THE RELATIONSHIP BETWEEN MIDDLE SCHOOL PRINCIPALS USE OF THE
DIMENSIONS OF DISTRIBUTED LEADERSHIP AND TEACHERS

by

George Lathan Marek Marshall

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

Distributed leadership provides school leaders with an opportunity to engage teachers in the leadership process. Sharing leadership in the middle school setting engages teachers in the decision-making process while allowing them to utilize their leadership skills. Creating a culture of shared leadership through distributed leadership, provides school leaders and teachers an opportunity to achieve school related goals together as a team. The purpose of this study was to determine if a relationship exists between middle school principals use of the dimensions of distributed leadership and teacher engagement in the shared decision-making process. The research questions guiding this study are: 1) What is the relationship, if any, between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process? 2) Is there a difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices? This research study sample involved middle school teachers from a local school district in South Carolina. The instrument used in this study was the Distributed Leadership Readiness Scale (DLRS). A correlational analysis found a significant positive relationship between teacher engagement and the principal’s use of distributed leadership practices. An analysis of variance revealed no differences among teachers at grade levels 6 through 8 regarding mean scores on any of the four dimensions measured by the DLRS.

Key words: distributed leadership, distributed leadership readiness scale, and middle school concept
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Dedication

This dissertation is dedicated to my entire family. To my loving wife, Kristina, I am grateful for your love, patience, and prayers. There have been countless days, nights, and weekends you have sacrificed for our children while I was working towards this goal. Your presence, love, and support granted me the ability and confidence to complete this journey. To my sons, Shawn, Johnathan, and Christopher, thank you for being the reason I continued to work hard and bring so much happiness into my life. Everything your mother and I do in this life is for you all. To my mother, Evelyn Marshall, you have never failed me. Mother you have been my encourager and you instilled an excellent work ethic in me. I will continue to make you proud in all I seek to accomplish. To my sister, Geor’Shawn Marshall, you are my best friend and prayer warrior. Thank you for your unconditional love, encouragement, and support. To my second set of parents, John and Valerie Stroud, thank you for helping Kristina and I with the boys when I had a great amount of work to complete. I also appreciate your love, support, and accepting me into your family as your third child. Lastly, to my late father, George B.T. Marshall, you set the standard and showed me how to be a loving husband and father. Thank you for teaching me how to honor God and place the Lord first in all things I seek to accomplish.
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List of Abbreviations

Distributed Leadership Readiness Scale (DLRS)

No Child Left Behind (NCLB)

One-way analysis (ANOVA)

Professional learning communities (PLCs)
CHAPTER ONE: INTRODUCTION

Overview

School leaders utilize distributed leadership to influence decisions made within a school’s learning environment (McKenzie & Locke, 2014). School administrators may apply the dimensions of distributed leadership, which are: mission, vision and goals, shared responsibility, school culture, and leadership practices in middle school settings. This study sought to understand if a relationship exists between the middle school principal’s use of the dimensions of distributed leadership in the middle school setting on the engagement of middle school teachers in the decision-making process. This chapter provides the background, problem statement, purpose statement, significance of the study, research questions, and definitions.

Background

Historical Context

The emphasis on school improvement has shifted to the quality of work and school leadership, principals utilize to improve school level performance (Goff, Guthrie, Goldring, & Bickman, 2014). Principals have a responsibility to effectively communicate with teachers, students, and community members to positively impact a schools-learning environment. Principals and teachers make up a complex system within a school’s learning environment and must simultaneously work together (Tschannen- Moran & Gareis, 2014). As principals work to improve the learning environments in their school setting, clear vision and goals must be set.

According to Katterfeld’s (2013), research demonstrated that principals impact their school environment when they are actively involved in setting goals and defining a school’s academic vision. School principal’s leadership is vital to the success of teachers and students in the learning environment. Research has consistently proven that principals’ leadership impacts
student learning (Klar & Brewer, 2014). As school principals display leadership, the type of leadership style they use may impact teaching and learning. One style is distributed leadership, which allows school leaders to implement new routines that redefine the culture of an organization (Halverson & Clifford, 2013). Distributed leadership creates opportunities for school leaders and teachers to collaborate when bringing about school change.

Distributed leadership is a style that principals utilize to influence decisions made in a school’s learning environment (Tashi, 2015). The discussion of distributed leadership began in the 1940s and 1950s. However, it was not until the 1980s that research began to focus on the distribution of leadership (McKenzie & Locke, 2014). The use of distributed leadership has seen an upward trend in the field of education since the year 2000. School administrators apply four dimensions of distributed leadership, which are: mission, vision and goals, shared responsibility, school culture, and leadership practices (Tashi, 2015). Distributed leadership is different from traditional leadership in that the proponents of distributed leadership encourage leaders to distribute leadership throughout the entire organization (Adigüzelli, 2016). Through distributed leadership school leaders are presented with multiple opportunities to share leadership responsibilities with others within an organization.

Dieronitou (2014) explained that advocates of distributed leadership believe the job of transforming schools should not be the sole responsibility of one person. The term-distributed leadership can be described as shared leadership or democratic leadership. As school leaders distribute leadership, leadership is dispersed throughout a school’s setting and does not rest with one person (Dieronitou, 2014). Tahir, Lee, Musah, Jaffri, Said, and Yasin (2015) argued that distributed leadership might have different interpretations. One common misconception is that all individuals in distributed leadership actually lead. Furthermore, Distributed leadership is a
way of leading and ensuring that individuals in a school organization can share in leadership
decision-making and play a vital role in shared leadership (Tahir et al., 2015). Shared leadership
could provide school principals and teachers opportunities to share in the decision-making
process.

Social Context

Principals can impact an educational community and utilize multiple leadership
approaches to achieve school wide goals. Moreover, principal leadership impacts student
learning through instructional and non-instructional tasks (Urick, 2016). Leaders in the
educational community have evaluated the role of school principals and results indicate the
principal’s role previously had been top-down (Urick, 2016). However, as school leaders
transform their leadership styles, it is imperative that principals develop leaders in their school
environment and share leadership.

To improve the organizational structure of a school environment, principals are no longer
singular dictators of the actions of subordinates. When leading teachers and providing a strong
instructional foundation for students, school leaders must include teachers in the decision-
making process. Finally, Urick (2016) explained that distributed leadership provides an
opportunity for principals and teachers to interact with each other. The use of distributed
leadership may increase collaboration with school leaders and teachers.

According to Harris (2013), another aspect of distributed leadership is a fundamental
change to the way school leaders implement and view their roles as leaders. When analyzing the
distributed leadership model, educators must understand how this type of leadership will impact
school settings. Harris (2013) discussed the idea of distributed leadership and explained the
leadership practice has sparked the interest of researchers, policy-makers, and educators.
Exploring the structures of leadership within the distributed leadership model will enable educators to understand the work of the school leaders and observe how they influence the school organization. As school leaders understand how distributed leadership can enhance the learning environment and management in an educational setting, school leaders will have access to an educational tool that is beneficial to students and educators. Social interaction in a school’s learning environment is also pertinent to school leaders, and Harris (2013) explained social interaction is an important element of leadership practice. Distributed leadership may increase the way school leaders and teachers socially communicate with each other.

Educational leaders should also understand that distributed leadership would allow principals to form partnerships in a school’s organization. Kelly and Dikkers (2016) explained that leadership is a responsibility that is shared among individuals in a school’s organization. As principals implement distributed leadership, they will understand that role of the principal will transition into one that is supporting and encourages shared expectations. Additionally, implementing distributed leadership in a school’s environment is critical for effective collaboration between school leaders and teachers. Distributed leadership allows for the creation of an educational organization where principals and teachers positively interact (Kelly & Dikkers, 2016). Interactions between school leaders and teachers could lead to shared decision-making within a school’s organization.

**Theoretical Context**

The theoretical context of distributed leadership has three essential elements, which are: leaders, followers, and their situation (Cron, 2016). As tasks are completed utilizing distributed leadership, no one individual in a school’s organization will be the sole person leading a task (Cron, 2016). Moreover, distributed leadership theory is described normatively and analytically.
Nicholas leadership is considered democratic or shared as opposed to a more traditional style of top-down leadership. Furthermore, distributed leadership enables school principals to provide teachers with more authority (Cron, 2016). By contrast, distributed leadership theory provides insight as to how leaders divide authority among leaders, followers, and the situation (Cron, 2016). The theoretical context of distributed leadership encourages school leaders to share responsibility when addressing issues.

Distributed leadership was proposed as an analytical framework by Spillane and builds upon the work of Elmore and Gronn (Johnston, 2015). For many years the primary focus of leadership was on the leader. However, in recent years the notion of distributed leadership has garnered the attention of researchers. Distributed leadership is also described as using the expertise and knowledge of individuals in an organization to lead specific tasks. Finally, Johnston (2015) defined distributed leadership as a group of individuals who interact with each other. Interactions between school leaders and teachers is one of the ways in which school leaders can change the culture within a school.

Wells and Klocko (2015) explain that principals are the primary source of leadership and have the responsibility of transforming the culture of a school to improve student achievement. As principals utilize distributed leadership, they are in fact encouraging teachers in their school settings to become leaders. According to Wells and Klocko (2015), distributed leadership further correlates with the foundations of teacher leadership. As principals encourage interactions among leaders and followers, they are in position to successfully incorporate distributed leadership in school learning environments.

**Problem Statement**

School principals have been faced with pressure to continually increase student
achievement in their school settings and as a result of No Child Left Behind, test driven accountability has become the norm in U.S. schools (Grenda & Hackmann, 2014). In many traditional educational environments, the school principal has become overwhelmed with instructional monitoring, student issues, and student achievement accountability. Moreover, administrative leadership has shifted from the traditional hierarchical relationships to distributed leadership practices. One consequence of interdisciplinary teams in a middle school setting, is teachers have a responsibility to create a learning environment, where educators collaborate and deliver a curriculum to students across disciplines. As school principals begin to use distributed leadership practices, middle-level schools are appropriate for distributed leadership (Grenda & Hackman, 2014). The foundation of the middle school concept and teacher teams may allow distributed leadership to take place in middle school settings.

While many research studies have focused on distributed leadership, more work is needed in understanding the practices of distributed leadership in school settings (Hairon & Goh, 2015). Additionally, Halverson and Clifford (2013) encourages research on distributed leadership in different school settings, so that practitioners may gain an understanding of how to bring about effective change. Finally, Grenda and Hackmann (2014) suggest further research should examine distributed leadership practices in middle school settings that have fully implemented features associated with the middle school concept. The problem is that it is not known whether there is a relationship between middle school principals use of distributed leadership practices and middle schools that have implemented features associated with the middle school concept.

**Purpose Statement**

The purpose of this quantitative correlational and causal-comparative research study is to
determine whether there is a relationship between middle school principals’ use of distributed leadership practices and middle schools that have implemented features associated with the middle school concept. The Distributed Leadership Readiness Scale (DLRS) is a scale, which was developed by the Connecticut Department of Education to measure shared leadership in school settings. Teacher responses to distributed leadership practices by middle school principals is the dependent variable and will be measured by the DLRS. The independent variable is middle school principal use of distributed leadership practices utilizing the four dimensions of the distributed leadership model. The researcher used one instrument to determine the effect of the four dimensions of distributed leadership on teacher engagement in shared decision-making in the middle school setting. This study investigated the impact of middle school principals utilizing the practices of distributed leadership (independent variable) on teacher responses (dependent variable) by focusing on shared leadership experiences of middle school teachers.

**Significance of the Study**

Principal leadership in the middle school setting accounts for one quarter of the success middle school students will experience (Gale & Bishop, 2014). The type of instruction middle school students receive is the primary factor that impacts student achievement. However, it is the primary responsibility of school principals to lead middle schools that implement programs and curricula that meet the needs of students (Gale & Bishop, 2014). Middle school principals do not lead as a single person. The authors explain that middle school principals should create a democratic and collaborative community of adults in the school setting. Furthermore, establishing effective leadership teams in the middle school setting allows everyone to be a part of the mission.
In many progressive school systems it is normal for high-performing principals to distribute leadership and share the philosophy, vision, and values throughout a school’s organization. Furthermore, the practice of distributed leadership is the best approach for principals to use for the operation of a school (Hutton, 2016). School improvement has been dependent upon school leader’s practices in learning environments (Rikkerink, Verbeeten, Simmons, & Ritzen, 2016). Implementing the distributed leadership model could grant school leaders an opportunity to engage teachers in shared decision-making.

This study could provide middle school principals with practical evidence about the principals of distributed leadership and its impact on shared responsibility and teacher engagement in the decision-making process in the middle school learning environment. Moreover, middle school teachers will have an opportunity to understand how their expertise can positively impact the school culture and the instruction children receive. Educational leaders will gain valuable knowledge about shared leadership, effective communication, and teacher engagement. The purpose of this quantitative study is significant because results will contribute to the literature on middle school principals’ use of the dimensions of distributed leadership in the middle school learning environment.

**Research Question(s)**

**RQ1:** What is the relationship, if any, between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process?

**RQ2:** Is there a difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices?

**Definitions**

1. *Distributed Leadership* – The cultivation of an organization that intertwines
various elements of the organization together to produce relationships, in which individuals contribute to the organization and are held accountable by each other (Grenda & Hackman, 2014).

2. Distributed Leadership Readiness Scale – A scale designed to measure distributed leadership (Tashi, 2015).

3. Middle Level Concept – An interdisciplinary teaming structure, which includes teams of teachers who collaboratively deliver a curriculum to students, so that learning connections are made (Grenda & Hackman, 2014).
CHAPTER TWO: LITERATURE REVIEW

Overview

Educational leaders in school settings cannot act alone when attempting to improve an educational environment and impact teaching and learning. Distributed leadership allows school leaders to increase communication and actively engage school staff in leadership activities. As school leaders distribute leadership in the school setting, evidence shows that teachers are positively motivated (Rikkerink et al., 2016). However, there is a lack of evidence that shows how school leaders in the middle school setting utilize the practices of distributed leadership in middle school settings that have adopted the middle school concept (Grenda & Hackman, 2014). This literature review will examine the dimensions of distributed leadership and provide a cause to research the impact of distributive leadership on teachers in the middle school setting. In essence, the chapter will contain four sections: (a) an overview, (b) information related to the theoretical framework, (c) related literature, and (d) the summary.

Conceptual or Theoretical Framework

Distributed Leadership Theory

The concept of distributed leadership has become a topic of research in recent years. Distributed leadership originated in the mid-1950’s and has become prevalent among scholars and practitioners (Maxcy & Nguyệt, 2006). Due to the increase of demands on school leaders, individuals now work together to solve problems as oppose to one individual bearing the burden of solving school issues alone (Johnston, 2015). “Distributed leadership theory advocates that schools ‘decentre’ the leader” (Harris, 2003, p. 317). Granting many individuals in an organization to lead, takes many leadership responsibilities off of the school leader.

The model of distributed leadership consists of the following tasks: explaining the rules
that leaders in an organization must follow when engaging in improvement tasks and describing how leaders in different roles will share responsibilities (Elmore, 2000). In an organization, leadership practices is focused on one formal leader and can arise anywhere in the organization (Bush, 2013). Distributed leadership theory provides school staff with the opportunity to mobilize, accomplish leadership tasks through multiple people in a school’s organization, and responsibility is shared through interdependency (Harris, 2003). Encouraging staff members to take on leadership roles in the school setting impacts the responsibility and accountability of educators in school organizations.

Power and responsibility in a school setting can be shared between the school level principal and teachers; this concept is known as distributed leadership. Additionally, the theory of distributed leadership provides clarity to teacher leadership and as principals grant teachers an opportunity to become a part of the leadership team, they can work with multiple groups of individuals to impact the instructional process (Wells & Klocko, 2015). The foundations of teacher leadership can be found in distributed leadership. According to Wells and Klocko (2015), “Distributed leadership is aligned with the foundations of teacher leadership, since it recognizes that collective energy surpasses that of individual efforts” (p. 318). As teachers collaborate with each other and take on leadership roles, their cooperation leads to them becoming teacher leaders in the school organizations.

As school leaders solve issues in the school setting, individuals are afforded an opportunity to assume leadership roles. Through distributed leadership, a system is in place for leadership to be distributed across multiple activities and situations (Timperley, 2005). When utilizing distributed leadership as a leadership model, school principals can directly impact efforts made in school (Wells & Klocko, 2015). Distributed leadership identifies how leaders
create and maintain a culture in which others successfully interact (Timperley, 2005). Applying
the distributed leadership model will provide opportunities for leadership to take place anywhere
in a school’s organization (Bush, 2013). As teachers become leaders in a school’s organization,
they will have multiple opportunities to take on leadership roles.

**Spillane’s Theory of Distributed Leadership**

According to Johnston (2015), Spillane’s theory of distributed leadership is an analytical
framework that researchers and practitioners explore to understand how leadership is used
among various individuals and as a school leadership practice. Identifying dimensions of
leadership practice will give leaders an opportunity to reflect on and analyze their leadership
practices (Spillane, Halverson, & Diamond, 2004). According to Johnston (2015), Spillane’s
theory of distributed leadership is the most contemporary perspective of distributed leadership
theory. Furthermore, Spillane’s theory of distributed leadership focuses on leadership practice,
the distribution of leadership practices among leaders, and the school’s situation or context. The
conceptual foundations for the distributed leadership perspective are distributed cognition and
activity theory (Spillane, et al., 2004). The combination of distributed cognition and activity
theory grants Spillane to focus on multiple components of an organization.

Spillane’s theory of distributed leadership focuses on a situation in which individuals
work together and utilize their abilities and expertise to work towards an outcome. Equally,
within distributed leadership, the expertise of many people in the organization is distributed; as a
result, a variety of leaders emerge and are utilized throughout the organization (Johnston, 2015).
“Spillane promotes his distributed perspective as a means of simply better understanding the
meaning and nature of leadership in schools, a theoretical foundation to study leadership practice
and help practitioners understand school leadership practice” (Johnston, 2015, p. 42). Spillane’s
theory of distributed leadership allows school leaders to comprehend leadership within school organizations. As distributive leadership practices are extended throughout a school’s organizational structures the generation of ideals and knowledge will impact the organization (Spillane et al., 2004). Spillane’s perspective of distributed leadership theory will be utilized for this study.

Spillane’s three elements of leadership practices include leaders, followers, and situation (Johnston, 2015). According to Spillane et al., (2004) the distributive perspective focuses on the thinking of school-leadership practices. Leaders practices are inclusive of: tasks utilized to complete a routine, identifying those who are responsible for completing tasks, and identifying what tools are needed to complete a task (Johnston, 2015). Within Spillane’s leadership practice, areas of expertise are also vital to an organization. According to Johnston (2015), distributed leadership theory enables leaders to move beyond formal leadership positions and allows leaders to encourage individuals within an organization to use their knowledge or expertise to contribute to the improvement of the organization.

The distributed leadership perspective encourages school leaders to identify and get multiple individuals involved in leadership practices. According to Johnston (2015), “A distributed leadership perspective recognizes the varied skills and expertise of individuals and engages multiple individuals, both in formal and informal leadership positions in leadership practices” (p. 43). Within the distributed leadership model, school leaders are responsible for deciding when and how leadership should be distributed. Distributed leadership allows school leaders to identify the problem and determine which individuals within the school’s organization have the expertise to assist with the common goals of the organization (Johnston, 2015). As individuals are chosen to lead projects in school settings, school leaders can assist teachers with
utilizing their strengths.

The sociocultural context is a vital part of leadership activities (Spillane et al., 2004). Although school leaders use distributed leadership as an approach to sharing leadership in the school setting, school leaders are still the fundamental figure in leadership practices. “Spillane proposes that it is the job of the principal to guide and bring the pieces of the organization together in a productive relationship, to coordinate and connect the leadership efforts of many, or lead the leaders” (Johnston, 2015, p. 44). When leading individuals within a school organization, the principal must be aware of the expertise of teachers and allow them to use their skills and knowledge to achieve the school’s organizational goals.

Related Literature

School Leadership

As education evolves, school leaders are faced with many obstacles to overcome when leading teachers and students. Specifically, the initiation of No Child Left Behind (NCLB) has caused many school leaders to focus almost exclusively on accountability and standards within public school settings (Sanzo, Sherman, & Clayton, 2011). Additionally, since the school accountability era, policymakers have placed an expectation on principals to improve the academic performance of students (Peck & Clarida, 2016). The leadership of a school principal can have a significant impact on student learning (Klar & Brewer, 2013). While school principals are charged with providing hands-on leadership, they must create a shared vision for stewardship while engaging all members of the school’s community (Tschannen-Moran & Gareis, 2015). As school leaders seek opportunities to improve the learning of students, they can utilize the abilities of teachers by creating a culture of shared leadership.

The shared leadership of school leaders is critical to the success of teachers, students, and
the school-wide community. According to Hauge, Norenes, and Vedøy (2014), school leadership impacts the success of individual schools as well as educational change. As school leaders attempt to lead, they must understand that principals and teachers are dependent upon each other. Through shared leadership, leadership can be distributed throughout individuals in an organization (Routhieaux, 2015). When seeking change through school improvement, those within the school’s community must work together; specifically school principals, teachers, parents, and students (Ganon-Shilon & Schechter, 2017). School principals have an opportunity to collaborate with teachers and create opportunities for teachers to effectively utilize their expertise.

Principals depend on the competencies and motivation of teachers, so that teaching and learning can take place in the school environment (Hauge et al., 2014). When school leaders focus on improving the school’s learning environment, they should be willing to relinquish some control. Relinquishing authority will allow principals to have a real influence over the progression of school improvement (Hauge et al., 2014). Through distributed leadership teachers have an opportunity to share their expertise and develop a shared responsibility for their impact on student learning (Kennedy, Deuel, Nelson, & Slavit, 2011). As teachers share their expertise, they have an opportunity to positively impact school organizations through shared leadership.

Shared leadership is distributed among people in an organization, this allows social interactions to take place among members of the organization and allows for learning among others to take place while leading to positive actions (Kraut & Kittur, 2013). The distributed leadership model is a shared leadership approach utilized by school leaders and has become the ideal leadership model in the twenty-first century (Bush & Glover, 2014). As school leaders
identify ways to improve the instructional environment in a school’s setting, distributed leadership can be beneficial to school leaders. Through the distributed leadership model, school leaders can utilize the strengths and expertise of their staff members to accomplish school goals. Bush and Glover (2014) explain that school leaders can use the distributed leadership model as a means to get individuals within an organization to collaborate. School leaders can impact the culture and organization structures of a learning environment through the distributed leadership model.

The leadership of a school principal is critical to school culture and the implementation of a school’s organizational structures and practices (Bickmore & Dowell, 2015). Schools and students will experience success when school leaders distribute and share leadership with teachers (Nappi, 2014). School leaders utilize distributed leadership as a means to spread leadership across a variety of roles within an organization (Firestone & Martinez, 2007). Sharing leadership allows leaders to broadly distribute leadership among individuals and not have one centralized executive (Routhieaux, 2015). As school leaders distribute leadership and teachers become leaders, they may take on the following roles: resource provider, instructional specialist, classroom supporter, mentor, learning facilitator, and learner. Moreover, as teachers take on leadership roles, they will collaborate and become dependent on each other when faced with school related issues (Nappi, 2014). Effective school leaders should encourage teachers in a school setting to take on leadership roles.

Distributing leadership will allow teachers to individually and collectively use their expertise to work together to benefit a school’s organization (Malin & Hackmann, 2017). Additionally, distributed leadership allows members of a school to have shared interactions and take on the responsibilities of leadership (Lee, Hallinger, & Walker, 2012). The concept of
distributed leadership creates a balance of the power of decision-making between school administrators and teachers. Additionally, distributed leadership provides opportunities for school leaders and teachers to share the same vision and allocate responsibilities (Grubb & Flessa, 2006). Middle school leaders have chosen distributed leadership as a form of leadership because it affords them an opportunity to combine the expertise and interaction of school leaders and professional colleagues as a means to achieve common goals; while allowing teachers to share leadership, have common planning time, flexible scheduling, and team autonomy (Grenda & Hackman, 2014). When implementing distributed leadership in a middle school setting, understanding the middle school concept may be beneficial to school leaders.

The Middle School Concept

The middle school movement dates to 1963, the year scholars sought ideas and identified middle school as an official name (Schaefer, Malu, & Yoon, 2016). As the middle school movement progressed to the 1980’s educators began to focus on instructional pedagogy, team teaching, counseling, and an interdisciplinary curriculum. Furthermore, the 1990’s proved to be a pivotal juncture in the middle school movement. During this period, the Elementary and Secondary Schools Act was reauthorized (Schafer et al., 2016). As the middle school movement entered another decade, new legislation as a result of No Child Left Behind, held middle level schools to different accountability measures (George, 2011). As middle level teaching continues to evolve, middle level instruction in the U.S. schools is impacting teaching practices throughout the world (Schafer et al., 2016). The evolution of teaching practices on the middle school level also grants teachers the opportunity to meet the needs of various students.

Due to the diverse needs of young adolescents in the middle school level, middle schools offer a variety of social and academic supports to children. According to Gale and Bishop
(2014), middle school principals lead schools that have a set of programs, practices, and curricula that is beneficial to middle school students. Within the building configuration of a middle school setting, school leaders are challenged with ensuring block scheduling and interdisciplinary teams are in place to meet the needs of young adolescents (Gale & Bishop, 2014). Additionally, in the middle school setting, school leaders and teachers must be prepared to offer academic programs that are beneficial to adolescents.

As teachers collaborate in the middle school learning environment, they must set goals and incorporate instructional strategies that will lead to academic excellence. According to McCalla (2013), middle level teachers must use a variety of instructional strategies and focus learning on objectives and academic outcomes. When teachers effectively plan and focus on learning outcomes, they are presented with opportunities to positively impact instruction in the middle school setting. Creating developmentally appropriate content for young adolescents is also vital to the success of middle level education. High-performing middle schools provide programs which are designed to fit the needs of all students. Additionally, focusing on middle level improvement, school leaders must adopt a vision for student success and provide clear expectations (McCalla, 2013). Providing clear expectations for teachers and students will provide middle level educators with a solid foundation as to how to improve student learning.

**Mission, Vision, Values, and Goals**

Gurley, Peters, Collins, and Fifolt (2015), completed a study on educators who were seeking to become school leaders. The study looked at their ability to recall the mission, vision, values, and goals statements that were being utilized by their current schools. Additionally, participants in the study were asked to describe how their school’s mission, vision, values, and goals impact their practices within with the school setting. Results indicate educators in this
study were able to identify their school’s mission statement; however, the mission statement did not identify levels of student learning and academic achievement was not the primary purpose. Another result of this study indicates future school leaders were not able to recall the shared vision statement, describe organizational values for their school, or explain how organizational goals were directly related to student learning and school improvement (Gurley et al., 2015). The results of this study suggest, that shared mission, vision, values, and goals can impact teaching and learning in the school setting (Gurley et al., 2015). The goals of a school’s organization can also impact instruction in middle school settings.

Cook, Faulkner, and Howell (2016) conducted a study on the manner in which middle level educators made the learning experience unique for middle school students. Results indicate that teachers’ professional behaviors impact their daily decisions. (Cook et al., 2016). Their research further explained the importance of teachers working together as a collaborative team and embracing the middle school concept when addressing the needs of all students. The organizational structure in the middle school setting also had an impact on teachers and students. As middle level teachers took advantage of common planning time and focused on the development of middle school children, a positive impact was made on instruction and the middle school experience for children (Cook et al., 2016). The management of school leaders may also influence the performance of teachers in a school’s organization.

Another related study, conducted by Johansen and Hawes (2016) dealt with the impact of management tasks on an organization’s performance. Results indicate that when middle level managers have a clear set of goals, a positive impact is made on the performance of individuals in the organization. Moreover, when analyzing the three dimensions of management which include: management, leadership, and resource management, the management dimension had
more of an impact on the performance of the organization (Johansen & Hawes, 2016). The authors also explain that this study focuses on responses of the leadership at the school level. Although management was a predictor of how well the school’s organization performed, the results of this study suggest that leadership does impact the management style of managers (Johansen & Hawes, 2016). As school leaders manage organizations, encouraging shared responsibility may affect teacher and student performance as well.

Shared Responsibility

Lippy and Zamora (2013) completed a study on the implementation of professional learning communities (PLCs) as a means to increase student achievement within middle school settings. Results demonstrate differences in the implication of PLCs and PLC knowledge within different middle school settings. Results further indicate that the implication of PLCs can impact the leadership and instructional strategies at the middle school level (Lippy & Zamora, 2013). Additionally, PLCs grant school leaders an opportunity to increase the leadership ability of faculty members within the middle school setting, which allows them to engage in the decision-making process for vital school programs. Results also indicate that PLCs provide an opportunity for social change to take place in the school setting (Lippy & Zamora, 2013). PLCs also provide teachers with an opportunity to collaborate with each other in school settings.

Buttram and Farley-Ripple (2016) studied how principals adopt and implement PLCs as a means for teacher collaboration. School leaders in this study implemented PLCs according to the vision and goals they wanted to accomplish in their school settings. Moreover, principals played a vital role in implementing PLCs as a way to impact the culture in their school settings (Buttram & Farley-Ripple, 2016). PLCs granted principals an opportunity to include teachers in the decision-making process as well as set long and short term goals for their students. Findings
also indicate that principals could influence teacher collaboration through the implementation of PLCs (Buttram & Farley-Ripple, 2016). As school leaders encourage collaboration, a system of support by school leaders may also impact the culture in school settings.

Carpenter (2014) conducted research on supportive and shared leadership structures and their impact on school culture and procedures. Results indicate that as school administrators focused on improving student achievement and instruction in the school setting, teachers valued the time spent in PLCs. Furthermore, a collaborative culture was established within the school setting, which allowed teachers to collaborate and reflect on their instructional practice (Carpenter, 2014). Administrators and teachers also worked together for continuous improvement during PLC time.

As administrators and teachers focused on continuous improvement, some of the outcomes were: a shared purpose, shared values, a collaborative culture and a collective inquiry process (Carpenter, 2014). The importance of shared leadership was also discussed in this study. While the school leader was responsible for assisting with the creation of the PLC process, school administrators shared responsibility with teachers so that the school showed improvement. Additionally, shared leadership was the key component in establishing collaborative groups and having effective professional learning communities (Carpenter, 2014). When sharing leadership, it is imperative that a school’s work environment is supportive of PLCs.

Lalor and Abawi (2014) presented research on PLCs as a means of providing support and creating a positive work environment for teachers and found that the sharing of resources was valued by the staff in the school setting. As teachers shared resources, they had an opportunity to collaborate and solve problems together. The development of a social and emotional support
system among teachers was another finding in this study; PLCs afforded teachers opportunities to network and support each other. Moreover, PLCs gave teachers the opportunity to grow professionally and share teaching strategies with each other (Lalor & Abawi, 2014).

Participating in PLCs also further allowed teachers to actively engage in solving school wide instructional problems (Lalor & Abawi, 2014). As PLCs became common practice in this school setting, students were the topic of discussion and teacher leadership capacity was enhanced. Finally, according to Lalor and Abawi (2014), PLCs changed the culture of the school setting by empowering teachers and allowing them to share and learn together. As the culture changes in a school setting, distributed leadership could potentially lead to a collaborative culture as well.

**School Culture**

Waldon and McLeskey (2010) found distributed leadership to be a vital factor when attempting to positively improve schools and create a collaborative culture. The principal in the school must model collaboration and empower teachers to work together to improve instruction for all students. Furthermore, the school principal also has the responsibility of ensuring coherence takes place throughout the school organization, so that school improvement activities are successfully implemented (Waldon & McLeskey, 2010). Finally, when creating a collaborative culture for school improvement purposes, the school leader must ensure the infrastructure of the school’s organization is set up to support teachers as they work together to provide instruction for students (Waldon & McLeskey, 2010). Creating an infrastructure within a school for collaboration is vital and collaboration for teachers should impact the instruction students receive.

Gruenent (2005) study on school culture suggest, creating collaborative cultures
improves student achievement. Results indicate as teachers collaborate in a collegial climate, students math and language arts achievement scores increase. Additionally, professional development, unity of purpose, and a learning partnership lead to collaborative cultures in the elementary, middle, and high school settings (Gruenent, 2005). As faculty members completely understood the mission of the school and created positive relationships with parents, the collaborative culture of the school was positively impacted (Gruenent, 2005). While research shows how collaborative school cultures positively impact teachers, school leaders must effectively implement a culture of teacher collaboration.

Cameron (2005) study focused on collaboration and shared decision-making in an urban high school setting. The teaching culture in this high school was positively impacted when teachers worked in collaborative structures. However, as teachers were required to make instruction decisions as teacher leaders, they became emotionally drained (Cameron, 2005). As the principal in this school setting, the imposed power as well as potential power struggles with others in the school organization impacted the school culture. Results indicate as schools use collaborative models, tensions could arise among teachers which may negatively impact instruction in the classroom (Cameron, 2005). When focusing on creating collaborative school cultures, school principals must provide teachers with an opportunity to communicate and share their opinions.

A team of researchers analyzed the effects of school culture on academic optimism and school achievement in the elementary and middle school settings and found that school culture does impact academic optimism in these settings (Mitchell, Mendiola, Schumacker, & Lowery, 2016). As school culture becomes a priority in elementary and middle school settings, the stage is set for academic achievement to take place. Moreover, the effects of school culture directly
impact student achievement (Mitchell et al., 2016). This study found a higher correlation between school setting and academic optimism in elementary schools than in middle schools (Mitchell et al., 2016).

Departmentalization, specialization, and decreased parental involvement had an impact on academic optimism due to organization of the middle school settings (Mitchell et al., 2016). Another finding of this study explained how school culture affects school achievement and academic success. The final suggestion from this study is for leaders to create a school culture in which teachers are empowered and allowed to give valuable input (Mitchell et al., 2016). School leaders also play a valuable role in teachers and students experiencing success through positive school cultures.

Heck and Hallinger (2014) completed a study on the relationship between school leadership, teaching quality, and student learning, and student math achievement data was utilized to determine the relationship between these three. Findings indicate that teacher effectiveness had a positive impact on student achievement. This study also found that instructionally focused leadership had an indirect impact on the instructional environment and student achievement (Heck & Hallinger, 2014). The authors note that school leadership has no direct measurable impact on student learning. However, the school leader can shape the instructional environment and provide valuable assistance to teachers and improve their instructional practices (Heck & Hallinger, 2014). Findings suggest that the instructional leader plays a key role in increasing consistency in teacher efficiency (Heck & Hallinger, 2014). School leaders should trust teachers and seek to develop positive relationships when being effective leaders.

**Leadership Practices**
Stone-Johnson (2014) completed a study on responsible leadership and the impact it has on relationships between schools and student performance. The author explains that school leaders must be visionary leaders and understand what is needed for their schools. Additionally, school leaders must be able to improve relationships and create a vision in which staff, students, and leaders are encouraged (Stone-Johnson, 2014).

Findings also specify that the school leaders must be a steward of the school whereby they can share their vision of the organization and impact the culture of the school setting. Furthermore, school leaders must be servants of the school and rely on all stakeholders to achieve the mission of the school (Stone-Johnson, 2014). The study also asserted that the school leader must be a citizen as a leader and forge positive relationships with the community and business organizations. Results of this study indicate that school leaders who are visionaries, stewards, servants, and citizens can positively impact student performance (Stone-Johnson, 2014). Implementing leadership practices which are inclusive of all stakeholders can increase student and teacher engagement in school settings.

Klar and Brewer (2014) completed a study on leadership practices and beliefs utilized by a school leader to increasing student achievement within a middle school setting. The school leader within the study’s middle school setting had the task of developing individuals, restructuring the organization, and managing the instructional program. Findings indicate that effective leadership practices impacted student achievement within the middle school setting (Klar & Brewer, 2014). The school leader in this study displayed professional support of students, teachers, and those within the school’s community. Additionally, the school leader encouraged and expected all stakeholders within the middle school’s community to make positive contributions to the academic success of students (Klar & Brewer, 2014).
Through skilled leadership practices the school leader in this study successfully recruited parents to become actively involved in school activities. Moreover, Klar and Brewer (2014), explained how the principal motivated faculty and staff to collaborate and share instructional strategies that addressed the needs of students. Klar and Brewer (2014) suggest that school leaders should be aware of research-based leadership practices and understand how to adjust these practices to fit the needs of a unique school. While focusing on skilled leadership practices, school leaders should also develop a plan that meets the social needs of teachers.

Sun and Leithwood (2015) investigated the impact school leaders have on teaching and student learning when they focus on teacher emotions. Results show that the trust teachers have in principals is influenced by leadership practices (Sun & Leithwood, 2015). School leaders can earn trust from teachers by demonstrating concern for teachers, establishing a system of collaboration, and supporting teachers within the school and community work environment. Furthermore, teacher commitment increased when principals displayed the following leadership practices: support, building a shared vision, and creating an environment in which innovation is encouraged (Sun & Leithwood, 2015). While the trust teachers have in their principal was an important factor in this study, teacher trust in the school principal did not have a direct impact on student learning. However, as principals build positive relationships with teachers and enhance trust through collaboration, teacher efficacy increases and instruction within the classroom setting improves (Sun & Leithwood, 2015). As positive relationships are developed with teachers, changes to school curriculums and instruction is an important leadership practice for school principals.

Lai and Cheung (2015) completed a study on leadership practices of teachers as they engaged in changes made to a school’s curriculum. When allowing teachers to participate in
changes to a school’s curriculum, school leaders should give teachers an opportunity to make
decisions about the curriculum and instructional practices. Additionally, teachers should have an
opportunity to collaborate and utilize their talents and leadership capacity (Lai & Cheung, 2015).
Results indicate that educational change can take place as teachers are given an opportunity to
use their leadership practices to improve the school’s instructional and cultural environment,
work in communities of practice, and to support students (Lai & Cheung, 2015). Utilizing the
leadership practices of teachers and providing professional development opportunities is a key
leadership component for school leaders.

Sinha and Hanuscin (2017) completed research on the leadership development of
teachers as they participated in professional development. Teachers in this study had a low level
of confidence, however as they developed a leadership identity and experienced success in
leadership roles, they gained confidence. Teacher leadership development can be developed
through the following process: teacher leadership views, teacher leadership practices, and teacher
leadership identity (Sinha & Hanuscin, 2017). When preparing teachers to become leaders, they
should participate in professional development that aligns with teacher beliefs, actions, and
identities. Additionally, principals should encourage teachers to take on leadership roles,
participate in the decision-making process, and create opportunities for beginning and veteran
teachers to collaborate (Sinha & Hanuscin, 2017). As teachers participate in professional
development activities, school leaders must ensure professional activities are designed to meet
the needs of teachers.

Szeto and Cheng (2017) explored the experiences of beginning teachers as they
developed their leadership through interactions with school principals. The leadership
development of beginning teachers increased when they received support, extra resources, and
opportunities for professional development from their principals. Moreover, principals have significant roles in creating a positive school environment, which leads to teachers having the confidence to be teacher leaders. Finally, as principals establish ongoing communication with beginning teachers, they will develop the capability for leadership (Szeto & Cheng, 2017). School leaders must be effective communicators when providing teachers with the opportunity to work as cooperative team members.

Hulpia and Devos (2009) analyzed the perceptions of school leaders and studied whether distributed leadership impacts their job satisfaction. Results of the study indicate that school leaders believe cooperative leadership teams and members in a school setting can share in the decision-making process for the school. School leaders perceived that cooperative teams working together increased their job satisfaction. Job satisfaction improved when school leaders received feedback from colleagues and did not operate in isolation (Hulpia & Devos, 2009).

However, the participation of teachers in the decision-making process for schools did not impact the job satisfaction of school leaders. Another finding of the study was that the size of the school did not have an impact on school leaders’ job satisfaction. Although, there is a perception that a school’s leadership team and school type impact school leaders’ job satisfaction, Hulpia and Devos (2009) concluded that the functions of distributed leadership and teacher involvement in the school decision-making process did not impact school leaders’ job satisfaction. While job satisfaction was not impacted by distributed leadership, the application of distributed leadership granted teachers an opportunity to participate in the decision-making process.

**Distributed Leadership**

Spillane, Camburn, and Pareja (2007) research focused on the day-to-day work of school
principals in different school settings using a distributed perspective. Findings indicate leadership was distributed among many actors in the school setting who did not hold formal leadership positions. While school level principals in this study were active in curriculum-related activities, other leaders took responsibility for administrative type roles and responsibilities. However, the distribution of leadership varied from school to school. While this study indicates that school principals collaborate with others in the school setting to distributed leadership, the nature of those interactions are not disclosed (Spillane et al., 2007). While distributed leadership was used with formal leaders in school settings, specifically distributing leadership among teachers may be beneficial.

Larsen and Rieckhoff (2014) examined the perspectives of principals that participated in an urban professional development school network through a distributed leadership framework. Findings indicate that veteran teachers fulfilled leadership roles which historically had been the practice of the school principal. Teachers were eager to participate in leadership teams and become a part of the shared decision-making process. Furthermore, teacher leaders and the school principal shared leadership duties and collaborated when making decisions that impacted the school. As principals utilized the elements of distributed leadership, they noticed a positive culture change take place in their school settings (Larsen & Rieckhoff, 2014). Distributing leadership to multiple staff members in a school setting creates an environment of shared responsibility and collaboration.

Hairon and Goh (2015) research on distributed leadership explores how school leaders distribute leadership to subordinates in the school setting. School leaders should be willing to relinquish control and trust subordinates to make decisions. While teachers are given the freedom of decision-making, no decisions are made without the knowledge and approval of the
school principal. This study also indicates that when decisions are made, the school principal includes others and decisions align with overall school goals (Hairon & Goh, 2015). Distributing leadership is an excellent opportunity for teacher involvement in the decision-making process; however, school leaders must be aware of the decisions that are made due to distributing leadership.

Cherkowski and Brown’s (2013) study focused on administrators’ use of distributed leadership. Findings encourage school administrators to take personal responsibility when using the distributed leadership model. School leaders must create organizational structures which allow others to lead based on the situation. Furthermore, principals are responsible for creating a school culture that supports teacher professional development and instructional leadership. As school principals utilized the traits of distributed leadership, teachers were more effective as they participated in learning opportunities together (Cherkowski & Brown, 2013). As teachers were given the opportunity to participate in distributed leadership, they were eager to grow professionally.

Klar (2012) examined how principals in urban secondary school developed the leadership capabilities of department instructional leaders through distributed leadership and professional learning communities. In these secondary schools, principals took the responsibility of setting learning goals and modeling the approaches of distributed leadership and collaborative learning. Furthermore, instructional chairs were responsible for implementing goals set by school leaders and utilizing their leadership capabilities to impact teaching and learning (Klar, 2012). Through collaborative leadership activities, instructional department chairs had the opportunity to learn from team members.

As the leadership capabilities of department chairs developed, an impact was made on the
teaching and learning environment in the secondary school setting. The results of this study provided school principals with information on how distributed instructional leadership can impact school culture and teacher and student learning (Klar, 2012). Gaining a true understanding of distributed leadership, may give school leaders an opportunity to effectively implement the essentials of the distributed leadership model.

Kelly and Dikkers (2016) completed research on using distributed leadership as a model to provide feedback to middle as well as high school administrators and found that school administrators were able to analyze specific leadership practices through their school’s organization. School leaders were also able to identify certain leadership roles that could be utilized to improve teaching and learning in their school settings. Finally, school leaders received feedback which highlighted the roles of each member in the school’s organization and the impact they had on teaching and learning (Kelly & Dikkers, 2016). Understanding specific roles within a school’s organization can be imperative to the distribution of leadership in middle and high school settings.

Hulpia, Devos, and Rosseel (2009) investigated the relationship between distributed leadership, cohesion of the leadership team, participant decision-making, context variables, and the organizational commitment of teachers and leaders. Results of this study revealed that the principal is the most important factor for support and supervision in a school setting. Teachers display organizational commitment and job gratification when the school leadership team is cohesive, and teachers receive support from the leadership team. Another factor that relates to teacher leaders in the school setting is having the opportunity to participate in making decisions related to the school’s organization. Teachers and teacher leaders in this school setting displayed a strong commitment to the school’s organization when there was formal distribution of
supportive leadership among the school leadership team (Hulpia et al., 2009). As school leaders effectively implement distributed leadership, teachers could remain dedicated to the vision of the organization.

Hulpia, Devos, and Keer (2009) explored the relationship between distributed leadership variables, context variables, and the commitment of teachers to the school’s organization. Findings indicate that teachers’ perceptions of the leadership team impacts teachers’ organizational commitment. The leadership characteristics of the leadership team could impact teachers’ commitment to an organization. When utilizing distributed leadership to help teachers commit to a school’s organization, school leaders should define their school vision and the leadership team must be supportive of teachers in the school setting (Hulpia et al., 2009). As school leaders use the distributed leadership model, teachers may have multiple opportunities to be leaders in the school setting.

MacBeth’s (2005) study focused on the practice of distributed leadership by teacher leaders and teachers. As school leaders utilize distributed leadership, they must create a culture in which they monitor the progress of tasks that have been assigned to teachers. As tasks are assigned to teachers in the school setting, it is imperative that the school leader creates an environment in which shared leadership takes place and staff members have an opportunity to participate in school wide decision-making (MacBeth, 2005). Teacher leaders also have the responsibility of trusting teachers to carry out tasks as well as support leadership activities. At the conclusion of the study, teacher leaders gained an understanding of how teachers can become leaders in a variety of ways in the school setting (MacBeth, 2005). Learning how to become school leaders may permit teachers an opportunity to positively impact school leadership and teacher commitment.
Huplia, Devos, and Keer (2011) also completed a study on the relationship between school leadership and teacher’s organizational commitment taken from the distributed leadership viewpoint. Results indicate the importance of teachers having supportive leadership and receiving positive feedback from school leaders. Findings also reveal that school leaders should not be egocentric leaders but create a leadership team that collaborates and works towards the same school goals. Teachers are also committed to a school’s organization when they participate in the decision-making process, are provided opportunities for professional development, and a member of the leadership team sets a clear vision (Hulpia et al., 2011). Setting a clear vision and defining clear roles may be most beneficial when principals effectively use the components of distributed leadership.

Margolis and Huggins (2012) study examines the role of teacher leaders through distributed leadership. When utilizing teacher leaders in a school setting, it is imperative that roles and expectations are clearly defined. Due to the lack of proper implementation of distributed leadership, teacher leaders reverted to a more traditional role and professional development did not take place. Researchers suggest that school administrators clearly define and set expectations for teachers to be leaders in the school setting when utilizing a distributed leadership model (Margolis & Higgins, 2012). When implementing the features associated with distributed leadership, school leaders could properly prepare staff and allow time for change to occur.

Harris’s (2013) quantitative literature implies that school leaders can utilize distributed leadership to improve a school. Distributed leadership positively correlated with the organization of a school and positively impacted staff morale, student behavior, and student learning. Over time leaders of school organizations used distributed leadership in different
phases. As staff members began to trust school leaders and as school leaders gained more experience, distributed leadership was effectively used (Harris, 2013). When trust is developed between school principals and teachers, school improvement may begin to take place.

Heck and Hallinger (2010) completed research on distributed leadership, school improvement capacity, and student performance over a multi-year period. Results of this study specify that over time school improvement capacity does improve because of distributed leadership. Findings also indicate that the relationship between the professional capacity of schools and student growth changes depending on the levels of success students experience in reading and math (Heck & Hallinger, 2010). Furthermore, there were changes in student growth as schools focused on school improvement and supportive conditions for learning. Another outcome of the study explains that the effects of change through distributed leadership indirectly impacted student learning and growth (Heck & Hallinger, 2010). As distributed leadership can indirectly impact student learning, instructional staff members could be encouraged to take on leadership roles.

Tashi (2015) completed an international study on distributed leadership and teacher engagement. Teachers can be fully engaged in distributed leadership practices however; school leaders must provide them with time, resources, and support. In Bhutanese schools, teachers felt distributed leadership was a way for school leaders to delegate various tasks to teachers. The author explains that principals should focus on building leadership capacity in their school learning environments. Finally, Tashi (2015) found that school leaders should attempt to get their instructional staff to participate in administrative activities. Encouraging instructional staff to share in administrative leadership could be intimidating for some staff members in a school’s organization.
Tahir, Lee, Musah, Jaffri, Said, and Yasin (2015) also completed an international study, and it analyzed the perspective of distributed leadership from the point of view of head teachers. Tahir et al. (2015) found that it was difficult for head teachers to include multiple teachers in the different levels of management within a school’s learning environment. Head teachers needed additional time to learn which teachers could complete certain tasks. Furthermore, teachers in the school setting were hesitant to take on leadership responsibilities within the learning environment (Tahir et al., 2015). In this international school teachers felt it was the responsibility of head teachers to take on leadership roles and viewed leadership activities as extra work. Finally, teachers in this international study viewed head teachers as leaders and did not want to overstep their boundaries when head teachers attempted to implement distributed leadership practices (Tahir et al., 2015). As teachers in leadership roles may be viewed as leaders, school leaders could use motivation as a factor when encouraging teachers to serve as leaders.

Halverson and Clifford (2013) completed a study on distributed leadership and its impact on instructional leadership in a high school setting. The researchers found that motivation was a factor in getting some teachers to try new practices. The impact of distributed instructional leadership allowed teachers to identify specific tasks when reforming their school’s curriculum. Moreover, distributed instructional leadership directly impacted the type of instructional practices which took place within this high school setting (Halverson & Clifford, 2013). Results of this study also indicate that distributed leadership allow researchers and practitioners to understand how leadership tasks could impact different school situations. Additionally, high schools can use distributed instructional leadership as a diagnostic system to bring about change in a school’s instructional setting (Halverson & Clifford, 2013). School leadership teams can
effectively use distributed leadership as an opportunity to improve a variety of instructional settings.

Grenda and Hackmann (2014) completed a study on distributed leadership in middle level school settings and found that principals in middle school settings took advantage of the collaborative nature of middle school settings when implementing distributed leadership. As middle level principals engaged faculty members in the framework of distributed leadership, middle schools maintained high levels of professionalism and teachers were committed to the mission of teaching and learning. Additionally, teachers enjoyed their working environments and felt as if they were valued in the educational environment. Grenda and Hackmann (2014) also found that schools in this study effectively utilized elements of the middle school concept when implementing forms of distributed leadership. While teachers’ commitment to a school’s organization may increase through the use of distributed leadership, instruction in school settings may improve as well.

Robinson (2008) investigated distributed leadership’s contribution to the improvement of teaching and learning in schools and suggested that distributed leadership can improve student learning outcomes. Educational outcomes should be identified when attempting to measure the impact of distributed leadership and student outcomes. A key result of distributed leadership and its impact on teaching and learning is how teachers can positively influence their colleagues. According to Robinson (2008), distributed leadership can influence teacher to teacher relationships; however, the educational outcome must be identified in order to understand the benefit of distributed leadership on students’ achievement. Research does indicate that the concepts of distributed leadership can forge links between distributed leadership and the success of students (Robinson, 2008). While research may not provide a link between distributed
leadership and student academic outcomes, teachers have more opportunities to impact a school’s instructional curriculum.

Mullick, Sharma, and Deppeler (2013) reported on teachers’ perceptions of distributed leadership in a primary school setting. Results indicate that teachers who actively participated in professional development had more positive perceptions of distributed leadership. According to Mullick et al. (2013), teachers who displayed positive perceptions were familiar with the distributed leadership process. Findings also suggest that the number of teachers in a school setting impacts teacher perception of distributed leadership. When small-size, mid-size, and large-size schools were compared, teachers within a mid-size school displayed more distributed leadership practices than their peers who taught in small-size and big-size schools. The integration of distributed leadership granted teachers an opportunity to influence decisions, practices, and policies (Mullick et al., 2013). As teachers have opportunities to effect school practices, the culture within a school’s setting may begin to shift.

Ghanrawi (2010) presented research on the way school leaders create teacher leadership in their departments through distributed leadership, bartered leadership structures, and a shared system of teacher monitoring. Subject leaders within school settings have a critical role, which is to promote and nourish teacher leadership in schools. Teacher leadership in the school setting can increase when leaders build a common purpose, leading to respectful and trusting relationships (Ghanrawi, 2010). The establishment of teacher leadership leads to teacher collaboration and improved instructional techniques.

According to the author, as subject leaders and teachers build positive relationships, collective responsibility for student learning takes place. Additionally, monitoring and teacher evaluation by subject leaders improved; a non-threatening culture was created, and teacher
leadership capacity increased through monitoring and evaluation (Ghanrawi, 2010). The changing of school beliefs may lead to multiple chances for teachers to develop a culture of collaboration using distributed leadership.

Sales, Moliner, and Amat (2017) completed a study on how collaborative space for professional development can lead to distributed teacher leadership for school change. As teachers become distributed leaders, they must understand why change is needed in the school setting. To prevent potential conflicts to establishing a collaborative culture, school principals should encourage networking among teachers as a means to bring about professional change. Findings indicated that through distributed leadership teachers were empowered to be innovative, develop confidence through collaboration, and build a system of professional support (Sales et al., 2017). As teachers collaborate with each other through distributed leadership, they may be able to respectfully understand differing philosophies.

Ho and Ng (2017) study on distributed leadership highlighted tensions encountered by leaders and provided suggestions as to how to resolve tensions related to distributed leadership. Tensions took place in the school’s organization when there were conflicting priorities and different boundaries of organizational norms. As tensions arise in the school organization, leaders were provided with the opportunity to use innovative solutions to balance tensions. Finally, the distribution of leadership was the leadership dynamic which provided confidence and stability to appointed leaders when completing tasks in the school’s organization (Ho & Ng, 2017). Developing confidence through distributed leadership may be beneficial to school leaders as they attempt to increase the performance of teachers.

Mehra, Smith, Dixon, and Robertson (2006) examined the use of distributed leadership in teams. The use of distributed leadership did not lead to higher team performance; however, as
leadership tasks were distributed the team functioned at a higher level. Moreover, it was imperative that team members recognized each other as leaders (Mehra et al., 2006). This study also suggests that distributed leadership can be performed in a variety of ways. Finally, the researchers suggested the implementation of distributed leadership structures for teams provide higher levels of performance than those of traditional leadership structures (Mehra et al., 2006). Distributed leadership may lead to higher team performance, which could be helpful to middle school instructional teams.

Scribner, Sawyer, Watson, and Myers (2007) explored distributed leadership and how it related to teacher teams in the middle school setting. The authors suggested that teachers and administrators should understand how a team’s challenge and charge can impact a school’s organization. As teams share in making decisions they have an opportunity to be creative and develop the leadership capacity needed to solve problems. One final recommendation of this study encouraged school leaders to constantly monitor the structures and social dynamics of distributed leadership and understand how distributed leadership can help teams of teachers solve school related problems (Scribner et al., 2007). Solving school issues through distributed leadership in middle school settings is an action step towards developing a culture for shared leadership.

Murphy, Smylie, Mayrowetz, and Louis (2009) researched the role school leaders play in implementing distributed leadership in an urban middle school. The authors explained that the principal must use school goals to develop the culture for shared leadership. Distributed leadership was identifiable in the school setting when the principal identified opportunities for teachers to take on leadership roles in both formal and informal capacities. As the school principal developed a culture of shared leadership, the principal shaped teacher perceptions of
distributed leadership. Moreover, as distributed was implemented in this middle school setting, collaboration and shared practice increased (Murphy et al., 2009). Creating a strong culture of collaboration and shared practice with teachers through distributed leadership may strengthen the instructional foundation in a school setting.

Angelle (2010), studied distributed leadership in the middle school setting and found that providing opportunities for teachers to develop leadership skills empowered them and increased their self-efficacy. As teams of teachers participated in small learning communities and develop relationships through shared goals, trust at the principal and teacher level became imperative. While the author did not make a statically direct link between distributed leadership and student achievement in this study, the author is confident that distributed leadership positively impacts student learning in this middle school setting (Angelle, 2010). As the practice of distributed leadership increases, teachers’ commitment to the shared decision-making process may increase.

A final related study, conducted by Ross, Lutfi, and Hope (2016), explored the relationship between distributed leadership and teacher affective commitment and found that a relationship exists between these two. The authors went on to explain that teachers place a significant value on having an opportunity to participate in the school decision-making process. Moreover, distributed leadership contributes to principals and teachers developing effective relationships with each other. Ross et al. (2016) also discussed how distributed leadership can enhance organizational commitment through positive principal and teacher relationships. As the principals and practices of distributed leadership are utilized in school settings, shared leadership between school leaders and teachers may improve.

**Summary**

Distributed leadership allows leaders to increase interactions between leaders, followers,
and the situation (Kelly & Dikkers, 2016). Furthermore, distributed leadership enables teacher leadership through collective action, empowerment, and shared agency (Harris, 2003). According to Kelly and Dikkers (2016), “Many tasks of school leadership directly support the achievement of organizational goals (e.g., improving equity and excellence in student learning outcomes) and provide affordances to engage and align the emergent and voluntary leadership actions of others” (p. 397). School leaders have a responsibility to achieve school goals and utilize the expertise of school staff through shared decision-making, when seeking to make school improvements.

Gurley et al. (2015) discussed how leaders used a shared vision to impact teaching and learning within school settings. Cook et al. (2016) asserted that school leaders can create an organizational structure which allowed teachers to collaborate and positively impact instruction within a middle school setting. Johnson and Hawes (2016) shared that management, leadership, and resource management positively impacted a school’s organization. Additionally, research indicated that sharing responsibility in a school setting can bring about social change and influence teacher collaboration (Buttram & Farley-Ripple, 2016; Lippy & Zamora, 2013). Sharing responsibility and increasing teacher collaboration creates excellent opportunities for school leaders to positively impact school settings.

Carpenter (2014) explained how shared leadership was evident in creating collaboration and professional learning among teachers. Moreover, Lalor and Abawi (2014) explained PLCs were utilized by school leaders to develop teacher leadership capacity. Finally, Mitchell et al. (2016) suggested that school leaders create a school culture in which teachers are empowered and afforded the opportunity to provide valuable input. Through shared leadership and PLCs, school leaders and teachers were able to work together to change the culture in school settings.
Spillane (2005) described distributed leadership practice as a leadership routine which includes multiple leaders. Heck and Hallinger’s (2014) research on school leadership, teaching quality, and student learning explained that school leaders play a vital role in teacher efficiency. Stone-Johnson’s (2014) research on responsible school leadership revealed when school leaders act as visionaries, stewards, servants, and citizens they can impact the performance of students. Furthermore, Klar and Brewer’s (2014) study on leadership practice explained that school leaders can effectively engage teachers while addressing the instructional needs of students. Sun and Leithwood (2015) described how school leaders can earn the trust of teachers by building positive relationships through collaboration. Through distributed leadership, school leaders could develop trust with teachers, which leads to positive interactions and teacher collaboration.

A close examination of literature provided a variety of perspectives related to distributed leadership. Tashi et al. (2015) studied how distributed leadership can be helpful and challenging in international school settings. Harris (2013) postulated that distributed learning can impact teaching and learning within educational environments. Additionally, Halverson and Clifford (2013) revealed that distributed leadership influenced school curriculums within the high school setting. Heck and Hallinger (2010) explained that distributed leadership can indirectly impact student academic growth. While there is no direct correlation with distributed leadership and student academic growth, school leaders and principals can positively influence a school’s curriculum through shared decision-making.

The research of Mullick et al. (2013) shows how distributed leadership allows teachers to participate in the decision-making process in school settings. In Ghanrawi’s (2010) study on teacher leadership, distributed leadership was a contributing factor in creating a non-threatening culture in which teacher leadership capacity increased. Scribner et al. (2007) explored
distributed leaders in the middle school settings and described how distributed can increase teacher leadership capacity. While research has been completed on the impact of distributed leadership in various educational settings. Grenda and Hackmann (2014) provide a logical rationale to continue researching the impact of distributed leadership in middle school settings, which is the purpose of this research study.
CHAPTER THREE: METHODS

Overview

This quantitative study sought to discover whether a relationship exists between middle school administrators’ use of the principles of distributed leadership on teacher engagement; specifically, shared decision-making. Within this chapter research questions and hypotheses are discussed. Pertinent information on the participants and the setting in which the study took place will be given in detail. Additionally, the Distributed Leadership Readiness Scale (DLRS) will be used to collect data. Chapter three consists of the summary of the design, research questions, null hypotheses, participants and setting, instrumentation, procedures and data analysis.

Design

This study used a correlational and causal-comparative design to investigate how principal’s use of distributed leadership is related to teachers’ engagement, and how teachers’ perceptions of the principal’s use of distributed leadership might vary depending on the teachers’ grade level. According to Gall, Gall, & Borg (2007), “Correlational research refers to studies in which the purpose is to discover relationships between variables through the use of correlational statistics” (p. 332). Gall et al. (2007) states, “Causal-Comparative research is a type of nonexperimental investigation in which re-searchers seek to identify cause-and effect relationships by forming groups of individuals in whom the independent variable is present or absent-or present at several levels-and then determining whether the groups differ on the dependent variable” (p. 306). A correlational research design is used to study whether a linear correlation exists between middle school principals use of the principles of distributed leadership and teacher engagement in the shared decision making process. A causal-comparative approach is used for the second research question, to compare the DLRS scale scores of teachers at four
different middle school grade levels.

Middle school teachers were surveyed using the DLRS to determine if a relationship exists between middle school principals use of the elements of distributed leadership and teacher engagement through shared decision-making. The DLRS consists of Elmore’s five dimensions of distributed leadership, which are: mission, vision, and goals; leadership practices; school culture; evaluation and professional development; and decision-making (Smith, 2007). The independent variable from this study is middle school principal use of distributed leadership practices utilizing the five dimensions of the distributed leadership model. The dependent variable for this study is teacher responses to distributed leadership practices by middle school principals, as measured by teachers’ responses to the DLRS.

**Research Question(s)**

**RQ1:** What is the relationship, if any, between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process?

**RQ2:** Is there a difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices?

**Hypothesis(es)**

The null hypotheses for this study are:

**H₀₁:** There is no statistically significant relationship between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process.

**H₀₂:** There is no statistically significant difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices.

**Participants and Setting**

The participants in this study are drawn from a convenience sample based on the
demographics of the middle schools chosen to participate in this study. Gall et al. (2007) stated, “Rather, the researcher selects a sample that suits the purposes of the study and that is convenient” (p. 175). The convenience sample of teachers are drawn from middle school locations located in South Carolina during the 2018-2019 academic school term. The middle school settings are in the southeastern region of South Carolina. The Southeastern area consists of twenty-six schools located within the same region. The middle school settings in which the convenience sample is drawn from offer the same curriculum that all public-school students in the state of South Carolina receive. Additionally, all the teachers within the sample are exposed to the distributed leadership practices of the distributed leadership model.

According to Gall et al. (2007) a medium effect size with the statistical power of .7 at the .05 alpha required a sample of 100 teachers. For this study the researcher seeks to have a sample size of up to 200 participants. Prior permission from the school system in which participants participate was sought through district level administrators (see Appendix C). Once approval from the school district was given in which participants were employed, the researcher sent an email providing detailed information on the study and the instrument participants are asked to complete. Moreover, the data collection process is explained in the introductory email participants received.

A total of 100% of the participants in the study are middle school teachers. Participants within the middle school settings are employed at a middle school within the southeastern region of the state of South Carolina. All the middle schools within this study offer the same content and curriculum for middle level students. Each middle school has a traditional schedule in which students attend classes each school day. Each middle school offers advanced placement courses and a variety of related arts courses.
For this study, middle schools within one school district in South Carolina has been chosen as a research site. These middle schools were chosen due to the type of leadership practices their principals exercise. Each principal within the middle school settings utilize the five dimensions of distributed leadership when engaging teachers in the school improvement process. The five dimensions of distributed leadership are listed as: mission, vision and goals, leadership practices, school culture, decision-making, evaluation and professional development. The ages, years of teaching experience, and level of degree of the participants within this study varied.

The middle schools chosen were matched based on similar characteristic of the type of leadership style their school principals display. Principals within the selected middle school are required to establish a mission, vision, and goals, share responsibility, create a positive school culture, and utilize effective leadership practices each school term. Furthermore, principals within these middle school settings are required to include middle school teachers in the five dimensions of distributed leadership. The purpose of principals within these middle school settings are to engage teachers in the shared leadership process to improve the success of students.

**Instrumentation**

The instrument used in this study will be one instrument with two parts: a demographic survey and the Distributed Leadership Readiness Scale (DLRS). The first part of the DLRS is a demographic questionnaire in which teachers identified their race; gender; highest degree obtained; total years in education; total years working in this school; participation as a formal or informal leader; and how others view teachers as leaders (Scott, 2007). According to Smith (2007), the DLRS was developed by the Connecticut Department of Education. Elmore’s five
dimensions of distributed leadership, which are: mission, vision, and goals; leadership practices; school culture; evaluation and professional development; and decision-making were used to help create the DLRS.

The DLRS is made up of forty items, which are asked within a five-point Likert scale. According to Scott (2007), “The response options range from A=continually, B=Frequently, C=Sometimes, D=Rarely/Never to, E=Insufficient information” (p. 88). To assess the construct validity and reliability of the DLRS, the psychometric properties of the DLRS were investigated. A pilot sample and the proposed of 1,257 educators from elementary, middle, and high schools in Connecticut were used for the study (Smith, 2007). “When using the factor analysis on Elmore’s five dimensions: mission, vision and goals, leadership practices, school culture, decision-making, evaluation and professional development, the factor analysis produced four dimensions of mission, vision, and goals; school culture; shared responsibility; and leadership practices” (Smith, 2007, p. 94). Furthermore, evaluation and professional development were merged, so that there could be a dimension of shared responsibility. The four dimensions were found to be consistent and reliable with a Cronbach’s alpha .84 to .92. Elmore’s five dimensions of leadership practice were modified by Gordon and used to develop a forty-survey item instrument in a table format (Smith, 2007).

**Procedures**

The procedures for this study began with the researcher submitting an application to the Institutional Review Board (IRB). Gall et al. (2007) explained an IRB approval is needed to ensure federal regulations are followed. Following IRB approval, the researcher sought permission from Dr. Larry Jacobson formally of the Connecticut Department of Education to use the DLRS instrument. The researcher received permission from the superintendent of the school
system in which the participants were located.

The researcher also sought permission from teachers of the schools involved in the study. The focus of this study is on shared leadership and distributed leadership within the middle school setting. The need of a pilot study is not required for the completion of this study. Distributed leadership is a form of shared leadership within school settings. For this study teachers are exposed to middle school principals that utilize the dimensions of distributed leadership.

Collected data came from the DLRS instrument. All participants were provided with a letter, which explained the purpose of the proposed study. Moreover, participants were asked to sign electronic consent forms to understand the purpose of the study (see Appendix B). After participants agreed to participate in the study, they clicked on an electronic link which allowed them to access DLRS instrument. Once participants opened the link they received instructions on how to complete the DLRS instrument.

Data was collected after teachers within the identified middle school settings completed the DLRS instrument. The researcher collected data from a google document and all data was placed in an excel workbook document. To keep data secure, the excel workbook document was password protected. Once the data was sorted, the information was recorded electronically and analyzed. DLRS results were compared between the independent variable middle school principal’s leadership utilizing the dimensions of the distributed leadership model and the dependent variable middle school teacher engagement and shared leadership DLRS results.

**Data Analysis**

A Pearson product-moment correlation coefficient (r) was used to evaluate the relationships between middle school principals’ use of the principles of distributed leadership
and teacher engagement though shared leadership. The product-moment correlation coefficient (r) is appropriate for determining relationships among variables. According to Gall et al. (2007), “Product-moment correlation is the most widely used bivariate correlational technique because most educational measures yield continuous scores and because r has a small standard error” (p.347). Green and Salkind (2014) explained, “The Pearson product-moment correlation coefficient (r) assesses the degree that quantitative variables are linearly related in a sample” (p. 232). The Pearson product moment will determine the relationship between middle school administrators’ use of the principals of distributed leadership and teacher engagement through shared leadership. A one-way analysis (one-way ANOVA) will be used to determine if a relationship exists between middle school principals use of distributed leadership practices among middle school teachers. According to Green and Salkind (2014), “For a one-way analysis of variance (one-way ANOVA), each individual or case must have scores on two variables; a factor and a dependent variable” (p.183).

There are two assumptions underlying the significance for the Pearson product-moment correlation coefficient. The Pearson correlation coefficient assumptions are listed as: the variables are bivariately normally distributed and the cases represent a random sample from the population, and the scores on variables for one case are independent of scores on these variables for other cases. According to Green and Salkind (2014), “If the variables are bivariately normally distributed, each variable is normally distributed ignoring the other variable and each variable is normally distributed at all levels of the other variable” (p. 233). According to Green and Salkind (2014), “The significance test for a Pearson correlation coefficient is not robust to violations of the independence assumption” (p. 233).

The index of the effect size was computed by SPSS, the Pearson correlation coefficient
and the index ranges from -1 to +1. The .10, .30, and .50 regardless of sign can be interpreted as small, medium, and large coefficients. The researcher utilized a Box and Whisker plot for each group to check for outliers. All demographic data was displayed in a table utilizing APA format. The sample size for this study may be greater than 50, so the researcher will conduct a Kolmogrov-Smirnov test. The Kolmogrov-Smirnov test evaluates whether the data on a quantitative variable is normally distributed (Green & Salkind, 2014). In addition to the Kolmogrov-Smirnov test, Levene’s test of homogeneity of variance will be utilized. Levene’s test evaluates if the population among two groups is the same (Green & Salkind, 2014). A sample size of up to 200 middle school teachers will be used for a medium effect size with a statistical power of .7 at the .05 alpha level (Gall et al., 2007).
CHAPTER FOUR: FINDINGS

Overview

The purpose of this study was to determine whether there is a relationship between middle school principals’ use of distributed leadership practices and middle schools that have implemented features associated with the middle school concept. There are two research questions in this study. An explanation of each question, hypotheses, and descriptive statistics will be discussed in this chapter.

Research Question(s)

RQ1: What is the relationship, if any, between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process?

RQ2: Is there a difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices?

Null Hypothesis(es)

Ho1: There is no statistically significant relationship between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process.

Ho2: There is no statistically significant difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices.

Descriptive Statistics

The participants in this study consisted of 101 middle school teachers in a school district located in the southeastern region of South Carolina. The data screening of all participants are listed in figures and tables. There was a need to eliminate several teachers because they did not give usable answers to all the survey questions, reducing the usable sample size to 61. This correlation used only the data from 61 teachers who answered all 40 questions on the DLRS.
While 101 teachers responded to the survey and completed the informed consent any participant who answered “insufficient information” on any of the questions was excluded. A very high level of significance with 61 teachers was received. The boxplot in Figure 1 displays the distribution of scores. Additionally, there was one outlier for the Leadership practices dimension of the DLRS, which resulted in a sample of 60 teachers with complete data.

Figure 1 below displays a boxplot of the data from the 61 cases with complete data, which specifies that the Leadership Practices dimension had one outlying case.

![Boxplot of DLRS dimensions](image)

**Figure 1.** Distribution of scores on the four DLRS dimensions (N = 61). The outlier case indicated by “24” was dropped from the analysis, leaving a final N = 60.

The final sample of 60 teachers with completed data summarizes the demographic information in Table 1 below.
Table 1

Summary of Demographic Data

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent of Valid Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>10</td>
<td>16.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>White</td>
<td>48</td>
<td>81.4</td>
</tr>
<tr>
<td>No Answer or Don't know</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Highest Degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA/BS</td>
<td>16</td>
<td>27.1</td>
</tr>
<tr>
<td>MA/MS</td>
<td>38</td>
<td>64.4</td>
</tr>
<tr>
<td>6th Year Certificate</td>
<td>2</td>
<td>3.4</td>
</tr>
<tr>
<td>PhD/EdD</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Other Advanced Degree</td>
<td>2</td>
<td>3.4</td>
</tr>
<tr>
<td>No Answer or Don't Know</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>53</td>
<td>89.8</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>10.2</td>
</tr>
<tr>
<td>No Answer or Don't Know</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Years in Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>2</td>
<td>3.4</td>
</tr>
<tr>
<td>1-3 years</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td>4-6 years</td>
<td>10</td>
<td>17.2</td>
</tr>
<tr>
<td>More than 6 years</td>
<td>43</td>
<td>74.1</td>
</tr>
<tr>
<td>No Answer or Don't Know</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 lists the descriptive statistics for the four dimensions of the DLRS and the two composite variables used in the analyses.
Table 2

Summary Statistics for the Four DLRS Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Practices</td>
<td>2.62</td>
<td>0.52</td>
<td>2.50</td>
<td>3.78</td>
<td>1.78</td>
</tr>
<tr>
<td>Mission, Vision, and Goals</td>
<td>2.89</td>
<td>0.50</td>
<td>2.88</td>
<td>3.88</td>
<td>1.75</td>
</tr>
<tr>
<td>School Culture</td>
<td>2.91</td>
<td>0.66</td>
<td>2.81</td>
<td>4.00</td>
<td>1.54</td>
</tr>
<tr>
<td>Shared Responsibility</td>
<td>2.92</td>
<td>0.53</td>
<td>2.90</td>
<td>4.00</td>
<td>1.60</td>
</tr>
</tbody>
</table>

Note: N = 60 for all dimensions

Results

Null Hypothesis One

The first hypothesis focused on the relationship between principal’s use of distributed leadership practices which is (the Leadership variable) and teacher engagement (the Teacher variable). A Pearson Product-Moment correlation coefficient was used for the first hypothesis. The Leadership variable scores were formed by composite scores of the Leadership Practices and the Mission, Vision, and Goals dimensions of the DLRS. School culture and Shared responsibility dimension scores of the DLRS were averaged to form the Teacher variable.

Assumption Testing

The assumptions for the correlation coefficient include using interval or ratio variables, having few or no outliers, and using variables that are approximately normally distributed (Younger, 1979). In the current analysis both variables are interval data. Statistical measures and visual examination was used to understand the normality of their distributions. The Kolmogorov-Smirnov statistic for the Leadership variable was 0.108 with 60 degrees of freedom, and a probability of .081. The Kolmogorov-Smirnov statistic for the Teacher variable
was 0.084 with 60 degrees of freedom, and a probability of .200. As a result the distribution for both variables are statistically similar to a normal distribution. Figures 2 and 3 below show the distributions as histograms. Both distributions appear to be relatively normal.

![Histogram of Principal's Use of Distributed Leadership](image)

*Figure 2.* Distribution of the Leadership variable (Principal’s Use of Distributed Leadership).
Figure 3. Distribution of the Teacher variable (Teacher’s Engagement).
Figure 4 shows the distributions of the variables as boxplots. The Leadership variable had a single outlier slightly above the upper fence of its boxplot; both boxplots were relatively symmetrical.

**Figure 4.** Boxplots showing the distributions of the Leadership variable and the Teacher variable.

Table 3 below summarizes the descriptive statistics for the Leadership and Teacher Variables.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal’s Use of Distributed Leadership</td>
<td>2.76</td>
<td>0.46</td>
<td>2.72</td>
<td>3.77</td>
<td>1.88</td>
</tr>
<tr>
<td>Teacher’s Engagement</td>
<td>2.92</td>
<td>0.58</td>
<td>2.83</td>
<td>4.00</td>
<td>1.61</td>
</tr>
</tbody>
</table>

*Note: N = 60 for Leadership and Teacher variables.*
Inferential Statistics

The Pearson correlation between the Leadership variable and the Teacher variable is given by $r(58) = .8445, p < .001$. This result is significant at the hypothesized alpha level of .05, and thus Null Hypothesis 1 is rejected. Squaring the correlation coefficient indicates that the shared variance between the two variables is .713, or 71.3%. Either the correlation coefficient or the square correlation can be viewed as an effect size (Norman & Steiner, 2008). The scatterplot in Figure 5 displays the relationship between the variables.

Figure 5. Scatterplot of the relationship between the Leadership variable (Principal’s Use of Distributed Leadership) and the Teacher variable (Teacher’s Engagement).

Null Hypothesis Two

The second research question sought to determine whether teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices vary with the teachers’ grade level. The null hypothesis was that teachers at the different grade levels would not differ
on their scores on the four dimensions of the DLRS. The hypothesis was tested using a four one-way analyses of variance (ANOVAs).

Assumption Testing

The assumptions for the analysis of variance are that the variables are normally distributed and that the variances within the different groups have similar variances (homogeneity of variance), although Field (2009) points out that the ANOVA is relatively strong to minor violations of assumptions. The normality of the variables was investigated using the Kolmogorov-Smirnov (K-S) statistic, as well as visual inspections of the distributions. Table 4 below shows the K-S values for the four DLRS dimensions for this sample.

Table 4

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov Statistics for the Four DLRS Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolmogorov-Smirnov Statistic</td>
</tr>
<tr>
<td>Leadership Practices (LP)</td>
</tr>
<tr>
<td>Mission, Vision, and Goals (MVG)</td>
</tr>
<tr>
<td>School Culture (SC)</td>
</tr>
<tr>
<td>Shared Responsibility (SR)</td>
</tr>
</tbody>
</table>

A nonsignificant value for the K-S statistic indicates that a distribution is relatively normal. As Table 4 shows, the Leadership Practices dimension is the only dimension with a significant departure from normality using the K-S test. The K-S test is known to be conservative, and Field (2009) recommends that with large samples the final decision about normality requires a direct inspection of the distribution.

Figure 6 below shows histograms for the distributions of the four DLRS dimensions, and Figure 7 shows boxplots of the distributions.
Figure 6. Distributions of the four DLRS dimensions.
Both the histograms and boxplots show that the four distributions appear reasonably normal, with no outliers. Based on this result, the analysis proceeded using ANOVAs with tests of homogeneity of variance.

All analyses by teachers’ grade level have $N = 59$ because one teacher did not indicate a grade level.

**Analysis for Leadership Practices**

The Leadership Practices scores for the four grade level Teacher groups (6th Grade, 7th Grade, 8th Grade, and Multiple Grades) were compared using a one-way analysis of variance. Levene's test of homogeneity of variance was not significant, indicating that the variances across the four groups were equivalent: $W(3, 55) = 0.727$, $p = .540$. Table 5 below shows the group means for Leadership Practices. Table 6 below shows the results of the ANOVA.
Table 5

*Group-level Statistics for Leadership Practices.*

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Grades</td>
<td>12</td>
<td>2.59</td>
<td>0.44</td>
<td>2.11</td>
<td>3.56</td>
</tr>
<tr>
<td>6th Grade</td>
<td>13</td>
<td>2.61</td>
<td>0.47</td>
<td>1.89</td>
<td>3.44</td>
</tr>
<tr>
<td>7th Grade</td>
<td>16</td>
<td>2.58</td>
<td>0.63</td>
<td>1.89</td>
<td>3.78</td>
</tr>
<tr>
<td>8th Grade</td>
<td>18</td>
<td>2.72</td>
<td>0.52</td>
<td>1.78</td>
<td>3.56</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>2.63</td>
<td>0.52</td>
<td>1.78</td>
<td>3.78</td>
</tr>
</tbody>
</table>

Table 6

*Analysis of Variance Results Comparing Leadership Practices Scores for Teachers at Four Grade Levels.*

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.223</td>
<td>3</td>
<td>0.074</td>
<td>0.265</td>
<td>.850</td>
</tr>
<tr>
<td>Within Groups</td>
<td>15.418</td>
<td>55</td>
<td>0.280</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.641</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA result indicates that there were no differences in perceptions of Leadership Practices across the four grade levels: $F(3, 55) = 0.265, p = .85$. The null hypothesis was not rejected. The effect size (partial eta squared) = .014.

**Analysis for Mission, Vision, and Goals**

The Mission, Vision, and Goals scores for the four grade level Teacher groups (6th Grade, 7th Grade, 8th Grade, and Multiple Grades) were compared using a one-way analysis of variance. Levene’s test of homogeneity of variance was not significant, indicating that the variances across the four groups were equivalent: $W(3, 55) = 0.726, p = .541$. Table 7 below shows the group means for Mission, Vision, and Goals. Table 8 below shows the results of the ANOVA.
Table 7


<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Grades</td>
<td>12</td>
<td>2.94</td>
<td>0.46</td>
<td>1.88</td>
<td>3.75</td>
</tr>
<tr>
<td>6th Grade</td>
<td>13</td>
<td>2.72</td>
<td>0.49</td>
<td>2.13</td>
<td>3.75</td>
</tr>
<tr>
<td>7th Grade</td>
<td>16</td>
<td>3.01</td>
<td>0.44</td>
<td>2.25</td>
<td>3.88</td>
</tr>
<tr>
<td>8th Grade</td>
<td>18</td>
<td>2.90</td>
<td>0.59</td>
<td>1.75</td>
<td>3.75</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>2.90</td>
<td>0.50</td>
<td>1.75</td>
<td>3.88</td>
</tr>
</tbody>
</table>

Table 8

*Analysis of Variance Results Comparing Mission, Vision, and Goals Scores for Teachers at Four Grade Levels.*

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.619</td>
<td>3</td>
<td>0.206</td>
<td>0.807</td>
<td>.495</td>
</tr>
<tr>
<td>Within Groups</td>
<td>14.052</td>
<td>55</td>
<td>0.255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.671</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA result indicates that there were no differences in perceptions of Mission, Vision, and Goals across the four grade levels: $F(3, 55) = 0.807, p = .50$. The null hypothesis was not rejected. The effect size (partial eta squared) = .042.

**Analysis for School Culture**

The School Culture scores for the four grade level Teacher groups (6th Grade, 7th Grade, 8th Grade, and Multiple Grades) were compared using a one-way analysis of variance. Levene’s test of homogeneity of variance was not significant, indicating that the variances across the four groups were equivalent: $W(3, 55) = 1.061, p = .373$. Table 9 below shows the group means for School Culture. Table 10 below shows the results of the ANOVA.
Table 9

*Group-level Statistics for School Culture.*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Grades</td>
<td>12</td>
<td>2.85</td>
<td>0.57</td>
<td>2.15</td>
<td>4.00</td>
</tr>
<tr>
<td>6th Grade</td>
<td>13</td>
<td>2.92</td>
<td>0.59</td>
<td>2.23</td>
<td>4.00</td>
</tr>
<tr>
<td>7th Grade</td>
<td>16</td>
<td>3.00</td>
<td>0.69</td>
<td>1.62</td>
<td>4.00</td>
</tr>
<tr>
<td>8th Grade</td>
<td>18</td>
<td>2.91</td>
<td>0.77</td>
<td>1.54</td>
<td>4.00</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>2.92</td>
<td>0.66</td>
<td>1.54</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Table 10

*Analysis of Variance Results Comparing School Culture Scores for Teachers at Four Grade Levels.*

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.133</td>
<td>3</td>
<td>0.044</td>
<td>0.098</td>
<td>.961</td>
</tr>
<tr>
<td>Within Groups</td>
<td>24.878</td>
<td>55</td>
<td>0.452</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.012</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA result indicates that there were no differences in perceptions of School Culture across the four grade levels: $F(3, 55) = 0.098, p = .96$. The null hypothesis was not rejected. The effect size (partial eta squared) = .005.

**Analysis for Shared Responsibility**

The Shared Responsibility scores for the four grade level Teacher groups (6th Grade, 7th Grade, 8th Grade, and Multiple Grades) were compared using a one-way analysis of variance. Levene’s test of homogeneity of variance was not significant, indicating that the variances across the four groups were equivalent: $W(3, 55) = 0.812, p = .49$. Table 11 below shows the group means for Shared Responsibility. Table 12 below shows the results of the ANOVA.
Table 11

*Group-level Statistics for Shared Responsibility.*

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Grades</td>
<td>12</td>
<td>3.03</td>
<td>0.44</td>
<td>2.40</td>
<td>4.00</td>
</tr>
<tr>
<td>6th Grade</td>
<td>13</td>
<td>2.88</td>
<td>0.49</td>
<td>2.40</td>
<td>3.80</td>
</tr>
<tr>
<td>7th Grade</td>
<td>16</td>
<td>2.92</td>
<td>0.53</td>
<td>1.60</td>
<td>3.70</td>
</tr>
<tr>
<td>8th Grade</td>
<td>18</td>
<td>2.92</td>
<td>0.62</td>
<td>1.80</td>
<td>3.90</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>2.93</td>
<td>0.53</td>
<td>1.60</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Table 12

*Analysis of Variance Results Comparing Shared Responsibility Scores for Teachers at Four Grade Levels.*

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.167</td>
<td>3</td>
<td>0.056</td>
<td>0.193</td>
<td>.901</td>
</tr>
<tr>
<td>Within Groups</td>
<td>15.865</td>
<td>55</td>
<td>0.288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16.032</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA result indicates that there were no differences in perceptions of Shared Responsibility across the four grade levels: $F(3, 55) = 0.193, p = .90$. The null hypothesis was not rejected. The effect size (partial eta squared) = .010. Figure 8 below shows the mean scores for the four DLRS dimensions across the four teachers’ grade levels. It shows that the mean scores for Leadership Practices tend to appear lower than the mean scores for the other dimensions, regardless of grade level.
Figure 8. Mean scores for the four DLRS dimensions across the four teachers’ grade levels.
CHAPTER FIVE: CONCLUSIONS

Overview

Educational leaders can impact teaching and learning in school settings; however, they cannot do so without utilizing the expertise of those in the school schoolwide community. School leaders can use distributed leadership as they make decisions that impact educational environments (McKenzie & Locke, 2014). School leaders can implement the dimensions of distributed leadership when engaging teachers in leadership responsibilities and activities. While school leaders have applied the dimensions of distributed leadership, additional research was needed to analyze the practices of distributed leadership in middle school settings (Grenda & Hackman, 2014). This chapter provides the discussion, implications, limitations, and recommendations for future research of this study.

Discussion

This study was developed upon the distributed leadership theory which originated in the mid-1950’s (Maxcy & Nguyễn, 2006). Distributed leadership theory provided a model for leaders to use when sharing responsibility with individuals in an organization (Elmore, 2000). The foundation of teacher leadership is also aligned with distributed leadership, which allows teachers to use a collective energy over individual efforts (Wells & Klocko, 2015). Another theory this study drew upon was Spillane’s theory of distributed leadership.

Spillane’s theory of distributed leadership is a framework school practitioner used to understand the leadership practices of various individuals (Johnston, 2015). Spillane’s perspective on distributive leadership enables school leaders to understand leadership in school organizations and know how the generation of ideas and knowledge can impact the organization (Spillane et al., 2004). Additionally, Spillane’s elements of leadership practices include three
elements which are: leaders, followers, and situation (Johnston, 2015). This study sought to use the distributed leadership theory and Spillane’s theory of distributed leadership to display how middle school principals could share leadership with teachers in the middle school setting.

Scribner et al. (2007) explained distributed leadership in middle school allow teams of teachers to share in leadership capacity and create opportunities to be creative when solving problems. The authors suggested that school leaders be aware of the social dynamics of distributed leadership and know how they can be used to bring about solutions to school related issues (Scribner et al., 2007). This study displayed how distributed leadership in the middle school setting may create a culture for shared leadership.

Distributed leadership could also create structures and systems for collaboration to take place in middle school settings that positively impact the instructional foundation. In Murphy et al. (2009) study, distributed leadership contributed to middle school teachers having the opportunity to attain leadership roles and responsibilities. Teacher perceptions indicated that the school level principal developed and created a culture of shared leadership through distributed leadership (Murphy et al., 2009). As a result, of the school principal creating a culture of shared leadership, teacher collaboration and shared practices increased (Murphy et al., 2009).

Caskey (2010) research on distributed leadership provides evidence that distributed leadership increased teachers’ commitment to shared decision-making. As teachers in the middle school setting collaborated in learning communities, relationships were developed through forming shared goals (Caskey, 2010). Ross et al. (2016) study on distributed leadership found that distributed leadership contributed to principals and teachers developing effective relationships with each other. As the practices of distributed leadership in middle school settings increased, shared leadership between school principals and teachers were established (Ross,
The goal of this study was to determine if a relationship exists between principals use of distributed leadership practices and middle schools that have implemented features associated with the middle school concept.

**Purpose**

The purpose of this quantitative correlational study was to explore whether a relationship exists between middle school principals’ use of distributed leadership practices and schools that have implemented features associated with the middle school concept. The participants for this study were middle school teachers. All participants taught in the same school system but in different middle schools. The DLRS instrument was used to collect data from participants and data was collected in January thru the beginning of March of the 2018-2019 school term.

**Participants**

After receiving IRB approval and permission from the school district in which the study took place (Appendix A). The information in (Appendix B) is the DLRS scale and the informed consent document is located in (Appendix C). All of the participants were current employees of the school system and all served students on the middle school level. A total of 101 participants completed the DLRS instrument. The data was entered into SPSS and analyzed. The statistical tests conducted for the study included: descriptive statistics, a Pearson Product-Moment correlation coefficient and four one-way analyses of variance (ANOVAs). Additionally, data screening and assumption tests were conducted, the results of these tests were discussed in Chapter Four.

**Methods**

This quantitative study used a correlational research design and sought to determine if a correlation existed between middle school principals’ use of distributed leadership practices and
schools that have implemented features associated with the middle school concept. The DLRS instrument was used to collect data. The DLRS instrument was developed by the Connecticut Department of Education and has a Cronbach’s alpha .84 to .92 (Smith, 2007). Upon receiving approval from the IRB committee at Liberty University and the research site. The researcher worked with district administrators to carry out an approved plan of having participants complete the DLRS instrument.

Data was collected during the second semester of the 2018-2019 school term. The researcher sent an introductory email to middle school teachers. The introductory email and link was included that allowed participants to electronically sign the informed consent document and complete the DLRS. Once data had been collected, statistical tests were conducted and included the following: data screening, descriptive statistics, assumptions tests, a Pearson Correlation Coefficient, and a one-way analysis of variance test.

**Research Questions**

**RQ1:** What is the relationship, if any, between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process?

**RQ2:** Is there a difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices?

**Null Hypotheses**

**H₀1:** There is no statistically significant relationship between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process.

**H₀2:** There is no statistically significant difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices.
Summary of the Research

Results of this study provided information to assist in determining if a relationship exist between middle school principals use of distributed leadership practices and teacher engagement in the shared decision-making process. Furthermore, results from this study provided information on the relationship of middle school principals’ use of distributed leadership practices among middle school teachers. Numerous tests for assumptions of normality and outliers was conducted.

Research Question 1

Research Question One stated, “What is the relationship, if any, between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process?” The null hypothesis specified there is no statistically significant relationship in the teacher engagement and middle school principals use of distributed leadership practices. After using a Pearson-Moment correlation coefficient, the researcher determined that a relationship does exist between middle school principals use of distributed leadership practices and teacher engagement in the decision-making process. In a related study by Hairon and Goh (2015), evidence indicated that school leaders should be willing to surrender responsibility and allow teachers to make decisions. This study is comparable to the current study in the fact that teachers were engaged in the decision-making process. However, it is important to note that evidence was not gathered utilizing the same method.

Cherkowski and Brown’s (2013) study is also similar to the current study. Findings indicate that as teachers were engaged in distributed leadership practices, they were motivated to grow professionally. Furthermore, Cherkowski and Brown’s (2013) study and this study relate to Spillane’s elements of leadership practices. School leaders must create opportunities for teachers to lead based on the given situation in a school. In Kelly and Dikkers (2016) study, results
revealed that middle and high school administrators identified roles in a school’s organization that could be beneficial to improving teaching and learning. While this study highlighted the importance of distributed leadership as a model school leaders use to analyze practices in their school’s organization, it differs from the current study. The current study indicates teacher engagement through distributed leadership practices. Kelly and Dikkers (2016) study focuses on middle and high school leaders and their ability to understand how distributed leadership practices assist with the distribution of leadership.

**Research Question 2**

Research Question Two stated, “Is there a difference between middle school teachers’ perceptions of teacher engagement and principal’s use of distributed leadership practices?” The null hypothesis of this study indicated there are no statistically significant differences in middle school teachers and middle school principals in grades six through eight use of distributed leadership practices. Margolis and Huggins (2012) study coincides with results of the current study. Due to school leaders failure to properly implement the practices of distributed leadership, teacher leaders reverted to a more traditional role and teachers did not grow professionally. The researchers concluded when features associated with distributed leadership are properly implemented, teachers will be able to assist with change in the school setting.

Results of Ross et al. (2016) study revealed how distributed leadership can enhance a school’s organization through positive principals and teacher relationships. Additionally, the authors explained that teachers value the opportunity to participate in the school decision-making process. The current study differed from Ross et al. (2016) findings specified that teachers in multiple grades indicated that they did not have opportunities to participate in the decision making process. Grenda and Hackman (2014) study on distributed leadership in the middle
school setting indicates that school leaders effectively utilized the collaborative nature of the middle school setting. Teachers within the middle school organization were committed to the school’s organization and instruction improved through distributed leadership. Results from the current student revealed that middle school teachers could identify the practices of distributed leadership, however collaboration between school leaders and teachers does not continually take place. Additionally, results suggest that school leaders must identify a situation in the school’s organization and effectively create collaborative opportunities for teachers in multiple grade levels to participate in the decision making process.

The researcher suggests that additional research be conducted to explore middle school principals and teacher perspectives of distributed leadership practices in the middle school setting. The results of this study will add to the discussion of distributed leadership practices in the middle school setting. Moreover, results will contribute and add to literature on distributed leadership practices in the middle school setting. Additional research should be conducted to determine the impact of distributed on teacher engagement and shared leadership in the educational environments.

**Implications**

There is much to be gathered from this study and the correlation between middle school principals’ use of distributed leadership practices and teacher engagement. While there was no correlation between middle school principals use of distributed leadership practices among middle school teachers, findings will contribute to the literature on distributed leadership in the middle school setting. Results do indicate middle school principals’ leadership does have a direct impact on teacher engagement. These findings were like Klar’s (2012) study, in which
school leaders used distributed leadership to impact school culture and teacher and student learning.

Middle school principals play an important role when engaging with teachers and sharing leadership. Larsen and Rieckhoff (2014) study indicated that teachers were enthusiastic to collaborate with the school principal and participate in the shared decision-making process. Distributed leadership practices allow teachers to engage in the decision-making process and allows the principal to share leadership responsibilities. Hulipa et al. (2009) study displayed teacher commitment and engagement when school leadership teams implemented distributed leadership and provided support to teachers.

In addition to teacher engagement this study sought to determine if a relationship exists between middle school principals use of distributed leadership practices among middle school teachers. While teachers’ perceptions for the following dimensions of distributed leadership according to the DLRS: Leadership practices, Mission, Vision, and Goals, School Culture, and Shared Responsibility did not indicate a relationship. Teacher responses are impactful for literature on distributed leadership in the middle school setting. Teacher responses on the DLRS were consistent when analyzed which indicates that teachers are aware of how middle school principals lead and share leadership among teachers in the school setting. Gurley et al. (2015) study in the middle school setting on teacher leaders indicated teachers were not able to relate to the shared mission, vision, values, and goals established by school leaders. However, understanding the importance of a shared mission with the assistance of the school principal, teachers could impact instruction (Gurley et al., 2015).

Shared responsibility is a task school principals and teachers must engage in together to ensure professional growth. While there was not a strong correlation in this study of teachers
and middle school principals collaborating through distributed leadership practices, evidence suggest teacher and principal engagement can be impactful. Carpenter (2014) study specifies a collaborative culture led to improved instructional practices. School culture impacts the way in which school leaders, teachers, and children interact with each other. Waldon and McLeskey (2010) study encouraged the school principal to ensure cohesiveness throughout the school organization through distributed leadership.

The leadership practices of school principals impacts how the stakeholders in a school community can increase teacher engagement. Stone-Johnson (2014) encouraged school leaders to be visionaries and create positive relationships so students can reap the rewards of a great school culture. Distributed leadership is a model school leaders use to help teachers grow professionally and help them become teacher leaders through shared leadership. Cherkowski and Brown’s (2013) study encouraged school administrators to use the distributed leadership model to provide opportunities for teachers to grow professionally. The implications of this study will contribute to the discussion on distributed leadership in middle school settings. Additionally, school leaders will gain an understanding of the importance of including teachers in shared leadership and the decision making process.

**Limitations**

The results of this quantitative research study will impact the literature on distributed leadership. However, limitations of this study have been identified and include, but are not limited to, sample size, grade levels, location, and the quality of the middle school principal. Gall et al. (2007) suggested a sample size of 100 teachers to have a medium effect size. While 101 participants signed informed consent documents, only 60 responses to the DLRS instrument were utilized for this study. A larger number of responses could have impacted the results of this
Having to exclude 40 teacher responses was significant and could have potentially altered the results of the study. Specifically, had all of the responses been included in the study, the researcher would have a clearer indication of the impact distributed leadership has on middle level teachers and teacher engagement in the decision making process. With only 60 responses being utilized for the study an accurate representation of the practices of distributed leadership in the middle schools presented a challenge. An indication of the impact of middle school principals use of distributed leadership practice was limited to the perceptions of 60 participants instead of 101 participants. Finally, in a quantitative research had all teacher’s responses been viable, the distribution of responses may have been different.

Furthermore, this study focused primarily on middle school teachers in the following grades: sixth, seventh, eighth, and those that taught multiple grade levels. The participants in this study also taught in one school district. This study did not include participants who provided instruction to middle school students who attended alternative schools or charter schools located in the same region or location. Additionally, the demographic data collected on participants in this study was not calculated in the findings. While the demographic data provided the researcher with quality information, the researcher did not attempt to determine if participant demographic data impacted research results.

Lastly, the researcher did not focus on the quality of the middle school principal in which teachers were engaged in distributed leadership practices. This study did not gather information on the viewpoint of middle school principals. While middle school principals are responsible for incorporating distributed leadership practices into their daily practices with middle school teachers, a tool was not used to measure their impact on teachers across multiple schools located in the research site school system. Finally, the DLRS instrument was given to teachers at the
beginning of the second semester. Participant responses may have changed had the instrument been given at the end of the school year.

**Recommendations for Future Research**

The researcher has several recommendations based on the results of this study. The first recommendation is to expand this research study. This research study included middle schools located in one school system. Additionally, allowing middle school principals to complete the DLRS instrument and comparing those results with middle school teachers may provide another focus research. Expanding this research will provide an opportunity for more middle level educators to participate, which may lead to different results or results that will contribute to the literature on distributed leadership. Moreover, the researcher recommends that data be collected at the end of the school term. Collecting data at the end of the school term, may grant teachers an opportunity to fully understand how the practices of distributed leadership impacts them as professionals.

Another recommendation is to conduct a qualitative research study on principal use of the practices of distributed leadership which encompasses multiple school levels. Focus interviews or completing a case study may provide a different perspective on the elementary, middle, or high school setting. Additional considerations for research include face-to-face interviews, a different quantitative design, or mixed-methods designs. Finally, another focus of research could focus primarily on multiple grade levels of school leaders. Elementary, middle, or high school principals may be able to provide valuable insight into how they implement the dimensions of distributed leadership. Additional research on distributed leadership in this area may impact the decisions school leaders make when attempting to improve teacher and student engagement.
REFERENCES


doi:10.1080/15700763.2013.792935

Kelley, C., & Dikkers, S. (2016). Framing feedback for school improvement around distributed leadership. *Education Administration Quarterly, 52*(3), 392-422. doi:
10.1177/00131161X16638416


10.1177/1741143214535742

in international schools. *International Journal of Pedagogies and Learning, 9*(1), 76-86. doi: 10.1080/18334105.2014.11082021


school principals. *Journal of Educational Administration, 49*(1), 31-45. doi: 
http://dx.doi.org.ezproxy.liberty.edu/10.1108/09578231111102045


http://dx.doi.org.ezproxy.liberty.edu/10.1080/0022027032000106726


doi:http://dx.doi.org.ezproxy.liberty.edu/10.3390/soc5030566


doi:http://dx.doi.org.ezproxy.liberty.edu/10.1007/s12564-015-9387-4


December 18, 2018

George Lathan Marek Marshall
IRB Approval 3586.121818: The Relationship Between Middle School Principals Use of the Dimensions of Distributed Leadership and Teachers

Dear George Lathan Marek Marshall,

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

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

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

Sincerely,

[Signature]
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

Liberty University | Training Champions for Christ since 1971
APPENDIX (B)

The Liberty University Institutional Review Board has approved this document for use from 12/18/2018 to 12/17/2019
Protocol # 3586.121818

CONSENT FORM

The Relationship Between Middle School Principals Use of the Dimensions of Distributed Leadership and Teachers
George Lathan Marek Marshall
Liberty University
School of Education

You are invited to be in a research study on the relationship between middle school principals’ use of the dimensions of distributed leadership and teacher engagement in the shared decision making process. You were selected as a possible participant because you are a middle school teacher in the Rock Hill School District. Please read this form and ask any questions you may have before agreeing to be in the study.

George Lathan Marek Marshall, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to determine whether there is a relationship between middle school principals’ use of distributed leadership practices and teacher engagement in middle schools that have implemented features associated with the middle school concept.

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

1. Complete the Distributed Leadership Readiness Scale, which may take up to 30 minutes.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study. Participation in this study will allow the researcher to add to existing literature on distributed leadership in the middle school setting.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject.
Research records will be stored securely, and only the researcher will have access to the records. The Liberty University Institutional Review Board has approved this document for use from 12/18/2018 to 12/17/2019 Protocol # 3586.121818

I may share the data I collect from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data.

- The school system, research sites, and participants will be assigned a pseudonym to protect their identity. I will not disclose any information that can be traced to their identity.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Rock Hill School District. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please inform the researcher via email prior to submitting your responses. Your responses will not be recorded or included in the study.

**Contacts and Questions:** The researcher conducting this study is George Lathan Marek Marshall. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at [email protected] and/or email [email protected] You may also contact the researcher’s faculty chair, Dr. [Last Name] at [email protected].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

*Please notify the researcher if you would like a copy of this information for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

<table>
<thead>
<tr>
<th>Signature of Participant</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of Investigator</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
October 15, 2018

Dear [Redacted]

Chief of Strategic Planning, Engagement, & Program Support

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctorate degree. The title of my research project is The Impact Of Middle School Principals Use Of The Dimensions of Distributed Leadership On Teacher Engagement In Shared Decision Making In The Middle School Setting and the purpose of my research is to determine if a relationship exists between middle school principals’ use of distributed leadership practices and teacher engagement in the shared decision making process.

I am writing to request your permission to utilize middle school teachers as participants for my research.

Participants (middle school teachers) will be asked to access their email and click on the link provided to complete an online survey. The data will be used to determine the relationship between middle school principals use of distributed leadership practices and teacher engagement. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

There are no known risks to this study, Participants’ identity will not be disclosed at any time during this study. I anticipate my findings will provide positive feedback to district level administrators, middle school principals’, and teachers.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval.

Sincerely,

George Marshall
Principal Investigator