of administration and operations is the only one in which the two studies have nearly identical findings.

This is also consistent with findings from an earlier study that stated principals spend the most time on the area of school management, with principals citing the requirements of the NCLB as the primary reason for the increased time spent on this category (McPeale, 2006). The importance that principals place on administration and operations is consistent with other research findings. Ensuring an orderly and supportive environment was one of the five leadership domains that emerged from a study on the impact of leadership on student outcomes (Robinson, Lloyd & Rowe, 2008). Additionally, a study on essential traits and behaviors for principals cited creating a safe and orderly school environment as one of the areas at which principals of high-performing schools are effective (Cotton, 2003).

Research question #2. In the second research question (What are the differences in how middle school principals allocate their time on the seven identified categories of time use in high and low-performing schools?) the focus shifts to differences between two subgroups of the population, principals at schools designated as either high or low-performing.

To further examine the relationships between the percentages of time allocated to the seven time-on-tasks categories by the two performance subgroups, the researcher ran a series of t-tests for each of the time-on-tasks categories with AYP performance as the grouping variable. Two of the differences between the subgroups are significant at the *p*

< .5 level; percentage of time spent on instructional program and external relations. Both of these categories remained significant when the demographic variables were added to the regression equation and are included in the final models predicting pass rates on mathematics and reading scores compiled in the stepwise regression analyses.

Finding #2. Of the middle school principals who participated in this study, principals at high-performing schools spend more time on administration and operations than principals at low-performing schools.

Principals in the high-performing subgroup spend the most time on administration and operations, while principals in the low-performing subgroup spend the most time on day-to-day instruction. This is the reverse of findings from the Horng et al. (2010) study where principals at the highest performing schools spend more time on day-to-day instruction and principals at the lowest performing schools spend more time on administration and supervision.

The overall mean percentage of time spent on administration and operations by all participating principals is 26.82%. This category ranks first in percentage of time allotted by the high-performing subgroup (33.11%) and second by the low-performing subgroup (19.75%). There is a mean difference between the high and low-performing subgroups of 13.36%. This difference is significant at the $p < .01$ level.

Standardized testing is the only task within this category where there is a significant difference between the two performance sub-groups. Sixteen principals (47%) reported preparing, implementing and administering standardized tests as a regular weekly task. Fourteen of the 16 principals are from the low-performing subgroup. Only two are from the high-performing subgroup. This equates to 12% of the high-performing

subgroup compared to 87% of the low-performing group who include this as a regular task. This difference is significant at the $p < .01$ level.

Finding #3. Of the middle school principals who participated in this study, principals in low-performing schools spend more time on tasks related to day-to-day instruction than on any of the other identified categories.

Principals in the low-performing subgroup spend the most time on the category of day-to-day instruction and the category of administration and operations ranks second. The overall mean percentage of time spent on day-to-day instruction by all participating principals is 20.71%. The category of day-to-day instruction ranks second in terms of percentage of time allotted by the overall group of participating principals. The day-to-day instruction category ranks third in percentage of time allotted by the high-performing subgroup (15.55%) and first by the low-performing subgroup (26.50%).

There is a mean difference between the high and low-performing subgroups of -10.95%. This difference is significant at the $p < .01$ level. The rank and percentage for day-to-day instruction for this study differ greatly from the findings reported by Horng et al (2010), who reported day-to-day instruction as the sixth ranking category with an average percentage of 5.88 for the principals in their sample population.

Seventeen percent of principals in the high-performing subgroup reported teaching students as a routine weekly task in the category of day-to-day instruction, compared to 56% of principals in the low-performing subgroup. This difference is significant at the $p < .05$ level.

The correlation between time spent on day-to-day instruction and mathematics pass rates ($r = -.58$) and the correlation between time spent on day-to-day instruction and

reading pass rates (r = -.62) are significant at the p < .01 level. These strong negative

correlations may at first seem counter to research that emphasized the importance of

instructional leadership. However, it is consistent with the findings of Grissom & Loeb

(2009) and also with finding by Horng, Klasik &Loeb (2010) who concluded "day-to-

day instruction activities are marginally or not at all related to improvements in student

performance, and they often have a negative relationship with teacher and parent

assessments of the school" (p. 519). Horng et al also offered a potential explanation in

their finding that "a single-minded focus on principals as instructional leaders

operationalized through direct contact with teachers may be detrimental if it forsakes the

important role of principals as organizational leaders" (p. 520).

Another potential area that may have affected this outcome is the relationship

between the principals' years of experience both as a principal and at the current school.

Principals with more yearsof experience spend fewer time on day-to-day instruction and

principals at higher performing schools have more experience than principals at lower

performing schools. This study does not include any qualitative analysis that would

support conclusions as to the why of these relationships or the directional nature of these

factors.

Finding #4. Of the middle school principals who participated in this study,

principals at high-performing schools spend more time on tasks related to organization

management than principals at low-performing schools.

The category of organization management ranks second in percentage of time

allotted by the high-performing subgroup (17.55%) and fourth by the low-performing

subgroup (15.00%). There is a mean difference between the high and low-performing

subgroups of 2.55%. This difference was not statistically significant. This rank and percentage are similar to the findings reported by Horng et al (2010), who report organization management as the second highest ranking category with a reported percentage of 20.95 for the principals in their sample population.

Finding #5. Of the middle school principals who participated in this study, principals at low-performing schools spend more time on tasks related to instructional program than principals at high-performing schools.

The category of instructional program ranks fifth in percentage of time allotted by the high-performing subgroup (11.28%) and third by the low-performing subgroup (19.37%). There is a mean difference of 8.10% between the high and low-performing subgroups. This difference is significant at the $p < .05$ level. This rank and percentage vary somewhat from the findings reported by Horng et al (2010), who report instructional program as the fifth highest ranking category with a reported percentage of just 6.73 for the principals in their sample population.

When taken together with day-to-day instruction, principals at low-performing schools spend nearly 50% of their available work time on tasks related to instruction. Principals at high-performing schools spend approximately 27% of their available work time on tasks related to instruction.

Finding #6. Of the middle school principals who participated in this study, principals at high-performing schools spend more time on tasks related to internal relations than principals at low-performing schools.

The category of internal relations ranks fifth in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of

time spent on this category by all participating principals is 12.97%. This category ranks

fourth in percentage of time allotted by the high-performing subgroup (14.72%) and fifth

by the low-performing subgroup (11.00%). There is a mean difference between the high

and low-performing subgroups of 3.72%. This difference is significant at the $p < .01$

level.

The rank and percentage of time allocated to internal relations by principals in

this study are similar to the findings reported by Horng et al (2010), who reported internal

relations as the fourth highest ranking category with an average percentage of 14.64 for

the principals in their sample population.

Finding #7. Of the middle school principals who participated in this study,

principals at low-performing schools spend more time on tasks related to external

relations than principals at high-performing schools.

The category of external relations ranks sixth in percentage of time allotted by the

high-performing subgroup (5.33%) and sixth by the low-performing subgroup (6.50%).

There is a mean difference of 1.17% between the high and low-performing subgroups.

This difference is significant at the $p < .05$ level. The low percentage of time allotted to

this category agrees with findings from an earlier study of principals' time management

practices that found principals spend the least time on community relations, with a mean

of 2.6 hours per week spent in this area (McPeale, 2006).

Finding #8. Of the middle school principals who participated in this study,

principals overall spend the lowest percentage of time on tasks in the category of other;

however principals at high-performing schools spend more time on this area than

principals at low-performing schools.

The category of other ranks seventh in percentage of time allotted by the high-performing subgroup (4.55%) and seventh by the low-performing subgroup (2.00%). The overall mean percentage of time spent on this category by all participating principals is 3.35%. There is a mean difference between the high and low-performing subgroups of 2.56%. This difference is significant at the $p < .01$ level.

The rank and percentage of time allocated to other by principals in this study vary widely from the findings reported by Horng et al (2010), who reported other as the third highest ranking category with an average percentage of 18.68 for the principals in their sample population.

Research Question #3. For the third research question, (What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and demographic factors such as the principal's gender, the principal's years of experience in administration, the school's socioeconomic status, the student population's size and ethnicity, and the school's location?) the researcher looked at time use for the group as a whole in relationship to the various principal characteristics and school demographic variables.

Finding #9. For the middle school principals who participated in this study, there is an inverse relationship between the length of the principal's reported work week and the percentage of time allocated to administration and operations.

The only subgroup of principals who did not rank administration and operations first in terms of time allocated were the principals who reported an average work week of more than 60 hours. This group ranked administration and operations as fourth in percentage time spent. Principals with a reported work week of fewer than 55 hours

spend an average of 5.42% more time on this category than principals with a reported

work week of 55 – 60 hours; and 14.80% more time than principals with a reported work

week of more than 60 hours. This variance is significant at the $p < .05$ level.

  Finding #10. For the middle school principals who participated in this study,

principals with the most experience spend more time on tasks related to administration

and operations than those with less experience.

  The principals with more than ten years at the current school spend an average of

8.28% more time on this category than those with fewer than five years at the current

school. This difference was significant at the $p < .05$ level. At the same time, as the

principal's years of service increases, there is a decrease in time allocated to tasks related

to day-to-day instruction, organization management, and instructional program.

  Finding #11. Of the middle school principals who participated in this study,

principals of urban schools spend a smaller percentage of their time on administration

and operations than principals of suburban or rural schools.

  Principals of rural school schools spend 48.66% of time on administration and

operations, principals of suburban schools spend 29.33% and principals at urban schools

spend 18.31. There is a mean difference of 11.02 between urban and suburban schools,

19.33 between suburban and rural schools, and 30.35 between urban and rural schools.

This variance is significant at the $p < .01$ level.

  Finding #12. Of the middle school principals who participated in this study,

principals at schools with a majority White student population spend a larger percentage

of their time on administration and operations than principals at schools with a majority

Black or Hispanic student population.

Principals of schools with a primarily White student body spend an average of 12.46 more time on administration and operations than principals at schools with a primarily Black student body. This difference is significant at the $p < .05$ level. This is in alignment with the finding regarding school size also, as eighteen of the 23 schools with a majority White student population were classified as suburban schools.

Finding #13. Of the middle school principals who participated in this study, principals at the largest schools spend a larger percentage of their time on organization management than principals at smaller schools.

Of all the demographic sub-groups, principals at the largest schools spend the most time tasks related to organization management. In general, the larger the school, the more time principals spend on management tasks. This is consistent with findings from an earlier study that noted principals in schools with student populations over 1000 in number spend more time on management tasks than do their counterparts in smaller schools (Taylor, 2007). None of the variances in time spent on organization management in light of school demographic characteristics are statistically significant.

Finding #14. Of the middle school principals who participated in this study, male principals spend a larger percentage of their time on organization management than female principals.

Female principals in this study spend an average of 12.42% of time on organization management and male principals spend an average of 19.10% of time. This is consistent with findings from an earlier study that reported female principals spend more time on instructional leadership tasks while male principals spend more time on organization and administration tasks (Taylor, 2007).

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Finding #15. Of the middle school principals who participated in this study, principals at urban schools with majority Black student bodies spend the largest percentage of their time on tasks related to day-to-day instruction.

The correlation between school location and time spent on day-to-day instruction (r = -.50) is significant at the p < .01 level. Principals of urban school schools spend 26.46% of time on day-to-day instruction. Principals of suburban schools spend 17.78% of time and rural schools 13.33% of time.

Principals at schools with a majority Black student body spend an average of nearly 12% more time (28.40%) on day-to-day instruction than those at schools with a primarily White student body (16.96%). The correlation between the school's racial composition and time spent on day-to-day instruction (r = .57) is significant at the p < .01 level.

Principals of schools with fewer than 600 students spend an average of 14.00% of time on day-to-day instruction, compared to principals of schools with 600-900 student (24.68) and principals of schools with more than 1000 students (18.38). This difference is significant at the *p* < .05 level.

Finding #16. Of the middle school principals who participated in this study, principals with the longest reported work week spend the largest percentage of their time on tasks related to instructional program.

There is a gap of close to 10% between time spent on the instructional program category by principals with the shortest work week and those with the longest reported work week. Principals with a reported work week of 60+ hours spend 19.16 on this category, principals with a reported work week of between 55 and 60 hours spend

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16.67% of time and principals with a reported work week of fewer than 55 hours spend 9.80% of time. There is a mean difference of 9.36 between principals with the longest reported work week and those with the shortest reported work week. This difference is significant at the $p < .01$ level.

The correlation between the principal's years of experience and time spent on the instructional program (r =.-.35) is significant at the $p < .05$ level. Principals with fewer than five years experience spend an average of 14.00% of available time on the instructional program category, while principals with five to ten years spent 19.12% of time and principals with more than ten years total experience spend an average of 13.63% of time on this area. This difference is significant at the $p < .01$ level.

None of the variances in time spent on instructional program in light of school demographic characteristics are statistically significant.

Finding #17. For the middle school principals who participated in this study, the percentage of time principals spend on internal relations increases as years at the current school increase.

While all subgroups across the demographic characteristics reported spending 15% or fewer time on this category, principals with more than ten years' experience at their current school spend an average of 2.63% more time on this area than principals with fewer than five years' experience at their current school. This difference is significant at the $p < .01$ level.

Principals of suburban schools spend the most time on this category (14.44) compared to principals of urban schools (12.00) and rural schools (8.33). This difference is significant at the $p < .01$ level.

Principals spend 13.91% of time on internal relations at schools that are majority White, 10.60% at schools that are majority Black, and 15.00% at the sole responding school that is majority Hispanic. This difference is significant at the $p < .05$ level.

Finding #18. Of the middle school principals who participated in this study, principals with the longest work week spend a larger percentage of their time on external relations than principals with a shorter work week.

Principals who reported a work week of more than 60 hours spend an average of 4.48% more time on external relations than principals with a reported work week of fewer than 60 hours. The correlation between principal work hours and time spent on external relations ($r = .47$) is significant at the $p < .01$ level. None of the variances in the percentage of time spent on external relations within school demographic subgroups are statistically significant.

Research question #4. Research question four (What is the relationship between the amount of time middle school principals allocate to the seven identified categories of time use and AYP performance indicators at high and low-performing schools?) is complicated to answer. Horng, Klasik, & Loeb, (2010) noted that "any observed relationship between school performance and the principal's actions may be causal, but the causality may work in either direction or the relationship may be a spurious one; that is, more and fewer effective schools might differ in other ways that mask the true relationship between their principals' time use and outcomes" (p. 499).

Finding #19. For the middle school principals who participated in this study, time spent on administration and operations and time spent on internal relations are positively correlated with mathematics and reading pass rates; however time spent on

day-to-day instruction and time spent on instructional program are negatively correlated with mathematics and reading pass rates.

There are significant positive correlations between three of the time-on-tasks categories and mathematics pass rates; administration and operations (r = .40), internal relations (r = .50), and other (r = .45). As time spent on administration and operations and on internal relations increases, mathematics pass rates increase. This same pattern holds true for correlations between time-on-tasks categories and reading pass rates, with significant positive correlations for administration and operations (r = .43), internal relations (r = .48), and other (r = .44).

There are significant negative correlations between two of the time-on-tasks categories and mathematics pass rates; day to day instruction (r = -.58) and instructional program (r = -.41). There are also significant negative correlations between reading and day-to-day instruction (r = -.62) and instructional program (r = -.45).

Finding #20. For the middle school principals who participated in this study, time spent on tasks related to internal relations has the strongest positive correlation with AYP performance indicators and is the only significant category when viewed in combination with all other time-on-tasks categories.

The findings in this study revealed a number of statistically significant relationships between the individual time-on-tasks categories and the AYP performance indicators of mathematics pass rates and reading pass rates. To determine if these relationships remain significant in combination, the researcher ran a series of hierarchical, or blockwise, multiple regressions. The hierarchical regression analysis for time-on-tasks categories and mathematics pass rates yielded only one statistically

significant relationship. The category of Internal Relations has an R^2 of .49 that is significant at the $p < .05$ level. None of the other time-on-tasks categories yielded a statistically significant relationship to mathematics pass rates.

Similar to the findings for mathematics pass rates, the hierarchical regression analysis for time-on-tasks categories and reading pass rates yielded only one statistically significant relationship. The category of Internal Relations has an R^2 of .51 that is significant at the $p < .05$ level. None of the other time-on-tasks categories yielded a statistically significant relationship.

For this category, principals were asked to allocate the percentage of available work time they devoted to tasks related to interactions with students and staff at the school. There are seven tasks for this category that include: 1) developing relationships with students, 2) communicating with parents, 3) interacting socially with staff about school-related topics (shop talk), 4) interacting socially with staff about non-school topic, 5) attending school activities, 6) counseling staff about conflicts with other staff members and 7) counseling or in-depth conversation with students.

Of the tasks listed in the category of internal relations, only number one, developing relationships with students, was included as a routine weekly task by all principals. Numbers 2, 3 and 5 were included by 32 of the 34 principals. The least reported task is number 6, counseling staff about conflicts with other staff members (18). Twenty-eight percent of principals from the high-performing subgroup reported counseling staff about conflicts as a regular weekly task in the category of internal relations and 81% of principals from the low-performing subgroup included this task. This difference is significant at the $p < .05$ level.

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The category of internal relations ranks fifth in terms of percentage of time allotted by the overall group of participating principals. The overall mean percentage of time spent on this category by all participating principals is 12.97%. This category ranks fourth in percentage of time allotted by the high-performing subgroup (14.72%) and fifth by the low-performing subgroup (11.00%). There is a mean difference between the high and low-performing subgroups of 3.72%. This difference is significant at the $p < .01$ level.

The findings for internal relations are supported by other research that concluded that principal efforts that lead to school improvement include communicating regularly with teachers, encouraging collaboration between teachers, and soliciting teacher input regarding instructional decisions (Styrom & Nyman, 2008). Research also supports the concept that principals who share leadership have stronger working relationships with teachers and higher student achievement outcomes (Seashore Louis, Leithwood, Wahlstrom & Anderson, 2010).

Other findings. While completing the data analysis, the researcher identified other findings unrelated to the original research questions. Specifically, the addition of demographic variables to the regression equation resulted in a model that indicated a strong relationship between a school's socioeconomic status and AYP performance indicators.

Finding #21. For the middle school principals who participated in this study, there are strong negative correlations between the school's percentage of students on free/reduced lunch and mathematics and reading pass rates.

The correlations between the school's percentage of students on free/reduced lunch and reading pass rates (r = -.61) and mathematics pass rates (r = -.61) are both significant at the p < .01 level. When looking at all variables in combination, the percentage of students on free/reduced lunch is the largest contributing factor to the model predicting mathematics and reading pass rates (β = -.78).

Summary of findings. While there were a number of strong correlations between many of the independent variables and school performance indicators in the initial correlation analysis, this changed when the principal characteristics and school demographic variables were added to the multiple regression equation. The new regression analysis was conducted using the stepwise method of entering the variables to allow for the entry and removal of variables in a manner that would correct for multicollinearity. The final model included only those variables that remained significant after factoring for collinearity.

In the final models, four independent variables remained significant in combination as a predictor for passing rates on the mathematics test: free/reduced lunch, instructional program, size of the school and external relations. This set of variables in combination account for 70% of the variance in mathematics pass rates. The same four independent variables remained significant in combination as a predictor for passing rates on reading tests. The racial composition of the school was initially included in the reading model; however it failed to remain significant after the addition of the free/reduced lunch variable and so was subsequently dropped from the regression equation. The remaining variables in combination account for 76% of the variance in reading passing rates.

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When viewing the final model for predicting mathematics and reading pass rates, it is important to note the negative slope of the trend line, with the percentage of students on free/reduced lunch as the largest contributing factor to the negative slope of both the mathematics and the reading pass rates models ($\beta = -.78$). This means that the higher the percentage of students on free/reduced lunch, the lower the passing rate on the mathematics and reading tests.

All three other factors also contribute to the negative trend lines. For mathematics, time spent on the instructional program is the second largest contributor ($\beta = -.35$), followed by school size ($\beta = -.33$) and external relations ($\beta = -.27$). For reading, time spent on the instructional program is the second largest contributor ($\beta = -.39$), followed by school size ($\beta = -.33$) and external relations ($\beta = -.29$).

Implications

1. Principals who are assigned to low-performing schools should consider ways to incorporate tasks related to ensuring a safe and secure school into their overall time management plan. Building the climate of a school and the necessary tasks related to ensuring a positive climate for teaching and learning are important aspects of the principalship. Principals at high-performing schools in this study make establishing and maintaining a positive school climate a priority. This is supported by findings from Whitaker & Turner (2000) who ranked this as the number one priority for principals on their actual and perceived priority scales. Principals at high-performing schools devote considerable time ensuring a safe and secure learning environment. They spend time on tasks related to protecting instructional time from interruptions and disruptions.

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2. Principals should find ways to increase their visibility in a variety of settings throughout the school. Managing student discipline and supervising students are tasks at which principals in high-performing schools are effective. They do this by being visible and accessible as noted by Fiore (1999) in a study where visibility was cited as a primary factor in building a positive school culture.

3. Principals should attend to organizational needs as well as the instructional program needs. Research emphasizes the importance of instructional leadership as the primary way principals can improve teaching and learning (Black, 2000; Leithwood & Jantzi, 2005; Marks & Printy, 2003). However, principals should be careful not to focus on this area to the detriment of organizational needs as there is a pattern of diminishing returns when the focus is heavily on tasks related to day-to-day instruction. Principals at low-performing schools spend on average nearly 11% more time on day-to-day instruction than do their counterparts at high-performing schools. While there is no causal data to indicate the direction of this relationship, that is, we do not know if principals spend more time on instructional tasks because they are at low-performing schools, or if the schools are low-performing due in part to the way principals spend their time; there is supporting evidence that principals who protect instructional time and spend time on tasks related to creating a positive school climate see improvement in the schools to which they are assigned.

4. Principals should engage in leadership sharing activities. There is insufficient time for a principal to single-handedly attend to all the required tasks in running an effective school. An added benefit to this shared responsibility is detailed by

Marks and Printy (2003) who concluded that shared instructional leadership has a significantly positive effect on pedagogy.

5. Principals at low-performing schools should consider spending more time on tasks related to setting the stage for instruction and protecting instructional time from interruptions and disruptions. Principals at low-performing schools in this study spend nearly 46% of their work time on tasks related to instruction, 26.5% on day-to-day instruction and 19.4% on instructional program. Principals at high-performing schools in this study spend fewer than 26% of their time on tasks related to instruction, instead focusing much of their time on tasks related to administration and operations and on organization management.

6. Principals should examine the characteristics of time use that are common to principals at high-performing schools. By looking for differences between their own time use practices and those of principals at high-performing schools, middle school principals may be able to identify ways to increase their own contribution to school performance measures.

7. Principals should analyze their own time-on-tasks and time management practices. By analyzing their time management practices, principals may be able to change practices on a personal level that could impact school performance. With information on the relative use of time, principals can review and make better informed decisions about their own time management behaviors. Current and future principals may find the results of this study useful for identifying time-management behaviors that could better promote an atmosphere of teaching and learning.

8. Division level administrators should consider a principal's years of experience when making assignments to schools in need of improvement. Principals at high-performing schools have more years of total experience and more years at their current assignment than their counterparts at low-performing schools. Supervisors may also want to consider the principal's time use when developing criteria for the evaluation and development of principals in the domain of leadership as it pertains to student outcomes.

9. Principals should consider all time-on-tasks categories together when organizing their time. While the time-on-tasks categories each have individual correlations with school performance, many of the individual relationships do not remain significant in a multiple regression analysis of all categories together. Overall, principals at high-performing schools in this study spend more time on administration and operations and organization management (50.66%) and principals at low-performing schools in this study spend almost half their time on tasks related to instruction (45.87%). Principals should seek a balance in maintaining instructional leadership and organization leadership activities so that a single focus on instruction does not negatively impact on other essential tasks.

10. Principals at low-performing schools should spend more time on internal relations. Principals seeking to improve school performance outcomes by increasing their focus on internal relations should seek to spend more time on communicating regularly with teachers, encouraging collaboration, and soliciting teacher input on instructional decisions. While there are a number of significant relationships between the time-on-tasks categories and the school performance

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outcomes, the data reveal that the only time-on-tasks category to remain significant in combination is the amount of time spent on tasks related to internal relationships. Schools may want to consider reviewing the amount of time and attention given to tasks related to internal relations since small increases in time spent are positively correlated with performance outcomes.

11. School division administrators should allocate resources and design interventions to address barriers to school performance caused by the size and/or socioeconomic status of a school. The data reveal that principals of schools with large student populations and high numbers of students on free/reduced lunch have additional factors to consider as they seek to improve school performance. The finding that there is a large negative correlation between the percentage of students on free/reduced lunch and AYP performance indicators may prompt school and division leaders to consider ways to mitigate these variables.

12. Principals of large schools and/or schools with high rates of free/reduced lunch should recognize the impact of these factors and seek to develop programs and allocate resources that will help mitigate their effect. While the demographic variables are not within the control of the school, divisions should seek to identify where these characteristics exist and assign resources as appropriate to help mitigate their effect. According to Grubb & Flessa (2000), "The initiative for developing support services to help low-income students usually falls on the principal" (p. 519). While schools are not able to directly impact socioeconomic status of their students, they can use this information to help determine what interventions may be effective in overcoming this hurdle and to seek resources to

help implement them. Principals at schools with these characteristics should carefully review their own time management practices and ensure that they are devoting sufficient time to internal relations and to tasks related to administration and operations to protect instructional time and build a positive climate for teaching and learning.

Limitations and Delimitations

A delimitation set by the researcher is the inclusion of only those schools in the Commonwealth of Virginia that met the criteria of either a high or low-performing middle school as defined in the operational definition described in chapter three. An additional delimitation is the inclusion of only those principals who had been at their current school for at least three years in the capacity of principal.

A limitation to this study is the small sample size in comparison to the overall population. Of the 134 middle schools in Virginia that met the criteria for participation, only 25% of eligible schools (34 schools) completed and returned the online survey.

The survey data is limited to the extent that respondents provided accurate, honest, and complete answers to the survey questions. The responses within the self-reported surveys were subject to perception and memory biases on the part of the respondents.

Multicollinearity is a limitation to the data results. While every effort was made to use models to account for variables that are highly correlated, some results may be affected by unanticipated confounding variables. In addition, the data results represent correlation and not causation. It is not possible with the available data to determine the direction of the relationships noted between the dependent and independent variables.

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Recommendations for Future Studies

   Future researchers may want to consider the following recommendations for
further study:

1. Repeat the study and add correlation and regression analyses within the subgroups
   as well as between the subgroups. The current study did not delve deeply into the
   correlations for the individual performance subgroups with each of the
   performance outcomes and demographic variables.

2. Conduct a similar study that separates high and low performing subgroups into
   demographic pairings to see if the differences in performance levels remain
   consistent within demographically similar schools.

3. Conduct a similar study on a larger scale with a national population of middle
   schools.

4. Conduct a similar study of high school or elementary school principals.

5. Conduct a similar study using site visits to collect the data in lieu of surveys.

6. Conduct a qualitative study to answer questions regarding why the relationships
   between time-on-tasks categories and school performance outcomes exist.

Reflections

   While there were a number of obstacles to overcome, conducting this study was
an overall positive experience that led to growth in both professional knowledge and
research skills for the researcher. The first obstacle was encountered in the collection of
data. The online survey system did not provide a process to contact only those schools
who had not yet responded to the initial survey, which obliged the researcher to send
reminder emails to all schools. In an effort to be the least intrusive as possible, the

researcher limited the reminders to two and included a thank you for those who had already responded.

The second obstacle was obtaining permission to conduct the study in one of the large school divisions. This was the only division in which principals would not respond to the online survey without permission from the division leadership. The division had a cumbersome process to obtain permission and never provided a final permission to conduct the study as the contact person claimed to have no record of the request after it was submitted twice. Since there were only two eligible schools in the division, the researcher finally gave up on the approval process after eight weeks and withdrew the request.

Finally, it was a difficult process to complete the statistical analyses for the data. Determining how to set up and interpret the tests took much longer than anticipated. Once the tests were completed however, the process of recording the results and reporting the findings proceeded smoothly. In conclusion, the researcher hopes to help middle school principals identify patterns of time use and determine if any changes in the principal's allocation of time-on-tasks would lead to improved performance outcomes.

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Survey of Middle School Principals' Time-on-Tasks

Thank you for agreeing to participate in this doctoral research study. Before you begin, you may find it helpful to print the documents attached to the original email correspondence. Those documents contain:

--A description of the task categories and related tasks used in this survey
--A print copy of the survey

You should feel free to print the survey and take as much time as you need to consider the information before you begin the actual electronic survey. Once you begin, the survey should take approximately 30 minutes to complete.

Thank you again for your generous time commitment that will provide invaluable information for this study.

Part I. Background Information

Instructions: Please respond to each question about yourself and your current school to the best of your knowledge.

A. School Demographics

1. School location is primarily:

○ urban   ○ suburban   ○ rural   ◉ other: [_____]

2. Student population is:

○ <300   ○ 301-599   ○ 600-999   ○ 1000+

3. The free/reduced lunch % is:

○ <20%   ○ 20-39%   ○ 40-59%   ○ 60% +

4. The largest % of the student population is:

☐ Caucasian   ☐ African American   ☐ Hispanic   ☐ Asian   ☐ Other

5. Did the school make federal Adequate Yearly Progress (AYP) for school year 2007-08?

○ yes   ○   no

6. Did the school make federal Adequate Yearly Progress (AYP) for school year 2008-09?

○ yes   ○   no

7. Did the school make federal Adequate Yearly Progress (AYP) for school year 2009-10?

○ yes   ○   no

8. What was the school's 2009-10 overall AYP score for:

a) Mathematics ☐

b) Reading: ☐

B. Principal Characteristics

1. The school principal is:

○ male   ○   female

2. How many years has the current principal served as principal of this school?

Years: ☐

3. How many total years has the current principal served as a principal at any locations?

Years: ☐

C. Administrative Team

1. The school's administrative team currently consists of:

☐ one principal

☐ two or more co-principals

☐ one assistant principal

☐ two or more assistant principals

☐ one dean of students for discipline

☐ two or more deans of students for discipline

☐ one dean of instruction

☐ two or more deans of instruction

other: [   ]

2. Does this school have department chairs who assist with walkthroughs or observations?

○ yes

○ no

○ no, but other administrative staff assist

D. Work Day

1. How many hours are in the principal's contract week?

Hours use decimal points for partial hours): [   ]

2. Approximately how many additional hours beyond the contracted work time does the principal work in a typical week?

Hours (use decimals for partial hours): [   ]

3. What is the total time the principal spends on school-related tasks in a typical week? (Add number 1 and 2 above and note this total for use in Part II.)

Total hours: [   ]

Part II: Principal's Time-on-Tasks

Directions: Preview the information in the chart below, and then answer the questions that follow.

Category	Associated Tasks
Administration /Operations	• Fulfilling compliance requirements (NOT including special education) • Managing school schedules • Managing personal, school-related schedule • Managing student discipline • Managing student services (records, reporting, activities, etc.) • Managing student attendance-related activities • Preparing, implementing, and administering standardized tests • Supervising students as a scheduled daily activity (lunch duty, bus duty, hall duty) • Maintaining campus facilities • Developing and monitoring a safe school environment
Organization Management	• Managing budgets, resources • Hiring personnel • Managing instructional staff • Managing non-instructional staff • Planning/participating in scheduled school meetings • Planning/participating in district office meetings or other communications initiated by the district office • Interacting/networking with other principals • Engaging in self-improvement/ professional development

Day-to-Day Instruction	• Fulfilling Special Education requirements • Informally coaching teachers to improve instruction or their teaching in general • Formally evaluating teachers and providing feedback to support improvement • Planning to conduct or conducting classroom observations/ walk-throughs • Implementing required professional development • Using data to inform instruction • Teaching students
Instructional Program	• Developing an educational program across the school • Evaluating curriculum • Using assessment results for program evaluation and development • Planning or facilitating professional development for teachers • Planning or facilitating professional development for prospective principals • Releasing or counseling out teachers • Planning or directing supplementary, after school, or summer school instruction
Internal Relations	• Developing relationships with students • Communicating with parents • Interacting socially with staff about school-related topics (shop talk) • Interacting socially with staff about non-school topic • Attending school activities • Counseling staff about conflicts with other staff members • Counseling or in-depth conversation with students
External Relations	• Working with local community members or organizations • Fundraising • Communicating with the district office to obtain resources (Initiated by principal) • Recruiting students to attend school • Publicizing school events and achievements • Recruiting school volunteers from the community
Other	• Personal time (e.g., bathroom, lunch, personal calls and emails) • Transition between in activities • Other tasks not listed in any category above

For questions 1-7 that follow, consider the total amount of time in your typical work week as identified in Part I above. Then for each question:

a) Divide that time into percentages that represent the estimated amount of time you spend in a typical week on each broad category. The total for all 7 categories should equal 100%. For example, if your work week has 50 hours, and you estimate that you spend 5 hours a week on tasks related to Administration/Operations that would equal 10% of your work hours and your answer for that category would be (10).

b) Check all related tasks for each category on which you would spend time once or more in a typical work week.

****

1. Estimated % of time spent on the category of:

Administration/Operations: ____

Check all tasks from this category that apply to your typical work week:

☐ Fulfilling compliance requirements (NOT including special education)

☐ Managing school schedules

☐ Managing personal, school-related schedule

☐ Managing student discipline

☐ Managing student services (records, reporting, activities, etc.)

☐ Managing student attendance-related activities

☐ Preparing, implementing, and administering standardized tests

☐ Supervising students as a scheduled daily activity (lunch duty, bus duty, hall duty)

☐ Maintaining campus facilities

☐ Developing and monitoring a safe school environment

2. Estimated % of time spent on the category of:

Organization Management: ☐

Check all tasks from this category that apply to your typical work week:

☐ Managing budgets, resources

☐ Hiring personnel

☐ Managing instructional staff

☐ Managing non-instructional staff

☐ Planning/participating in scheduled school meetings

☐ Planning/participating in district office meetings or other communications initiated by the district office

☐ Interacting/networking with other principals

☐ Engaging in self-improvement/ professional development

3. Estimated % of time spent on the category of:

Day-to-Day Instruction: ☐

Check all tasks from this category that apply to your typical work week:

☐ Fulfilling Special Education requirements

☐ Informally coaching teachers to improve instruction or their teaching in general

☐ Formally evaluating teachers and providing feedback to support improvement

☐ Planning to conduct or conducting classroom observations/ walk-throughs

☐ Implementing required professional development

☐ Using data to inform instruction

☐ Teaching students

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4. Estimated % of time spent on the category of:

Instructional Program: ☐

Check all tasks from this category that apply to your typical work week:

☐ Developing an educational program across the school

☐ Evaluating curriculum

☐ Using assessment results for program evaluation and development

☐ Planning or facilitating professional development for teachers

☐ Planning or facilitating professional development for prospective principals

☐ Releasing or counseling out teachers

☐ Planning or directing supplementary, after school, or summer school instruction

5. Estimated % of time spent on the category of:

Internal Relations: ☐

Check all tasks from this category that apply to your typical work week:

☐ Developing relationships with students

☐ Communicating with parents

☐ Interacting socially with staff about school-related topics (shop talk)

☐ Interacting socially with staff about non-school topic

☐ Attending school activities

☐ Counseling staff about conflicts with other staff members

☐ Counseling or in-depth conversation with students

6. Estimated % of time spent on the category of:

External Relations: ☐

Check all tasks from this category that apply to your typical work week:

☐ Working with local community members or organizations

☐ Fundraising

☐ Communicating with the district office to obtain resources (Initiated by principal)

☐ Recruiting students to attend school

☐ Publicizing school events and achievements

☐   Recruiting school volunteers from the community

7. Estimated % of time spent on the category of:

Other: ☐

Check all tasks from this category that apply to your typical work week:

☐   Personal time (e.g., bathroom, lunch, personal calls and emails)

☐   Transition between in activities

☐   Other tasks not listed: ☐

You have reached the end of the survey. If you have any questions or comments, or if you would like to request a copy of the study findings, please contact: Lisa A. Harris at lisa0902@vt.edu

Thank you for your participation!

Survey Instrument (Paper Version)

Part I. Background Information

Instructions: Please respond to each question about yourself and your current school to the best of your knowledge.

School Demographics

1. School location is primarily:_____urban   _____suburban _____rural

2. Student population =   _____<300   _____301-599   _____600-999   _____1000+

3. Free/reduced lunch % =   _____<20%   _____20-39%   _____ 40-59%   _____60% +

4. Racial breakdown =   _____% Caucasian   _____% African American
                _____% Hispanic   _____ % Asian _____ % Other

5. AYP status (Yes/No) for year: _____2008   _____2009   _____2010

6. Overall AYP math score (0-100)for year: _____2008   _____2009   _____2010

7. Overall AYP reading score (0-100)for year: _____2008   _____2009   _____2010

Principal Characteristics
1. Gender: _____male   _____ female
2. Years at current school: _____years
3. Years as a principal: _____years

Administrative Team
    The school's administrative team currently consists of (give # of each):
    _____ co-principal _____ assistant principal(s)   _____ dean(s) of students for discipline
    _____ dean(s) of instruction

1. The school has department chairs who assist with observations and walkthroughs: ___ Yes ___ No

2. The school has other administrative team members: _____ Yes (please list title and duties below)   ___ No

Other Administrative team members:

Title: _____   duties: _____

Title: _____   duties: _____

Work Day
Current contract work week =   _____ hours per week
Average time spent at work in addition to contract work week =   _____ extra hours per week
Total time spent on school-related tasks in a typical week = _____ hours (sum of #1 & #2 above

Part II: Principal's Time-on-Tasks

1. **Percentage of Time per Category:** Preview all 7 categories and the associated tasks below. Considering your total work hours for the week, including contract and extra hours outside of the contracted time, assign a total estimated % of time you spend on each broad category. The sum for all categories should equal 100%.

2. **Associated Tasks:** Review the associated tasks for each category and mark any task on which you spend time once or more in a typical work week.

% Time	Category	Mark all that apply	Associated Tasks
	Administration/ Operations	☐	Fulfilling compliance requirements (NOT including special education)
		☐	Managing school schedules
		☐	Managing personal, school-related schedule
		☐	Managing student discipline
		☐	Managing student services (records, reporting, activities, etc.)
		☐	Managing student attendance-related activities
		☐	Preparing, implementing, and administering standardized tests
		☐	Supervising students as a scheduled daily activity (lunch duty, bus duty, etc)
		☐	Maintaining campus facilities
		☐	Developing and monitoring a safe school environment
	Organization Management	☐	Managing budgets, resources
		☐	Hiring personnel
		☐	Managing instructional staff
		☐	Managing non-instructional staff
		☐	Planning/participating in scheduled school meetings
		☐	Participating in district meetings or other communications initiated by the district office
		☐	Interacting/networking with other principals
		☐	Engaging in self-improvement/ professional development
	Day-to-Day Instruction	☐	Fulfilling Special Education requirements
		☐	Informally coaching teachers to improve instruction or their teaching in general
		☐	Formally evaluating teachers and providing feedback to support improvement
		☐	Planning to conduct or conducting classroom observations/ walk-throughs
		☐	Implementing required professional development
		☐	Using data to inform instruction
		☐	Teaching students
	Instructional Program	☐	Developing an educational program across the school
		☐	Evaluating curriculum
		☐	Using assessment results for program evaluation and development
		☐	Planning or facilitating professional development for teachers
		☐	Planning or facilitating professional development for prospective principals
		☐	Releasing or counseling out teachers
		☐	Planning or directing supplementary, after school, or summer school instruction
	Internal Relations	☐	Developing relationships with students
		☐	Communicating with parents
		☐	Interacting socially with staff about school-related topics (shop talk)
		☐	Interacting socially with staff about non-school topic
		☐	Attending school activities
		☐	Counseling staff about conflicts with other staff members
		☐	Counseling or in-depth conversation with students

1. **Percentage of Time per Category:** Preview all 7 categories and the associated tasks below. Considering your total work hours for the week, including contract and extra hours outside of the contracted time, assign a total estimated % of time you spend on each broad category. The sum for all categories should equal 100%.

2. **Associated Tasks:** Review the associated tasks for each category and mark any task on which you spend time once or more in a typical work week.

% Time	Category	Mark all that apply	Associated Tasks
	External Relations	☐	Working with local community members or organizations
		☐	Fundraising
		☐	Communicating with the district office to obtain resources (Initiated by principal)
		☐	Recruiting students to attend school
		☐	Publicizing school events and achievements
		☐	Recruiting school volunteers from the community
	Other	☐	Personal time (e.g., bathroom, lunch, personal calls and emails)
		☐	Transition between in activities
		☐	Other task not listed in any category above

Appendix C

Survey Instrument Validation

Thank you for participating in the validation of this research survey. The purpose of this validation is to field test the survey instrument for clarity and ease of use. Please respond to each of the 4 questions about the survey instrument using the key below to guide your answers.

KEY	
Clarity: 1 = Very difficult to understand 2 = Difficult to understand 3 = Somewhat easy to understand 4 = Easy to understand 5 = Very easy to understand **Ease of Use:** 1 = Very difficult to complete 2 = Difficult to complete 3 = Somewhat easy to complete 4 = Easy to complete 5 = Very easy to complete	**Time Needed to Complete:** 1 = >45 minutes 2 = 40 -44 minutes 3 = 30 - 39 minutes 4 = 20 – 29 minutes 5 = <20 minutes

■■■

1. For Survey Part I: Background Information –Rate Part I in its entirety for each area below:

	1	2	3	4	5
Clarity	1	2	3	4	5
Ease of Use	1	2	3	4	5

2.   For Survey Part II: Principal's Time Use

Rate the question and instructions for each area below:

Q1: Percentage of Time per Category: Preview all 7 categories and the associated tasks. Considering your total work hours for the week, including contract and extra hours outside of the contracted time, assign a total estimated % of time you spend on each category. The sum for all categories should equal 100.

	1	2	3	4	5
Clarity	1	2	3	4	5
Ease of Use	1	2	3	4	5

3.   For Survey Part II: Principal's Time Use

Rate the question for each area below:

Q2: Associated Tasks: Review the associated tasks for each category and place a check next to any task on which you spend time once or more in a typical work week.

	1	2	3	4	5
Clarity	1	2	3	4	5
Ease of Use	1	2	3	4	5

4.   For the Overall Survey Instrument –Rate the survey instrument in its entirety for each area below:

	1	2	3	4	5
Ease of Use	1	2	3	4	5
Time Needed to Complete	1	2	3	4	5

Appendix D

Correlation Matrix

Correlation Matrix between Standards of Learning Pass Rates, Time-on-tasks Categories, and Demographic Characteristics

	1	2	3	4	5	6	7	8
1. SOL Math pass rate	-							
2. SOL Reading pass rate	.97**	-						
3. % Admin. and operations	.40*	.43*	-					
4. % Org. management	.20	.21	-.29	-				
5. % Day-to-day instruction	-.58**	-.62**	-.65**	-.18	-			
6. % Instructional program	-.41*	-.45**	-.56**	-.14	.26	-		
7. % Internal relations	.50**	.48**	-.20	.45**	-.20	-.31	-	
8. % External relations	-.31	-.33	-.51**	.30	.37*	.17	.22	-
9. % Other	.45**	.44**	-.10	.29	-.31	-.24	.62**	.07
10. School location	.39*	.50**	.56**	-.003	-.50**	-.29	-.02	-.25
11. School size	-.12	-.13	-.16	.37*	.02	.10	.07	.21
12. Free/reduced lunch	-.61**	-.61**	-.10	-.29	.43*	-.03	-.49**	-.11
13. Racial makeup	-.59**	-.63**	-.45**	-.06	.57**	.17	-.30	-.01
14. Principal years at school	.35*	.31	.19	-.14	-.19	-.35*	.21	-.03
15. Principal total exp.	.39*	.35*	.05	-.13	-.17	-.18	.27	-.03
16. Principal work hours	-.26	-.30	-.14	.31	.08	.22	-.002	.47**

*p < .05. **p < .01.

Correlation Matrix between Standards of Learning Pass Rates, Time-on-tasks Categories, and Demographic Characteristics

	9	10	11	12	13	14	15	16
1. SOL Math pass rate								
2. SOL Reading pass rate								
3. % Admin. and operations								
4. % Org. management								
5. % Day-to-day instruction								
6. % Instructional program								
7. % Internal relations								
8. % External relations								
9. % Other	-							
10. School location	.03	-						
11. School size	-.39*	-.39*	-					
12. Free/reduced lunch	-.22	-.22	-.39*	-				
13. Racial makeup	-.39*	-.57**	.17	.71**	-			
14. Principal years at school	.69**	-.01	-.30	-.12	-.33	-		
15. Principal total exp.	.75**	.09	-.44**	-.21	-.44*	.92**	-	
16. Principal work hours	-.56**	-.13	.56**	-.08	.25	-.66**	-.75**	-

*$p < .05$. **$p < .01$.

Permission Letter and Form Sent to Superintendents

[date]
Superintendent
School Division
Street Address
City, State Zip Code

Dear Superintendent [Name]:

I am contacting you to ask permission to survey selected Middle School Principals in your school division. The survey will ask principals to identify the percentage of work time they spend on seven identified time-on-tasks categories. If you grant permission, I will contact each school principal via email to request their participation in an electronic survey of this topic.

Schools will be selected based on their AYP performance data as recorded on a list generated from the Virginia Department of Education website of all Virginia middle schools. Participation in this research study is voluntary and responses to the survey will be anonymous and confidential.

The data gathered from this survey will be used in aggregate form to provide descriptive information on principals‟ time-on-tasks and to answer questions regarding relationships between the time allocation and school performance outcomes.

As a middle school project manager and former assistant principal, I am very aware of the enormous demands on your principals‟ time. Please know that your participation is an invaluable part of this study and that the utmost care will be taken to ensure that the reported results are accurate, unbiased, and completely free of any reference to specific schools.

I believe that this research will be of benefit to school leaders as they work to manage their time in this increasingly complex world of school administration and leadership; and as such I will make available to any school leader who requests it a copy of the study findings.

 If you decide to grant your permission, please take a moment to complete the attached form and fax it to me at (276) 496 – 3216. If you have any questions, or concerns, please call me at (276) 496 – 7751.

Respectfully,

Lisa A. Harris
Doctoral Candidate
Virginia Polytechnic Institute and State University

**Permission to Conduct Research
Study**

By signing this form, I am granting Lisa Harris permission to conduct the research project,

"The Relationship of Middle School Principals" Time-on-tasks to School Performance," with the

participation of selected Middle School Principals.

The researcher, Lisa A. Harris, agrees to follow the research proposal as outlined in the

attached letter.

1)   Contact each selected school principal via email.

2)   The information will be aggregated into group data for analysis.

3)   No identifiable information will be maintained to link school divisions,

schools, or principals to responses on the survey.

4)   The results of the study will be shared with school and division leaders upon request.

_____

School Division

_____   _____

Printed Name of Superintendent or Designee   Title

_____   _____

Signature of Superintendent or Designee   Date

Appendix F

Recruitment Emails

Dear Principal (Name):

My name is Lisa Harris and I am a doctoral candidate in Educational Leadership and Policy Studies at Virginia Tech University. As part of my dissertation on Middle School Principals' Time-on-Tasks, I am conducting a survey of Middle School Principals in Virginia regarding allocation of time to specific time use categories and tasks.

I would sincerely appreciate your participation in this research study and will share the findings with any interested participants. The survey should take approximately 30 minutes to complete and can be accessed at the following link:

https://survey.vt.edu/survey/entry.jsp?id=1300391170060

To assist you in preparing for the survey, I have attached to this email a paper version that you may wish to print for your reference. You may wish to record your answers on the paper survey and use this to decrease the time needed to complete the electronic survey.

Your school was randomly selected from a list generated from the Virginia Department of Education website of all Virginia middle schools. Your email information was obtained from either a public website or a telephone call to your school.

Participation in this research study is voluntary and your response to the survey will be anonymous and confidential. The data gathered from this survey will be used in aggregate form to provide descriptive information on principals' time-on-tasks and to answer questions regarding relationships between the time allocation and school performance outcomes.

As a middle project manager and former assistant principal, I am very aware of the enormous demands on your time. Please know that your participation is an invaluable part of this study and that the utmost care will be taken to ensure that the reported results are accurate, unbiased, and completely free of any reference to specific schools.

Thank you in advance for your participation. Please feel free to contact with any questions you may have regarding the survey instrument or the associated research project.

Best Regards,

Lisa Harris

For more information please contact:
Lisa A. Harris
Doctoral Candidate, Virginia Polytechnic University
lisa0902@vt.edu

First Reminder Email

Dear Principal (Name):

I hope that you are well on your way to a successful end to the school year. I know how busy things get this time year, so I wanted to thank you for taking the time to assist with my doctoral research. If you have already completed the survey, please accept this as my sincere thanks.

If you have not yet been able to complete the survey, I would deeply appreciate your input by accessing the link below to submit your responses.

https://survey.vt.edu/survey/entry.jsp?id=1300391170060

As this is a blind survey, I do not know which principals have responded, but please know that I value your time and effort.

With Best Regards,
Lisa Harris

For more information please contact:
Lisa A. Harris
Doctoral Candidate, Virginia Polytechnic University
lisa0902@vt.edu

Final Reminder Email

Dear Principal (Name):

Please accept my deepest appreciation for your participation in a survey of middle school principals' time-on-tasks for my doctoral dissertation. The survey window will close on Friday of this week and the information provided by participating principals will help ensure the study is as inclusive as possible.

If you have not yet been able to complete the survey, I would sincerely appreciate your input by accessing the link below to submit your responses. As this is a blind survey, I do not know which principals have responded, but please know that I value your time and effort.

https://survey.vt.edu/survey/entry.jsp?id=1300391170060

If you would like a copy of the survey results, please feel free to contact me. Thank you once again for your support.

With Best Regards,
Lisa Harris

For more information please contact:
Lisa A. Harris
Doctoral Candidate, Virginia Polytechnic University
lisa0902@vt.edu

Appendix G

IRB Approval

MEMORANDUM

DATE: March 18, 2011

TO: Travis W. Twiford, Lisa Harris

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires October 26, 2013)

PROTOCOL TITLE: Middle School Principals' Time-on-Tasks

IRB NUMBER: 11-259

Effective March 18, 2011, the Virginia Tech IRB Administrator, Carmen T. Green, approved the new protocol for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the
subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: Exempt, under 45 CFR 46.101(b) category(ies) 2Protocol Approval Date: 3/18/2011Protocol Expiration Date: NA
Continuing Review Due Date*: NA

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future
V I R G I N I A   P O L Y T E C H N I C   I N S T I T U T E   A N D   S T A T E   U N I V E R S I T Y

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

*Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

cc: File

V I R G I N I A   P O L Y T E C H N I C   I N S T I T U T E   A N D   S T A T E   U N I V E R S I T Y

Permission to Use Copyrighted Figure

Permission to Copyrighted Figure

RE: Request for permission to use copyrighted figure

--- On **Tue, 3/22/11, Kenneth Leithwood *<kenneth.leithwood@utoronto.ca>*** wrote:

From: Kenneth Leithwood <kenneth.leithwood@utoronto.ca>
Subject: RE: Request for permission to use copyrighted figure
To: "Karen Seashore" <klouis@umn.edu>, "lisa0902@vt.edu" <lisa0902@vt.edu>
Cc: "sanderson@oise.utoronto.ca" <sanderson@oise.utoronto.ca>, "wahls001@umn.edu" <wahls001@umn.edu>
Date: Tuesday, March 22, 2011, 4:54 PM

 fine with me.

--- On **Tue, 3/22/11, Stephen Anderson179 *<steve.anderson@utoronto.ca>*** wrote:

From: Stephen Anderson179 <steve.anderson@utoronto.ca>
Subject: RE: Request for permission to use copyrighted figure
To: "Karen Seashore" <klouis@umn.edu>, "lisa0902@vt.edu" <lisa0902@vt.edu>
Cc: "Kenneth Leithwood" <kenneth.leithwood@utoronto.ca>,
"sanderson@oise.utoronto.ca" <sanderson@oise.utoronto.ca>, "wahls001@umn.edu" <wahls001@umn.edu>
Date: Tuesday, March 22, 2011, 2:58 PM

 Agreed..steve anderson

--- On **Tue, 3/22/11, Karen Seashore *<klouis@umn.edu>*** wrote:

From: Karen Seashore [klouis@umn.edu]
Sent: Tuesday, March 22, 2011 1:23 PM
To: lisa0902@vt.edu
Cc: Kenneth Leithwood; sanderson@oise.utoronto.ca; wahls001@umn.edu
Subject: Re: Request for permission to use copyrighted figure

As far as I am concerned, it can be cited with attribution to the report, authors and Wallace Foundation (could all be done in the bibliography).

Karen Seashore (Louis)
Regents Professor of Organizational Leadership, Policy and Development
Robert H. Beck Chair of Ideas in Education
330 Wulling Hall
36 Pleasant St. S.E.
University of Minnesota
Minneapolis, MN 55455-0221
612 626 8971 (office)
612 385 4947 (cell)
612 624 3377 (fax)

On Mon, Mar 21, 2011 at 6:07 PM, <lisa0902@vt.edu> wrote:

Greetings Drs. Seashore Louis, Leithwood, Wahlstrom and Anderson,

My name is Lisa Harris and I am a doctoral candidate with Virginia Tech University. I am researching the topic Middle School Principals' Time-on-Tasks and I have cited one of your studies in my work.

As part of my dissertation, I would like to insert a figure from one of your recent works. I am therefore seeking guidance on how to obtain permission to reproduce a figure from the 2010 research project report to the Wallace Foundation on "Learning from Leadership - Investigating the Links to Improved Student Learning."

Specifically, I am seeking permission to reproduce in my dissertation [Figure 1: Leadership Influences on Student Learning] from page 14 of the Learning from Leadership study.

I appreciate any guidance you can provide as to whom I need to contact to obtain this permission.

Thank you for your time and consideration.

Regards,
Lisa Harris

Appendix I

Permission to Use Task Categories

```
Saturday, March 12, 2011 5:49 PM
RE: Request for permission to use information from study
From:"Loeb, Susanna" <sloeb@stanford.edu>
To:  "lisa0902@vt.edu" <lisa0902@vt.edu>
2 Files (70KB)


Hi Lisa,

You are welcome to use this.  We now have a slightly more sophisticated
list which I've attached in case you are interested.

All my best,

Susanna


-----Original Message-----

From: lisa0902@vt.edu [mailto:lisa0902@vt.edu]
Sent: Saturday, March 12, 2011 1:47 PM
To: Loeb, Susanna
Subject: Fwd: Request for permission to use information from study

Greetings Dr. Loeb,

I received a response back from Dr. Horng indicating that you are
the primary researcher for the study of Principal's Time Use and School
Effectiveness.

While Dr. Horng has agreed to my request, I will await confirmation
from you before proceeding.

Once again, thank you for your time and consideration.

Best Regards,

Lisa Harris


----- Forwarded message from lisa0902@vt.edu -----

From: Eileen Horng <ehorng@gmail.com>
Subject: Re: Request for permission to use information from study
To: "lisa0902@vt.edu" <lisa0902@vt.edu>
Date: Saturday, March 12, 2011, 3:42 PM

Hi Lisa,
```

This would be fine with me, but please do check with Susanna Loeb who is the PI for this research project.

RE: Request for permission to use information from study

~ Eileen
Sent from my iPad

----- Forwarded message from lisa0902@vt.edu -----
Date: Sat, 12 Mar 2011 12:54:29 -0500
From: lisa0902@vt.edu
Subject: Request for permission to use information from study

To: ehorng@stanford.edu
Cc: djklasik@stanford.edu , sloeb@stanford.edu

Greetings Dr. Horng,

My name is Lisa Harris and I am currently a doctoral candidate in Administration and Policy Studies at Virginia Tech University. I am in the process of designing my doctoral dissertation on the subject of Middle School Principals' Time-on-Tasks.

As part of my research, I reviewed your 2010 article on "Principal's Time Use and School Effectiveness" and would like to use the categories and task lists you developed as the basis for my survey.

Specifically, I am requesting permission to:

1) reproduce from your article "Figure 1, Principal's time use categories" directly into my paper, and;

2) use the categories and tasks you developed as the basis for my survey.

I admired the study that you completed with co-authors Susanna Loeb and Daniel Klasik and respect the research that was described in the article. I believe your categories and tasks would be a solid basis for my own study.

Thank you for considering my request, and please let me know if you need any additional information.

Best Regards,

Lisa Harris

Appendix J

Research Articles with Notes

#	Author	Title	Year	Focus/ related heading
1	Manasse, L.	Improving conditions for principal effectiveness	2010	History
2	Chan, T., & Pool, H.	Principals' priorities versus their realities: Reducing the gap	2002	Time on tasks
3	Leithwood, K.	Understanding successful principal leadership: progress on a broken front	2005	Probably not
4	Marks, H., & Printy, S.	Principal leadership and school performance: An integration of transformational and instructional leadership	2003	Leadership theories Combination of transformational and instructional styles, integrated leadership, yields most positive results Shared instructional leadership has positive results
5	Leithwood, K., & Prestine, N.	Unpacking the challenges of leadership at the school and district level	?	Leadership behaviors

#	Author	Title	Year	Focus/ related heading
6	O'Donell, R., & White, G.	Within the accountability era: Principals' instructional leadership behaviors and student achievement	2005	Leadership behaviors Primary responsibility to facilitate effective teaching and learning to improve student achievement Links instructional leadership to student outcomes Question how to accomplish all in available time
7	Nanavati, M., & McCulloch, B.	School culture and the changing role of secondary vice principal	2003	Probably not
8	Smith, J.	The relationship between school division climate and student achievement of school divisions in the commonwealth of Virginia	2005	The role of the principal
9	Robinson, V., Lloyd, C., & Rowe, K.	The impact of leadership on student outcomes: An analysis of the differential effects of leadership types	2008	Leadership theories Instructional leadership has 3-4 times larger effect size than transformational leadership 5 leadership dimensions – promoting and participating in teacher learning is strongest correlation to student achievement

#	Author	Title	Year	Focus/ related heading
10	Wahlstrom, K., & Seashore Louis, K.	How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility	2008	Leadership behaviors
11	Thomas, A. R.	A principal's interruptions: Time lost or time gained?	1998	Time management Handling interruptions helps build relationships Plan for interruptions
12	McEwan, E.	Seven steps to effective instructional leadership	2000	Leadership behaviors
13	Petzko, V., Clark, D., Valentine, J., Hackmann, D., Nori, J., & Lucas, S.	Leaders and leadership in middle level schools	2002	The role of the principal Time on tasks # of hours in work week is rising Accountability is intensifying
14	Leithwood, K., & Jantzi, D.	A review of transformational school leadership research 1996-2005	2005	Leadership theories Modest positive effect of transformation leadership on student engagement
15	Hargreaves, A.	The seven principles of sustainable leadership	2003	Probably not
16	Seashore Louis, Leithwood, et al (Wallace Foundation)	Learning from leadership: Investigating the links to improved student learning	2010	Leadership behaviors Leadership theories Indirect influence on student outcomes Theoretical framework

#	Author	Title	Year	Focus/ related heading
17	Leithwood, K, Seashore Louis, K., Anderson, S., & Wahlstrom, K.	How leadership influences student learning	2004	Leadership theories Leadership behaviors
18	Leithwood, K., Harris, A., & Hopkins, D.	Seven strong claims about successful school leadership	2008	Leadership behaviors
19	Styron, R. & Nyman, T.	Key characteristics of middle school performance	2008	Definition of terms Principal efforts that lead to improvement include: designing PD for teachers, communicating w/teachers, encouraging collaboration, getting input from T., time to discuss data
20	Mendez-Morse, S.	The principal's role in the instructional process: Implications for at-risk students	1991	Leadership behaviors
21	Quinn, D.	The impact of principal leadership behaviors on instructional practice and student engagement	2002	Leadership behaviors
22	Day, C.	Effective leadership and reflective practice	2000	The role of the principal
23	Barker, B.	The leadership paradox: Can school leaders transform student outcomes	2006	Leadership behaviors – other side

#	Author	Title	Year	Focus/ related heading
24	Grubb, W.N., & Flessa, J.	A job too big for one: Multiple principals and other nontraditional approaches to school leadership	2006	Leadership theories Time management
25	Rayfield, R. & Diamantes, T.	An analysis of administrator attitudes toward tasks in school administration	2004	Time on tasks Task analysis of school P job No domains, just a list of job categories and 25 specific tasks (p.32)
26	Rayfield, R. & Diamantes, T.	Task analysis of the duties performed in secondary school administration	2004	Time on task Jack of all trades and master of all trades
27	Hausman, C., Nebeker, A., & McCreary, J.	The worklife of the assistant principal	2001	Probably not
28	Engels, N., Hotton, G., Devos, G., Bouckenooghe, D., & Aelterman, A.	Principals in schools with a positive school culture	2008	Leadership behaviors Time management Time management, lack of time, and setting priorities are problems for P. Schools with highest positive culture have P. who spend most of time on preferred roles and tasks/ remarkable time management Demographics not a significant factor

#	Author	Title	Year	Focus/ related heading
29	Lovett, M.	Understanding the challenge: The worklife of a principal in an achieving urban elementary school with a large number of at-risk students	2000	Time management
30	Fiore, D.	Positive school cultures: The importance of visible leaders	2000	Leadership behaviors Trust building and shared responsibility
31	Wilson, A.	Time management for administrators	1999	Time management
32	Hargreaves, A, & Fink, D.	Sustaining leadership	2003	Probably not
33	Leithwood, K & Jantzi, D.	The relative effects of principal and teacher sources of leadership on student engagement with school	1999	Leadership theories
34	Leithwood & Riehl	What we know about successful school leadership (Needs reprinted – low ink on pages)	2003	Leadership behaviors Principals promote change by vision and goal setting, support structures for teaching and learning. Table 1 page 22 – leadership categories and practices
35	Leithwod, K., Day, C., Sammons, P., Harris, A., & Hopkins, D.	Successful school leadership: What it is and how it influences pupil learning	2006	Leadership behaviors
36	Andrews, R., & Soder, R.	Principal leadership and student achievement	1987	Leadership behaviors

#	Author	Title	Year	Focus/ related heading
37	Smith, W., Guarino, A.J., Strom, P, & Reed, C.	Principal self-efficacy and effective teaching and learning environments	2003	Time management
38	Leithwood, K. & Jantzi, D.	Linking leadership to student learning: The contributions of leader efficacy	2008	Leadership behaviors
39	Glasman, N.	Student achievement and the school principal	1984	The role of the principal of principal Primary function to show evidence of student gains
40	Lucas, S	The development and impact of principal leadership self-efficacy in middle level schools: Beginning an inquiry	2003	Leadership behaviors
41	Togneri, W., & Anderson, S.	Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools. A project of the Learning First Alliance [and] a leadership brief	2003	Leadership behaviors
42	Waters, T., Marzano, R., McNulty, B.	Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement. A working paper.	2003	Leadership behaviors Composite leadership framework

#	Author	Title	Year	Focus/ related heading
43	Hallinger, P. & Heck, R.	Exploring the principal's contribution to school effectiveness: 1980-1995	1997	The role of the principal Synthesis – lead in to topic
44	Neil, P., Carlisle, K., Knipe, D., & McEwan, A.	Principals in action (waiting to print)	2001	Leadership behaviors
45	Parkes, S. & Thomas, A.	Values in Action: Observation of effective principals at work (waiting to print)	2007	Leadership behaviors Interruptions make people feel valued
46	Sergiovanni, T.	The Principalship: A reflective practice perspective. (fourth edition). (can't get from Eric?)	2001	History
47	Valentine, J.	The changing roles of effective middle level principals	1999	The role of the principal
49	Gottfredson, G. and Hybl	An analytical description of the school principal's job (waiting to print)	1987	Role of principal is primarily a supervisor of other personnel – observation and evaluation of staff, feedback, assessing needs, planning for improvement 14 factors related to the principalship (p.30) 13 Tasks rated as both important and time consuming (p 30-31) Few tasks rated as unimportant

#	Author	Title	Year	Focus/ related heading
50	Smith, W., & Andrews, R.	Instructional Leadership: How principals make a difference	1989	Time on task Instructional Leadership Strong instructional leaders spend more time on preferred tasks Preferred tasks of strong instructional leaders include those related to improving the ed. Program Ave leaders prefer instructional, but spend most time on management behaviors
51	Robertson, P.	Time-Management practices of school principals in the United States	1999	Time management 6 categories of time management Notes need for more training on time management in handling interruptions, scheduling contacts, and managing paperwork
52	Whitaker, T., & Turner, E.	What is your priority?	2000	Time on task Need to balance competing priorities – their own and those imposed by others P feel all tasks are important Climate highest priority Ps Recognized need to improve time management Numerous responsibilities = high stress

#	Author	Title	Year	Focus/ related heading
53	Portin, B.	The changing urban principalship	2000	The role of the principal Principals stretched in multiple directions New responsibilities, complex,, far reaching Increased complexity and number of tasks Principals say not enough time – pressure to reorient time
54	Larry, C.	A study of time management use and preferred time management practices of middle and secondary school principals in selected southern states	2003	Time Management practices Ability to prioritize and develop time limits brings order to task performance 5 helpful time management practices: setting weekly admin meetings, email to correspond, delegation, daily activity log, get facts before making decisions
55	Powell, S.	Leadership and school success: The behaviors and practices of principals in successful at-risk schools. (Waiting to print)	2004	Leadership behaviors Primary job is instructional leader and success aligns with" clear vision, protect teaching time, support ind. Students, decision making, management skills

#	Author	Title	Year	Focus/ related heading
56	Taylor, K.	A study of principals' perceptions regarding time management (Waiting to print abstract – article ordered from Illiad)	2007	Time management Principals in large schools 1000+ students, spend more time on management Females spend more time on instruction than males Identifies time wasters and makes suggestions to improve time management in those areas
58	Branch, G., Hanushek, E., & Rivken, S.	Estimating principal effectivenes	2009	The role of the principal
59	Horng, E., Klasik, D., & Loeb, S.	Principal's time use and school effectiveness	2010	Time on Task Follow up to Grissom and Loeb study 6 final categories of time use (based on Spillane et al) Day to day behaviors Time on Organization management effect Use of beepers and observations to collect data P in high performing schools spend more time on organization management as opposed to administrative activities
60	Cross, C., & Rice, R.	The role of principal as instructional leader in a standards driven system	2000	Leadership behaviors

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61	Bottoms, G. & O'Neill, K	Preparing a new breed of school principals: It's time for action (Waiting to print)	2001	The role of the principal
62	Jackson, A.W. & Davis, G.A.	Turning points 2000: Educating adolescents in the 21st century (book cited in Petzco et al. 2002 – don't have copy)	2000	The role of the principal
63	Campbell, L. and Williamson, J.	Do principals have time to do it all?	1999	Time management
64	Black, S.	Finding time to lead	2000	Leadership theory – Instructional leadership Time on tasks
65	Campbell, P., & Williamson, J.	Do principals have time to do it all?	1991	Time on tasks Principals do not have time to do it all Principals need to improve time management Principals should delegate to make more time Seriously evaluate how to spend time
66	Cotton, K	Principals of high achieving schools: What the research says (have abstract only – cited in Grubb & Flessa, 2006)	2003	Leadership behaviors 26 essential traits Strong administrative and instructional leadership are key

#	Author	Title	Year	Focus/ related heading
68	Flessa, J.	Principal behaviors and school outcomes (need to find article - cited in Grubb & Flessa, 2006)	2004	Leadership behaviors
69	Goodwin, R.	The changing role of the secondary principal in the United States: An historical perspective	2005	Historical perspective Changing Role of the principal As role has changed the number and type of tasks has changed Increased expectations, conflict in roles
70	Institute for Educational Leadership	Leadership for student learning: reinventing the principalship (need to find article - cited in Grubb & Flessa, 2006)	2000	Leadership behaviors
71	Isaac, S & Michael, W.B.	Handbook in research and evaluation	1971	Research design
72	Manasse, L.	Improving conditions for principal effectiveness: Policy implications of research	1985	history
73	Spillane, J.	Taking a Distributed Perspective to the School Principal's Workday	2007	Time management Time on task 4 categories of tasks: administrative, instruction and curriculum, professional growth, relationships

#	Author	Title	Year	Focus/ related heading
74	Valentine, Clark, Hackmnn, & Pretzko	A national study of leadership in middle-level schools (need to look up article – cited in Grubb & Flessa, 2006)	2003	The role of the principal
75	Lunenburg, Fred C.	The principal and the school: What do principals do?	2010	Time on task
76	McPeale, Jacqueline A.	The principalship: A study of the principal's time on task from 1960 to the twenty-first century	2006	Time on task P work week of 60.3 hours Spend most time on school management Least time on community relations Increase over years in time spent on management due to NCLB
77	Marzano, R, Waters, T., & McNulty, B.	School leadership that works: from research to results.	2005	

#	Author	Title	Year	Focus/ related heading
78	Grissom & Loeb	Triangulating Principal Effectiveness	2009	Refined Spillane's 4 categories into 5 categories and 42 tasks Relationship btw organization management and school performance Effective instructional leadership combines understanding instructional needs with targeting resources Must balance instructional leadership with increased capacity in organization leadership to see results
79	Hallinger and Murphy	Assessing Instructional Management Behavior of Principals	1985	5 functions of leadership: protect instructional time, high visibility, incentives to teachers, promote PD, incentives for learning