

ACTIONS OF THE PRINCIPAL: INFLUENCES ON TEACHER SELF-EFFICACY AND
MOTIVATION

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

Classroom teachers are a significant influence on student achievement. Numerous studies indicate that teacher motivation and self-efficacy influence their effectiveness in the classroom. Furthermore, studies indicate that the leadership behaviors of the principal can influence the school culture and have a direct impact on teacher motivation and self-efficacy. This study sought to determine if a relationship exists between certain behaviors of administrators and a teacher's self-efficacy and motivation. The study used a correlational design using The Teacher Motivation & Job Satisfaction Survey (TMJSS), The Teachers' Sense of Efficacy Scale (TSES), and the Leadership Practices Inventory (LPI). There were 72 high school certified teachers within the First District RESA in south Georgia who participated in this study. Results of a multiple regression analysis suggested that there was a significant predictive relationship between the combination of leadership behaviors and teacher motivation. However, the results suggested that there was not a significant predictive relationship between the combination of leadership behaviors and teacher self-efficacy. Future research recommendations include replication studies in other high schools and focus on separating specific leadership behaviors that showed the most influence, such as model the way, inspire a shared vision, and enable others to act.

Keywords: Teacher, self-efficacy, motivation, principal, leadership, behaviors

Dedication

Without my family and God, I would not be in this race, much less finishing. I would also like to give a special thank you to my husband, Chris. During this process, we moved, built a house, and you took on a new career. You were there to take care of Coleman on the days when I had to lock myself away during all of that. A special thank you to my son, Coleman. Although you may not remember these times, you were a good sport about this whole situation and did what you could to help me. You never minded the trips to the school where I could work with more space, working internet, and you could play at pre-setup stations.

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List of Abbreviations

Board of Education (BOE)

Governor's Office of Student Achievement (GOSA)

IBM's Statistical Package for the Social Sciences (SPSS)

Institutional Review Board (IRB)

Leadership Practices Inventory (LPI)

National Center for Education Statistics (NCES)

Regional Educational Service Agency (RESA)

The Teacher Motivation & Job Satisfaction Survey (TMJSS)

The Teachers' Sense of Efficacy Scale (TSES)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this quantitative correlational study was to determine if a relationship exists between certain behaviors of administrators and a teacher's self-efficacy and motivation. Chapter One will evaluate the historical, social, and theoretical context used to determine this relationship. The problem statement examines the recent literature on this topic. The purpose, significance, research questions, and terms will also be included.

Background

When evaluating student achievement, teachers are often believed to be the most significant influence on student achievement (Day et al., 2016; Leithwood et al., 2019). Students often see school administrators, counselors, nurses, and, even the school secretary, on sporadic occasions throughout their school year. Teachers account for a large portion of adult interactions in a student's school day. Ouellette et al.'s (2018) study evaluated teachers' work environment and noted that they had become alarmingly characterized by higher levels of psychological distress and burnout. This burnout was created due to organizational factors, such as school climate, workplace relationships, and availability of resources. Greenberg et al. (2016) evaluated the extent to which such factors affect both teachers and the amount of energy that they can infuse into their students. Poor school climate, workplace relationships, and work resources are all identified as sources of teacher stress in the workplace. Greenberg et al. evaluated how teachers respond to stress and other job demands. This study showed that two forms of negative consequences, teacher-related and other, are brought about due to high-stress environments. Teacher-related adverse outcomes focused on direct factors, such as ill-health, increased absenteeism, and low performance. Greenberg et al. identified decreases in student performance

and achievement, student burnout, and increases in behavioral problems within the classroom when describing other negative consequences.

These components are reflected in the quality and intensity of teacher instruction, and motivation directly correlates to their success in the classroom (Greenberg et al., 2016, Huang et al., 2019). Consequently, certain direct and indirect behaviors by a school's administrative leader can influence a teacher's well-being (Huang et al., 2019). Principals can facilitate collegial, supportive environments by developing a trusting atmosphere (Greenberg et al., 2016, Huang et al., 2019). However, further study is needed to determine how leadership behaviors among school principals and administrators play a role in teacher motivation and self-efficacy.

Historical Context

Principal positions began materializing in schools in the mid-nineteenth century. Less than fifty years later, principals existed in almost all school systems in the United States (Rousmaniere, 2007). Early principals were in charge of paperwork, building maintenance, and instances of student misbehavior. Through the addition of an on-site middle manager, the power structures for schools have been significantly restructured. As the role of the principal continued to evolve, the methods of principal leadership began to gain more attention and study. Leithwood et al. (2020) evaluated qualitative case studies of overall leader effects and leadership practices to determine if school leadership has a significant impact on features of the school organization, which positively influences the quality of teaching. For that reason, Leithwood et al. determined that leadership practices must be studied to understand the causal relationship between positive leadership and teacher performance and self-efficacy.

Within the last five years, numerous studies have focused on specific leadership styles and how they affect teacher collaboration and self-efficacy (Agasisti et al., 2018; Cansoy &

Parlar, 2018; Özdemir & Yalçın, 2019; Sanchez et al., 2020; Wirawan et al., 2019). Of these studies, four occurred outside of the United States (U.S.). Three have occurred in elementary or middle schools. Only two studies occurred in high school settings, one inside the U.S. and one outside of the U.S.. These studies focused on defined leadership styles; instructional, servant, or transformational. However, these studies offered different definitions of leadership styles, and many provided descriptors that overlapped a different style in a separate study. Additional studies evaluated individual factors, such as school climate, time usage, language and tone, and support from administration to improve student achievement (Castro-Silva et al., 2017; Holmes & Parker, 2018; Liebowitz & Porter, 2019; Maxwell et al., 2017; Park et al., 2018). Singular studies have identified trends that suggest that key behaviors of administrators bring about positive changes in teacher effectiveness, which influence student achievement. However, the relationship between principal leadership behaviors and levels of teacher motivation needs more investigation, as current studies focusing on leadership styles have not agreed upon a specific set of behaviors that have proven to be the most effective concerning student achievement.

Social Context

As school reform continues to mold and shape educational practices, it develops and shapes the behaviors of leaders and how they encourage staff and impact student success. School leaders can positively influence teacher collaboration, leading to increased collective efficacy and effectiveness in the classroom (Özdemir & Yalçın, 2019; Park et al., 2018). Additionally, principal leadership can lead to the most consistently predicted stress or satisfaction influences reported by teachers (Ouellette et al., 2018). Hence, motivation and job satisfaction are essential elements of successful job performance (Klaeijssen et al., 2018). By understanding how a leader can influence self-efficacy, motivation, and indirectly affect student achievement, school leaders

will be able to use this knowledge to improve the environment within their school, positively impacting not only teachers but also students.

Theoretical Framework

When evaluating teacher effectiveness, three theories were used to understand how external influences affect internal beliefs. Bandura (1977) considered how a person's faith in their abilities (self-efficacy) influences their accomplishments. Bandura described experiences and behaviors with people of authority as an influence on one's self-efficacy. Additionally, Maslow (1943) evaluated motivation and the influencing factors associated. He found that influencing factors, such as the work environment, directly affected human motivation. Burns (1978) initially described transformational leadership as a reference to political leaders; however, this specific leadership style has since been observed and described in all fields. For this research, the particular descriptors of transformational leadership that will be evaluated are those defined by Kouzes and Posner (2012) as (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. By evaluating these specific leadership behaviors and theories of self-efficacy and motivation, a correlation may be determined.

Problem Statement

Educational research has often focused on classifying principal leadership into certain styles and using these styles to evaluate specific areas of influence (Agasisti et al., 2018; Cansoy & Parlar, 2018; Pietsch & Tulowitzki, 2017; Sanchez et al., 2020; Sun & Leithwood, 2015; Tan, 2016; Wirawan et al., 2019). However, researchers do not agree with all of these classifications as a whole. Sun & Leithwood (2015), Tan (2016), and Wirawan et al. (2019) all focused on multiple leadership styles and had different vocabulary identifiers for each characteristic,

including task-oriented, relationship-oriented, distributed, integrated, direction-setting, teacher-principal trust, instructional and transformational leadership. Between these three studies, elements of leadership styles were found to be overlapping in each other. Agasisti et al. (2018) and Pietsch & Tulowitzki (2017) attempted to narrow down leadership styles. Agasisti et al. identified three subgroups, educative leaders, leaders who teach, and transactional leaders. This study found that all subgroups had some form of influence on student achievement, both positive and negative. Although this study did not find an apparent effect between their subgroups and student achievement, it did highlight the need for additional classification and refinement of principal leadership. Pietsch & Tulowitzki attempted to disentangle school leadership and evaluate how various leadership styles affect instructional practices. This study began narrowing specific behaviors evaluated by previous studies and applying them to defined leadership styles.

Cansoy & Parlar (2018) and Sanchez et al. (2020) focused on one specific leadership style and began evaluating the effectiveness of a singular leadership style. Cansoy & Parlar focused on instructional leadership and both collective and teacher self-efficacy, but they found a need for additional studies relating to transformational leadership and self-efficacy. Sanchez et al. focused on transformational leadership in a high school setting and used Kouzes and Posner's (2012) five leadership practices but focused on the influences on the general school climate. Sanchez et al.'s 2020 study closely resembles the Kouzes and Posner study but differs in influencing factors in terms of leadership style. The Cansoy & Parlar study highlighted the need for studies involving transformational leadership and self-efficacy. Sanchez et al.'s study helped narrow down specific behaviors of transformational leadership that influence a school setting but evaluated different influences than the focus of this study. Only one study, Sanchez et al. , focused solely on a high school setting and used transformational leadership in their study,

creating a need for additional research in high school settings. Empirical studies have been conducted to evaluate how leader practices and behaviors influence student achievement, but specific studies have not been conducted (Hitt & Tucker, 2016, Liebowitz & Porter, 2019). The problem is that the literature has not fully addressed specific principal behaviors that influence teacher self-efficacy and motivation.

Purpose Statement

The purpose of this quantitative, predictive correlational design tested how transformational leadership influences high school teachers' self-efficacy and motivation. The predictor variables were five perceived principal leadership behaviors identified in this study as (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. A shared vision includes the direction the principal wishes to lead a school, and the teachers' understanding of this vision (Cansoy & Parlar, 2018; Day et al., 2016; Leithwood & Jantzi, 2008; Castro-Silva et al., 2017). Emphasis on instruction is how a teacher feels that a principal values effective instruction and expects teachers to implement effective teaching practices within the classroom (Goddard et al., 2015; Leithwood & Jantzi, 2008; Tan, 2016). Numerous and effective collaboration includes supporting both formal and informal learning communities in which teachers are encouraged to work and learn together, also referred to as professional development (Pietsch & Tulowitzki, 2017). Additionally, the descriptor encourages the heart and evaluates the perception that teachers feel they are recognized, encouraged, and praised for all levels of success, both in and out of the classroom (Cansoy & Parlar, 2018, Day et al., 2016). The criterion variables are teacher motivation and self-efficacy. Teacher motivation is the intrinsic factor that influences their teaching behaviors, including their instructional behavior and enthusiasm (Keller et al., 2016). Self-efficacy, or a

teacher's belief in their successes as a teacher, will influence the effort they expend, the amount of time they will invest in their perseverance, and their resilience to failure (Bandura, 1977, 1994; Leithwood & Jantzi, 2008; Maslow, 1943).

This study gathered survey data from teachers in rural South Georgia high schools. The schools were within the same Regional Educational Service Agency (RESA). Within the First District RESA, 37 high schools consisted of approximately 148 administrators and 1,948 teachers.

Significance of the Study

This study is significant to education because it builds upon the theoretical knowledge of teacher motivation and self-efficacy. Additionally, this study will add to empirical evidence by providing increased or decreased motivation and efficacy patterns based on principal behaviors. This study will also have practical significance for principals and school administrators wishing to improve behaviors in leadership that will positively influence teacher efficacy and motivation, having a trickle-down effect to increase student achievement.

Several studies have reviewed the relationship between leadership styles and motivation or self-efficacy (Agasisti et al., 2018; Cansoy & Parlar, 2018; Jambo & Hongde, 2020; Özdemir and Yalçın, 2019; & Sanchez et al., 2020). However, a proper evaluation of the underlying factors has not been conducted. This study will research five specific leadership behaviors: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. According to the National Center for Education Statistics (NCES) yearly digest (2019), since the 1999-2000 school year, approximately eight percent of teachers moved to another school, and another eight percent left the profession altogether. Of these movers and leavers, twenty-three percent cited school factors as the reason for their exit. Additionally, high

schools experienced a slightly higher percentage of teachers leaving the profession (8.3%) to elementary (7.1%).

This study aims to add to the body of literature supporting teacher self-efficacy, motivation, and principal behaviors. By evaluating these behaviors in this setting, this study can yield theoretical significance in principals' influence on student achievement through the positive effects of teacher self-efficacy and motivation. This study will have empirical significance by determining a causal relationship between specific behaviors, including efficacy and motivation. These findings may benefit school administrators and researchers by providing additional research on teacher self-efficacy, motivation, and principal behaviors. School administrators may use the results of this study to guide the leadership behaviors when working with or making plans involving teachers.

Research Questions

RQ1: How accurately can teacher motivation be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart?

RQ2: How accurately can teacher self-efficacy be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart?

Definitions

1. *Challenge the Process.* Behavior in which leaders seek innovative ways to change, grow, plan, and improve others and themselves (Kouzes & Posner, 2003).

2. *Collaboration*- The principal initiated teacher groups that work within the school to establish best practices for school improvement (Park & Ham, 2014; Pietsch & Tulowitzki, 2017).
3. *Enable others to Act*. Behavior in which collaboration is prompted and others are strengthened by knowing they are a vital part of the environment (Kouzes & Posner, 2003).
4. *Encourage the Heart*. Behavior in which leaders encourage others to carry on and recognize the efforts of individuals, in their work and their victories (Kouzes & Posner, 2003).
5. *FDRESA or RESA*- Regional Educational Service Agency. First District RESA (FDRESA) is the educational service agency that serves 17 counties in the Low Country of South Georgia. These counties include Appling, Bryan, Bulloch, Candler, Chatham, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Screven, Tattnall, Toombs, Vidalia, and Wayne.
6. *Inspire a Shared Vision*. Behavior in which leaders have a vision of the exciting and enabling future (Kouzes & Posner, 2003).
7. *Model the Way*. Behavior in which leaders are willing to walk the talk (do what they say they will do) and follow through on their values (Kouzes & Posner, 2003).
8. *Motivation*. Result of an individual's attempts to satisfy levels of need (Maslow, 1943). Specifically, the need to satisfy feelings of association, respect, and self-actualization (Fisher & Royster, 2016). Teacher motivation is the intrinsic factor that influences their teaching behaviors, including their instructional behavior and enthusiasm (Keller et al., 2016).

9. *Oral Communication*- Method in which principals use verbal communication to speak to teachers. A supportive and empathetic language helps principals build relationships with teachers (Holmes & Parker, 2018).
10. *Teacher Self-Efficacy*- Self-efficacy, or a teacher's belief in their successes as a teacher, will influence the effort they expend, the amount of time a person will invest in their perseverance, and their resilience to failure (Bandura, 1977, 1994; Leithwood & Jantzi, 2008).
11. *Transformational leadership*- A type of leadership in which the leader inspires followers to commit to a shared vision and goals for an organization, challenges followers to be innovative problem solvers, and develops followers' leadership capacity via coaching and mentoring (Bass & Riggio, 2006).

CHAPTER TWO: LITERATURE REVIEW

Overview

As teachers continue to influence their students' lives and academic achievement, aspects of teacher performance are of great interest. A systematic review of the literature was conducted to explore the relationship between a high school principal's behavior and a teacher's self-efficacy and motivation, which have a lasting effect on student achievement. A review of the current literature related to the topic will be presented.

The theories relevant to transformational leadership, self-efficacy, and motivation will be discussed in the first section, followed by a synthesis of recent literature regarding leadership styles, principal behaviors, and their impact on teacher self-efficacy and motivation. Lastly, literature will be presented on these factors that tie principal influences to student achievement. In the end, a gap in the literature will be identified, presenting a viable need for the current study.

Theoretical Framework

Bandura's (1977, 1994) Theory of Self-Efficacy, Maslow's (1943) Theory of Motivation, and Burns's Theory of Transformational Leadership (1978) will be the three theories used in this study. Bandura's (1977) and Maslow's theories will be used to evaluate teacher effectiveness. Burns's Theory of Transformational Leadership will be used as the foundation for evaluating specific principal behaviors.

When evaluating teacher effectiveness, it is necessary to look at the internal factors influencing teacher preparedness and methods within a classroom. Bandura's Theory of Self-Efficacy (1977) evaluates teachers' internal driving force and the factors that influence their belief in their success. Maslow's Theory of Motivation (1943) evaluates teachers' intrinsic needs

and how this affects their decisions. Furthermore, these intrinsic needs influence the enthusiasm teachers exhibit toward their work. Burns's Theory of Transformational Leadership (1978) evaluates how a leader can influence and motivate followers to reach their goals. These theories also shed light on how teachers are impacted by the behaviors of their principal, which, in turn, affects student achievement.

Theory of Self-Efficacy

Psychologist Albert Bandura (1977) examined the internal and external influences that affect people's self-efficacy and capabilities to exercise control over their behaviors. Self-efficacy is defined as a person's belief in their ability to succeed and how it influences their behaviors. Self-efficacy, Bandura asserted, should provide a foundation for an individual's motivation, well-being, and personal accomplishment. People need to have confidence in their abilities to be effective and successful in life. That confidence will influence people's actions, feelings, thoughts, and motivations (Bandura, 1994). High self-efficacy has many proven individual benefits, such as resilience to adversity and stress, healthy lifestyle habits, improved employee performance, and educational achievement (Lopez-Garrido, 2020). Past successes, verbal encounters with others, vicarious modeling, and mental status all affect a person's belief in their self-efficacy (Bandura, 1977, 1994).

Bandura (1977, 1994) organized four main sources of influence when evaluating a person's belief in their self-efficacy: mastery experiences, vicarious experiences, social persuasion, and emotional states. Mastery experiences are the experiences one gains when tackling a new challenge and succeeding (Lopez-Garrido, 2020). These successes provide the individual with actual evidence of their capabilities, motivating the individual to attempt other challenging tasks. These experiences are considered the most influential because how one

performs in the past is often interpreted as successes or failures, and these interpretations influence future performances in similar situations (Webb-Williams, 2017). For instance, a struggling high school student who studies for and passes a difficult algebra exam can use this experience to bolster their confidence in future situations. Bandura (1977) discussed the second source as vicarious experiences. This experience is when people see others they view as similar, succeeding through continued effort, which creates their confidence that they too can possess the capabilities to master similar activities. These experiences involve observing others considered role models, such as parents, teachers, and employers (Webb-Williams, 2017). Teachers, for example, may observe their principals and vicariously model their successful behavior through verbal and nonverbal communication.

Additionally, Bandura (1977) discussed the third source as social persuasion. This influence is when a person is willing to accept positive feedback from others while undertaking a task. Receiving positive verbal feedback persuades a person to believe that they have the skills and capabilities to succeed, especially in challenging tasks. An elementary school teacher utilizes social persuasion when telling students that they can achieve anything they set out to accomplish, giving them the courage to push themselves when facing future challenges (Lopez-Garrido, 2020). Finally, Bandura (1977) discussed the fourth source as emotional states. These can influence how individuals feel about their capabilities in a particular situation. If a person is struggling with anxiety, their methods of perceiving and interpreting emotions are impacted, thus directly influencing their level of self-efficacy. Managing anxiety and enhancing mood during challenging situations can improve self-efficacy.

Whether in a professional or personal setting, as people face new challenges or stressful situations, their self-efficacy expectation influences the amount of effort they will expend and the

level of coping behavior initiated (Bandura, 1977). Bandura viewed a person's efficacy expectation as the conviction that a person can execute necessary behaviors to obtain the desired outcome. He further clarified that this is not the belief that a particular action will produce a specific outcome; a person believes that they can effectively alter their behavior to achieve the desired outcome. Self-efficacy can be improved by: the successful completion of goals or tasks that give a person a sense of accomplishment; appropriate modeling of self-confident behavior through self-awareness and perceived ability; reduction of stressful situations by taking control of one's surroundings; and surrounding oneself with positive social influences who instill beliefs of self-efficacy, such as friends, coworkers, and family (Bandura, 1994).

Bandura (1994) also noted that self-efficacy affects four major efficacy-activated processes: cognitive, motivational, affective, and selection processes. All four of these processes are directly related to teacher success in the classroom. Teachers who have a strong perception of self-efficacy are more likely to set more challenging goals and have a firmer commitment to those goals. According to Bandura, courses of action are initially organized in thought (cognitive), and those who have the task of managing challenging environmental demands under taxing circumstances must maintain a resilient sense of efficacy and use good analytical thinking ((Newman-Carlson & Horne, 2004; Tschannen-Moran & Woolfolk Hoy, 2001). Consequently, these skills pay off by helping people succeed in performance accomplishments. In contrast, a teacher with low self-efficacy will have difficulty with cognitive processing and remaining on-task in a stressful environment, such as a disorderly classroom or dealing with problem behavior (Newman-Carlson & Horne, 2004).

People with high self-efficacy have higher motivation because they believe in what they can accomplish. They often feel that failure results from insufficient effort instead of a lack of

ability (Bandura, 1994). Motivational processes direct goal-oriented behaviors through courses of action and persistence in obtaining goals. If a teacher is motivated to adjust instructional practices, this can increase student achievement, and teachers can see the outcome of their hard work, motivating them to succeed (Cansoy & Parlar, 2018). As a result, teachers who are motivated to a higher level of persistence will realize more job satisfaction (Huang et al., 2019; Cansoy & Parlar, 2018).

Similarly, Bandura (1994) explained how affective processes are directly tied to self-efficacy because these processes regulate one's emotional state and stimulate emotional reactions. Those with higher self-efficacy trust in their coping capabilities and the level to which they can manage stress, such as maintaining self-control in stressful moments. Bandura equated this with avoidance of tasks they believed to be beyond their capabilities and embracing challenges in which they believed they could be successful. Many challenges exist within the classroom, but their beliefs in their successes will determine if they embrace or avoid these challenges. Avoidance can lead to stress, and stress can lead to burnout. However, stress management can reduce career burnout and emotional exhaustion, which lead to high teacher attrition rates in schools (Richards et al., 2018). Aloe et al. (2013) examined sixteen previous studies indicating that teachers who struggle with self-efficacy may experience emotional exhaustion and depersonalization. They lowered personal accomplishment, which negatively influences their classroom management self-efficacy (CMSE). Yet, some ways teachers can reduce stress are resilience, the confidence in the skill, and organization, all of which can improve self-efficacy. For that reason, self-efficacy is a protective factor against burnout.

One of the themes of Robert Frost's poem, "The Road Not Taken," is how a person's selection processes determine that person's path in the woods, and each choice leads that person

farther down that path to another choice, then another, and so on. Selection processes involve choices in activities and environments that determine one's path in life (Bandura, 1994). People are partly the products of their surroundings because their environment affects how people behave. By choosing their environment, they can have a certain amount of control over what they can become. An example of this is a person's choice in a career path and how successful that person is in that field. The person hopes to make the best choices for their future path, teachers included. With high self-efficacy, the teacher may see greater rewards through improving the quality of education and student achievement (Cansoy & Parlor, 2018).

Theory of Motivation

Maslow's (1943) Theory of Motivation was introduced after extensive observation and experimentation, and the theory posited that a hierarchy of individual needs determines an organism's behavior. He defines motivation as the result of an individual's attempt to satisfy each level of needs on the hierarchy. As an individual meets each of these needs, motivation will increase. As motivation increases, the individual can begin to focus on higher levels of the hierarchy, such as love needs, esteem needs, and finally, self-actualization.

Maslow (1943) discussed that "man is a perpetually wanting animal" (p.395). Maslow described how, once a person's physiological needs are met, they focus on safety needs, including job security, career advancement, and better pay. Once an individual's safety needs have been satisfactorily completed, they can advance to the third level, which involves love and belonging. If an individual is fortunate, they will have a safety net of friends and loved ones to satisfy their social needs. Maslow described his fourth level of need as esteem. People need a stable and firm evaluation of themselves through such traits as self-respect and confidence. Achievement, reputation, and prestige are external factors that reaffirm one's level of esteem.

Satisfying these needs increases a person's feeling of self-confidence and worth, ultimately increasing one's self-esteem. Maslow detailed his highest level as self-actualization or self-fulfillment. At this level, an individual is motivated to achieve greater success and recognize the full potential in all aspects of one's life.

In 1982, Weller evaluated Maslow's hierarchy of needs and the hierarchy's direct applications to teachers' needs in his much-referenced study on teacher retention. Weller (1982) believed that Maslow's needs helped principals provide their teachers and staff with a positive school climate that fosters development and learning. A positive school climate attributes are diversity and inclusion; physical safety; a supportive academic, disciplinary, and physical environment; mutual respect and trust; and parental involvement. As a follow-up to Weller's study, Fisher and Royster (2016) evaluated Maslow's hierarchy in their study, but the study was explicitly limited to mathematics teachers' needs. However, based on the responses from the participants, Fisher and Royster were able to develop a hierarchy of teachers' needs that resembles Maslow's hierarchy and can be applied to educational settings. Teachers who participated in a burnout and teacher stress survey conducted by Fisher (2011) were further interviewed in a qualitative format to evaluate their perceptions of job demands, resources, and sources of stress.

Furthermore, their coping skills were evaluated and scored. Teacher responses from this survey were used to compare to Maslow's original hierarchy (Fisher & Royster, 2016). Maslow's hierarchy matched these needs with the original, Subsistence-Physiological, Security-Safety, Association-Love and Belonging, Respect-Esteem, Self-Actualization-Self-Actualization.

Fisher and Royster (2016) classified their teacher hierarchy to align with how teachers managed and thrived within their teaching profession. Subsistence (Maslow's physiological

stage) described teachers in the early stages of their careers. This stage consists of important basic needs, such as professional development, pedagogy courses, taking a nap, and even remembering to work out. Maslow's safety stage equates to that of security for teachers. Teachers need a clean and safe work environment, free of hazards, adequate lighting, and appropriately heated or cooled environment. Having inadequacies in this stage increases stress levels and makes teachers feel dissatisfied with their workplace. Association (Maslow's love and belonging stage) evaluates the sense of belonging that teachers perceive with others in their profession. Although this can include people outside of the building where a teacher works, it primarily focuses on principals and other teachers. This sense of belonging decreases feelings of isolation and increases the enthusiasm teachers feel in the workplace. Maslow's esteem stage equates to that respect for teachers. Teachers want to feel respected, not just by students but also by peers and administrators. Teachers who have reached this level feel respected by others and typically have additional awards and specializations. Fisher and Royster's study also highlighted the need for more than humans think and to obtain self-actualization. Similar to Maslow's early comments on self-actualization, this stage is ambiguous in the teaching profession. However, Fisher and Royster described this as the pinnacle of a teacher's career where they know that what they offer the profession is essential and makes a difference.

Although Fisher and Royster's 2016 study was limited to mathematics teachers, they discovered that teachers collectively agreed their administrators were necessary for achieving satisfaction at all levels of the teacher hierarchy. Teachers' motivation influences their self-esteem and teaching behaviors, including their instructional behavior and enthusiasm for their job (Keller et al., 2016; Richards et al., 2018). Teachers are often perceived as the most influential factor in student success (Day et al., 2016; Leithwood et al., 2019). A teacher's level

of motivation influences innovative behavior and how to use motivation to deal with changes within their job (Klaeijsen et al., 2018). Teachers who experience a low level of motivation will begin to struggle with issues, such as classroom discipline and declines in student academic performance (Zee & Koomen, 2016). When teachers struggle with self-esteem, it will also negatively affect students' self-esteem. Teachers must be focused on the unconditional teaching of all students, and to accomplish this, teachers must be role models for their students. As principals are the leaders in their school, teachers are the leaders in their classroom. Students respond to that energy when they observe a teacher's positive or negative reactions, attitudes, and emotions during instruction.

While Maslow's popular hierarchy of needs is commonly taught and applied to many areas of life as a straightforward motivational tool used in leadership, it is not without its detractors. Rutledge (2011) argued that Maslow's model ignored the social connection needed at every hierarchy level. Rutledge contended that fulfilling all needs is not possible without social connection and collaboration with others, and therefore without that connection, there is no survival. Moreover, Rutledge claimed that peoples' lives are not an organized hierarchy; their lives are more like a set of divergent paths we must take to meet our diverse psychological needs dependent on social connection. Rutledge recognized that needs are a driving force behind many decisions, influencing motivation; however, she also acknowledged that life is messier and more overlapping. Human needs cannot be assigned simple tiers before moving to the next tier.

This study will focus on how principals can increase their teachers' efficacy and motivation. By understanding what behavior influences motivation and efficacy, principals can improve teachers' work environments and increase their effectiveness in the classroom, thus improving student performance. Understanding these theories is the framework of this study, and

the results of this study could potentially advance an understanding of how these theories apply to education, influencing external factors within a school.

Theory of Transformational Leadership

Burns (1978) receives credit for Transformational and Transactional Leadership Theories. Although his theories are more applicable to business and politics, both have roots in education. Burns defined transformational leadership as behaviors exhibited when leaders inspire followers to achieve exceptional outcomes and develop positive leadership skills. Burns understood that, in transformational leadership, leaders must engage with others and bring one another to a higher level of motivation. Burns postulated that transformational leaders want their followers to grow and meet their needs by empowering them to change. Yet, Burns felt that followers must have a certain amount of idol or hero-worship for leaders to be influential.

In contrast to transformational leaders, transactional leaders use reward systems to ensure compliance (Burns, 1978). Transactional leaders focus on efficient management and complying with an organization's rules and policies (Bass & Riggio, 2006; Eyal & Roth, 2010). These types of leaders maintain tight control by recurrently checking subordinates' progress and quality of work. Under transactional leadership, subordinates are not typically expected to think innovatively and are monitored based on predetermined criteria, and they cannot deviate from the standard operating procedures (Bass & Riggio, 2006). Teachers may use this type of leadership for varying degrees of success in the classroom, such as requiring students to complete assignments on set due dates and rewarding those students who do well with good grades and recognition. However, teachers who work under such controlling practices like transactional leadership ultimately perform out of controlled motivation, which can cause burnout (Eyal & Roth, 2011).

Bass and Riggio (2006) and Leithwood and Sun (2012) further built on these ideas to create an understanding of transformational leadership that is more applicable to the educational setting and more in line with Kouzes and Posner's (2011) model of leadership. Bass and Riggio (2006) developed four main components of transformational leadership, (a) idealized influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration, all of which represent the refinement and conceptualization of Burns' original theory. Leithwood and Sun (2012) brought awareness to the complexity of transformational leadership, further expanding these components into twelve behaviors, (a) shared vision, (b) high-performance expectations, (c) individualized support, (d) intellectual stimulation, (e) modeling key values, (f) strengthening school culture, (g) building structures to enable collaboration, (h) engaging parents and community members, (i) instructional development, (j) contingent reward, and (k) management by exception.

Bass and Riggio (2006) defined transformational leaders as those who inspire followers to commit to a shared vision and goals for an organization, those who challenge followers to be innovative problem solvers, and those who develop followers' leadership capacity via coaching and mentoring. Transformational leaders are role models, gaining their followers' respect, admiration, and trust, effectively using these four main components. The first component, idealized influence, deals with behaviors that allow leaders to serve as role models. These behaviors include persistence, determination, and extraordinary capabilities, making followers feel that they can overcome any obstacle. The second component, inspirational motivation, deals with behaviors that make their followers feel that they have meaning in their work and are challenged positively in the work environment. These behaviors can be characterized by team spirit, making followers feel enthusiasm and optimism. Leaders give their followers a compelling

vision of the future of which they are excited to be a part. The third component, intellectual stimulation, deals with behaviors that the leader exhibits to cultivate innovative and creative environments. Leaders must develop environments where creativity is encouraged, and followers are encouraged to question assumptions, reframe problems, and look at situations in new ways. The fourth component, individualized consideration, involves behaviors that cultivate the skills of their followers. These include growing workers, often acting as a coach or mentor. Increasing the level of potential in one's followers involves recognizing individual characteristics and having personalized interactions with those around the leader. By providing direction and exercising influence, followers of a transformational leader will emulate their high ethical and moral standards, inspiring them to achieve higher goals. Transformational leaders help stimulate creativity and innovation by encouraging new ideas and approaches. A critical method in achieving this is how transformational leaders acknowledge the goals and growth of their followers. Through continual acceptance, praise, and consideration of their followers, transformational leaders can inspire and support those around them.

Leithwood and Sun (2012) recognized that principals who demonstrate transformational leadership practices have better student learning, engagement, and teacher commitment. Leithwood and Sun's 2012 study evaluated 79 studies of transformational school leadership and determined key behaviors described in various transformational leadership studies. Leithwood & Sun characterized their eleven transformational behaviors as:

- **Shared Vision.** A shared vision must be identified, developed, and articulated by the leader to the followers. Teachers can be motivated by this challenging but achievable vision.

- High-performance expectations. Leaders must hold staff to a high standard, both professionalism and performance.
- Individualized support. Leaders need to listen to individual needs and act as coaches or mentors to staff members.
- Intellectual stimulation. Leaders must establish practices that challenge staff and allow them to think creatively and carry out their tasks more effectively.
- Modeling key values. Administrators must demonstrate a willingness to “walk the talk.” Administrators must be willing to change their practices because of new understandings or circumstances.
- Strengthening school culture. Administrators must create a cohesive school culture in which practices promote an atmosphere of caring and trust.
- Building structures to enable collaboration. Leaders enable staff to make decisions about collaboration and professional growth.
- Engaging parents and community members. Parents and other community members have a stake in the school building, and leaders encourage outside involvement in the learning process.
- Instructional development. Leaders focus on improving the instructional program.
- Contingent reward. Leaders reward staff for completion of agreed-upon work.
- Management by exception. Leaders monitor performance and interact with staff whose performance has deviated from the expectation.

Of the eleven categories, several were described under other leadership styles ranging from transactional to laissez-faire. Leithwood and Sun’s study determined that, with so many variables, there should be more attention paid to the impact of specific leadership practices and

less to the specific models. This conclusion has led to redefining effective leadership and evaluating other leadership behaviors.

Kouzes and Posner (2003, 2012) further refined these four components and eleven behavioral characteristics to define the Leadership Practices Inventory, which focuses on essential practices. They created five practices of effective leadership. These practices included (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

Leaders have to “model the way” (Kouzes & Posner, 2003, p. 43) to want followers to behave, believe, and think. Modeling includes clarifying their values, standing up for their beliefs, and representing themselves accordingly. Kouzes and Posner (2003, 2012) asserted that, for leadership to be effective, leaders must be willing to say the words to reaffirm their beliefs, and they must be ready to set an example in their daily behaviors and actions. This behavior reflects Bass and Riggio's (2016) idealized influence in which leaders behave as role models and Leithwood and Sun's (2012) characteristic of modeling key values. Before principals and other leaders can be credible examples for others to follow, they must find their voice and present their followers with a genuine expression of who they are (Kouzes & Posner, 2012). To make leadership decisions that align with one's identity and core values, a leader must find their authentic self. Effectively modeling this behavior requires a great deal of self-reflection and self-awareness. It requires exposing one's vulnerability, which can be challenging for some leaders who associate vulnerabilities with weaknesses. However, when leaders are willing to discuss their vulnerabilities, they acknowledge their humanity, which allows them to connect with others.

“Inspiring a shared vision” (Kouzes & Posner, 2003, p. ??) is the realization of a principal’s vision of the future and the way that they want to breathe life into an organization. A principal must take this vision and share it with the school; this includes collectively discussing it with teachers, receiving their feedback (Cansoy & Parlar, 2018; Day et al., 2016; Leithwood & Jantzi, 2008; Castro-Silva et al., 2017). A shared vision helps to specify the integral role each person plays within the school system (Castro-Silva et al., 2017). Teachers who have a clear idea of leadership goals are more likely to buy into the organizational plan. More importantly, teachers can develop emotional attachments to a successful leader’s goals when they have a shared vision with the administration (Leithwood & Jantzi, 2008). The idea of “inspiring a shared vision” (Kouzes & Posner, 2003, p. ??) reflects Bass and Riggio's (2006) idea of inspirational motivation in which leaders get their followers to envision the future and the changes needed. Similarly, Leithwood and Sun (2012) described a shared vision in which teachers are motivated and challenged by a singular achievable vision. In other words, a principal's passion becomes the teachers’ passion.

Principals are expected to “challenge the process” (Kouzes & Posner, 2003, p. ??) when they receive demands for change which can come from both internal sources (students, faculty, and staff) and external sources (parents, school board, and community), seemingly contradictory at times. When the pressures to provide the highest quality and most meaningful educational experience become overwhelming, a principal may mistakenly sacrifice opportunities that offer new ideas. This idea falls under Bass and Riggio’s (2006) description of intellectual stimulation. Leaders must challenge their followers to look at problems from many different angles. Leithwood and Sun (2012) had several characteristics that fall under the umbrella of challenging the process, including engaging parents and community members to have insight and

involvement in the school building, instructional development, which focuses on the improvement of the instructional programs, and high-performance expectations in which followers have a high performance and professional standard that they must meet. For example, a principal may use a faculty meeting only to convey information rather than open up a dialogue or invite discussion regarding salient topics, including enhancing instructional practices.

Kouzes and Posner (2003, 2012) described true leaders as those who recognize that they are not on a journey by themselves, and they must rely on team effort built on a solid foundation of mutual trust and dignity. Leaders must “enable others to act” (Kouzes & Posner, 2003, p. ??) through group collaboration and individual accountability to accomplish this. In other words, leaders must encourage group members to contribute ideas that can be shared collectively within the organization. By focusing on non-threatening environments where leaders and followers understand they are working collectively, a leader can foster trust and collaboration between everyone (Kouzes & Posner, 2003, 2012). Similarly, Bass and Riggio (2006) characterized these behaviors as inspirational motivation in which followers are encouraged to try new ideas to reach the desired goals. Leithwood and Sun (2012) described intellectual stimulation as how staff can think creatively and build environments that enable collaboration, sharing in professional peer growth.

According to Kouzes and Posner (2003, 2012), people may feel exhausted or frustrated when asked to push themselves beyond their comfort zone. Still, leaders must “encourage the heart” (Kouzes & Posner, 2003, p. ??) to uplift their followers and continue nudging them toward their shared goals (Kouzes & Posner, 2003, 2012). For instance, when a leader acknowledges efforts and accomplishments, followers feel supported and motivated to continue (Kouzes & Posner, 2012). Because a group cannot succeed without individual contributions, leaders need to

recognize individual and group contributions in words and actions (Kouzes & Posner, 2003). School principals can show their teachers appreciation through actions by giving face-to-face feedback instead of using emails, regularly visiting their classrooms, and simply listening and asking questions. Bass and Riggio (2006) described individualized consideration in which leaders pay special attention to their follower's needs for achievement and growth, stepping in to act as coaches and mentors. Leithwood and Sun (2012) shared the idea of mentors when they described individualized support in which leaders listen to individual needs and act as coaches.

This research will focus on the specific transformational leadership behaviors identified in the leadership practices and how self-efficacy and motivation influence teachers. Using this model to study leadership can potentially advance an understanding of principal and teacher interactions. Included is how these interactions relate to the theories of self-efficacy and motivation.

Related Literature

Principal Leadership

The functions and successes of a school are driven by the parental, community, and state concerns. The focus of this concern is often the school's leadership, expressly the principal, who must learn to designate leadership roles to lessen the burden and create a succession pipeline with peer, district, and community support (Jambo & Hongde, 2020). This concern has resulted in the development and study of many leadership strategies and styles. For instance, Pietsch and Tulowitzki (2017) empirically compared instructional and transformational leadership styles. They concluded that no singular leadership style for principals has been proven to be most effective; instead, core leadership practices of successful principals have proven to be most effective. Pietsch and Tulowitzki further explained that this core was more in line with these

behaviors (a) setting directions, (b) developing people, and (c) redesigning the organization. These behaviors align closest with the transformational leadership approach and Kouzes and Posner's five practices of exemplary leadership.

Principals knowledgeable in effective instructional practices can facilitate learning with teachers and increase teacher pedagogical knowledge through support and collaboration (Goddard et al., 2015). Effective leadership requires exhibiting certain leadership behaviors through demonstrated efforts to inspire optimism, action, and collaborative culture (Cansoy & Parlar, 2018; Leithwood & Jantzi, 2008; Wirawan et al., 2018). Principals' actions are influenced by their values, focuses, and purposes, with these actions motivating others (Agasisti et al., 2018). Additionally, these actions should coexist with necessary operational decisions to create an effective principal (Agasisti et al., 2018; Cansoy & Parlar, 2018; Jambo & Hongde, 2020).

Principal and Teacher Relationships

When evaluating student achievement, school climate has been a strong influencer (Hitt & Tucker, 2016; Maxwell et al., 2017). Tschannen-Moran and Gareis (2004) described principals as the agents of change who can influence school reform. Castro-Silva et al. (2017) collected data from 234 Portuguese middle and secondary schools teachers to measure school climate and strong leadership. Using a combined approach of linear and multiple regression tests with variables of emotional and informational support and support for professional development, they concluded that school climates are dependent on strong leadership. Principals can positively influence school climate, and a principal's support can motivate teachers' involvement in collaboration (Goddard et al., 2015). Castro-Silva et al. (2017) defined school climate as social-emotional safety, principal-teacher relationships, teacher-teacher relationships, teacher collaboration, and quality of teaching. Tschannen-Moran and Barr (2004) stated that these

aspects are related to staff members' collective and individual self-efficacy. The study conducted by Castro-Silva et al. (2017) is limited to Portuguese middle and secondary school teachers. Still, their results have been referenced in studies of mainstream U.S. schools with similar results used in this study.

In another study, Eyal and Roth (2010) examined how leadership styles affect followers' motivation, both autonomous and controlled, using Self-Determination Theory (SDT). SDT theorizes that people are driven by three psychological needs: competence (feelings of effectiveness and confidence in achieving goals), connection (trusting relationships), and autonomy (personal freedom in thoughts and actions), which stems from Maslow's theory of motivation. Although not the only factor contributing to the satisfaction of these three needs, teachers' style of engaging students is one of the most important. For Eyal and Roth's study, questionnaires were completed by 122 Israeli teachers. The results of their research suggested that leadership styles among school principals play a significant role in teachers' motivation, including student and teacher performance and wellbeing. However, when states and districts limit principals' authority in schools, principals may fall back on transactional leadership, which relies on controlled motivation and is detrimental to teachers' autonomous motivation.

Castro-Silva et al. (2017) discussed the social characteristics of the school climate, such as principal leadership, peer relationships, and school culture, and the effects these characteristics have on teachers' satisfaction. Teachers' perceptions of encouragement and support, mainly within the interpersonal environment, had a higher likelihood of increased interactions and increases in collaborative practices. Teachers' relationships with those who support their work in the classroom, such as colleagues and administrators, heavily affect a teacher's sense of belonging and job satisfaction. Peer collaboration helps teachers develop

skills, enable feedback, and strengthen relationships with each other. Furthermore, teachers are more likely to thrive when principals collaborate with them, allow them a sense of autonomy, and assign them leadership roles for professional development. The most dedicated and talented teachers can struggle in a school culture that lacks emotional and informational support. Improving school climate through specific actions of the principal to increase motivation and teacher collective efficacy is the focus of this study.

Principals influence students through school organization and culture, as well as teacher behaviors and classroom practices, by creating a non-threatening school climate focused on safety and a collaborative spirit (Day et al., 2016; Leithwood & Jantzi, 2008; Liebowitz & Porter, 2019; Park & Ham, 2014; Özdemir & Yalçın, 2019). Schools that sustained or improved student achievement had principals who focused on shaping the culture and quality of work by increasing teachers' beliefs in themselves and their commitment to excellence (Day et al., 2016). When principals are committed to taking risks and encouraging teachers to undertake complex challenges, teachers' efficacy will improve, enabling them to take on effective leadership roles in their classrooms (Kouzes & Posner, 2012). One of the best ways to cultivate this leadership in teachers is for the principal to model what leadership looks like in action.

School leadership directly affects student achievement, and demonstrated results of successful leadership are markedly greater in at-risk schools, as effective leadership for at-risk students corresponds with research concerning effective leadership at schools in general (Agasisti et al., 2018; Cansoy & Parlar, 2018; Jambo & Hongde, 2020; Liebowitz & Porter, 2019; Park & Ham, 2014; Pietsch & Tulowitzki, 2017; Tan, 2016; Wirawan et al., 2018). Leadership practices also indirectly affect student achievement through a principal's instructional leadership (Leithwood et al., 2020). Principal leadership affects student achievement indirectly

by creating the conditions that support teachers' motivation to teach (Leithwood et al., 2019). In a follow-up study conducted by Leithwood et al. (2020), successful school leadership is only second in importance to classroom teaching and student learning and achievement. Expressly, a principal's indirect leadership positively affects the school's quality of teaching and learning. Leithwood et al. based their study on four sources of evidence: (a) qualitative cases of successful leaders, (b) large-scale quantitative evidence of overall leader effects along with specific leadership practices, (c) research on specific leadership practices that have contributions to student engagement, and (d) the adverse effects of principal succession on student achievement.

Self-Efficacy

Individuals' self-efficacy influences their motivation to set goals, expend effort, persevere, and overcome failure (Bandura, 1977, 1994; Leithwood & Jantzi, 2008; Maslow, 1943). Tschannen-Moran and Gareis (2004) showed principals with high levels of self-efficacy are persistent in pursuing goals, adapting to environmental conditions to achieve them. In contrast, principals with low self-efficacy are less likely to adapt, often rigidly persisting in their original course of action. Within a school, individual and collective self-efficacy is related to the belief that faculty, staff, and administrators can positively influence student achievement (Cansoy & Parlar, 2018). Principals are influenced by their internal thoughts, beliefs, and environments, including interactions with other individuals (Tschannen-Moran & Gareis, 2004). Teachers and students are motivated when they see themselves as part of a team working together productively because of a shared sense of responsibility (Goddard et al., 2015).

Tschannen-Moran and Barr (2004) discussed collective teacher efficacy and student achievement by comparing teacher self-efficacy and collective self-efficacy. These two types affect one another because teachers' self-efficacy can be raised or lowered based on collective

self-efficacy and vice versa. Teachers with high self-efficacy show more zeal for teaching and have a more positive attitude toward education; this includes their attitudes and beliefs toward their instructional practices. Additionally, teachers with high self-efficacy also continually collaborate and work on instructional improvement to meet the needs of their students (Goddard et al., 2015). For example, interactive instruction has proven beneficial because it focuses more on student learning than rigid instructional compliance. This type of learning motivates students to be more engaged and control their learning, strengthening their self-efficacy. At the same time, teachers carefully manage classroom behavior to maintain a positive learning environment. As a result, teachers' self-efficacy also improves because they see the merit of their hard work and spend less time on behavioral issues (Bandura, 1997). Teachers with high self-efficacy interact with their students and exhibit their increased persistence toward excellence (Zee & Koomen, 2016). Moreover, teachers with higher self-efficacy often feel more capable of implementing effective instructional practices in the classroom (Zee & Koomen, 2016). This self-efficacy makes teachers more likely to try new methods to help struggling students.

High collective self-efficacy means that teachers are willing to work interdependently and coordinate instructional, motivational, and interpersonal aspects (Tschannen-Moran & Gareis, 2004). Additionally, teachers with high self-efficacy and those working in environments with high collective self-efficacy demonstrate the following three strategies that positively influence student achievement: (a) challenging goals with effective feedback, (b) high levels of planning and organization, and (c) setting the same high educational standards for all students in a class, school, or education system. Moreover, collective self-efficacy can foster student achievement (Cansoy & Parlar, 2018; Goddard et al., 2015; Leithwood & Jantzi, 2008; Park et al., 2018). Tschannen-Moran and Barr (2004) examined the relationship between collective

teacher efficacy and the achievement of middle school students in the Commonwealth of Virginia, as measured by the Standards of Learning (SOL) Tests. The study results showed higher student achievement in the 66 middle schools surveyed in schools where teachers have higher collective efficacy. The mutual relationships between student achievement on the math, writing, and English SOL tests indicated that students who score well on one SOL test would most likely do well on the other subject tests. In highly effective schools, teachers are motivated to set challenging guidelines and provide highly professional instruction to believe that all students can achieve academic goals regardless of socioeconomic status, ability, or family background (Bandura, 1997). This type of reciprocal motivation between teachers and students fosters collective efficacy (Tschannen-Moran & Gareis, 2004).

Increasing self-efficacy increases teacher confidence and collaboration (Cansoy & Parlar, 2018; Goddard et al., 2015). As teachers collaborate, they build trust in other skills, thus positively increasing collective efficacy. Principals play an essential role in self-efficacy beliefs (Cansoy & Parlar, 2018; Sehgal et al., 2017). Principals can influence teacher self-efficacy by modeling behaviors during discussions with teachers (Cansoy & Parlar, 2018; Goddard et al., 2015; Leithwood & Jantzi, 2008). By focusing on individual teachers and their self-efficacy, the collective efficacy of the school will increase. For instance, principals who discuss future decisions and solicit individual teacher input involve teachers and increase their feelings of competency (Cansoy & Parlar, 2018; Jambo & Hongde, 2020; Sun & Leithwood, 2015). Self and collective efficacy can positively influence school climate and teacher perceptions (Cansoy & Parlar, 2018). Additionally, a teacher's affinity and commitment to a school when actively involved in its shared goals and decision-making processes positively influence the school climate (Tschannen-Moran & Barr, 2004).

Motivation

Motivation is the energizing force for goal-oriented behaviors and beliefs that compels individuals to take action (Pietsch & Tulowitzki, 2017). Effective leaders improve a school's climate and culture by motivating staff through collaborative efforts and by making sure the basic needs of the staff are being met in a safe, evidence-based instructional environment (Holmes & Parker, 2018; Özdemir & Yalçın, 2019; Park et al., 2018; Park & Ham, 2014; Pietsch & Tulowitzki, 2017). For instance, principals can motivate teachers by prioritizing their need for love/belonging and self-esteem. According to Maslow (1943), individuals' need for love includes a sense of belonging to groups or environments where they develop meaningful relationships. An individual's self-esteem is often dependent on how others react to them through verbal and nonverbal communication and on how a person builds a reputation. Teachers are motivated by their esteem needs, and these needs can be satisfied through their principal's respect, appreciation, and recognition.

Furthermore, Klaijnsen et al. (2018) stated that motivation influences teachers' innovation and professional development. Like Eyal and Roth (2010), their study used Self-Determination Theory (SDT) to address teacher motivation and basic psychological need satisfaction. The study was administered in an online survey from 2,385 teachers in primary, secondary, and vocational schools limited to the Netherlands. A clear correlation was found between motivation and self-efficacy and their influences on teachers' innovative behavior, such as introducing new ideas to their school (Klaijnsen et al., 2018). The study did have limitations. The results are based on teachers' self-reports and only focus on a few psychological constructs without considering school leadership and the generalization of its findings. Overall, Klaijnsen et

al.'s study shed light on basic psychological need satisfaction as a predictor of intrinsic motivation and self-efficacy.

On the other hand, Sakiz et al. (2019) focus on the connection between school leadership and teacher motivation and self-efficacy, specifically how teachers perceive their principal's leadership effectiveness. The study consisted of two questionnaires totaling 651 teachers surveyed in Turkey. Quantitative data analyzed through descriptive and inferential statistics found that the relationship between teacher self-efficacy, including efficacy in student engagement, instructional strategies, and classroom management, and their perceptions of their principal's leadership capabilities, were significant, as principals have the power to model behavior that influences the school climate and encourages positive attitudes, beliefs, and school practices (Sakiz et al., 2019).

Internally, people are motivated to decrease perceived and desired performance (Leithwood & Jantzi, 2008). By emphasizing the development of quality teachers and teaching, principals can help reduce this gap (Day et al., 2016; Jambo & Hongde, 2020). Studies by Gess-Newsome et al. (2019), Keller et al. (2016), and Sorge et al. (2019) showed that pedagogical content knowledge positively influences student achievement. For instance, Gess-Newsome et al. (2019) measured pedagogical content knowledge (PCK) and its influence on student achievement. They studied two-year professional development intervention and its impact, analyzed teacher variables to validate professional knowledge, and examined how teachers' professional knowledge related to quality classroom experiences. Principals can ensure teachers expand their professional knowledge through positive and frequent collaboration, with collaboration improving the school climate by advancing quality instruction (Castro-Silva et al., 2017; Park & Ham, 2014).

Teachers' needs can also be influenced by the principal's verbal and nonverbal responses. One aspect of effective leadership is self-awareness of one's verbal and nonverbal communication cues to convey clear and supportive messages. Principals can also show encouragement by using empathetic language to influence teacher effort in a non-threatening environment (Holmes & Parker, 2018). Empathetic language demonstrates a conscious concern for other people through kind words and body language, often reflecting what is being said to demonstrate mutual understanding. Principals can use empathetic language to build rapport and trust with employees. In a 2020 study, the Center for Creative Leadership (CCL), a leadership development organization, analyzed data from 6,731 managers in 38 countries to determine if empathy can influence job performance. They found that empathy has a positive influence on job performance. The CCL determined that leaders rated as empathetic were also rated as high-performing (CCL, 2021). According to the CCL, ways that leaders can demonstrate empathy are by (a) recognizing signs of burnout, (b) demonstrating sincere interest in employees' needs, hopes, and dreams, (c) demonstrating a willingness to help an employee with personal issues, (d) and showing compassion for an employee's loss. When principals demonstrate empathy and compassion for their employees' needs, they also demonstrate emotional intelligence and leadership effectiveness (Holmes & Parker, 2018).

Behaviors Exhibited by the Principal

Core leadership characteristics that principals exhibit are often perceived as effective behaviors. These behaviors have been identified as those that focus on individual teachers, collaborative groups, and the school as a whole (Pietsch & Tulowitzki, 2017). Collaboration is linked with student achievement and overall school improvement. Principals who advocate cooperative learning among faculty members will likely improve the school's overall quality of

instruction, as teachers of diverse backgrounds share their knowledge regarding instructional theories, methods, and processes for teaching (Goddard et al., 2015). High levels of collective efficacy have been observed at schools where leaders exhibit a focus on Kouzes and Posner's Five Practices of Exemplary Leadership: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart (Cansoy & Parlar, 2018; Day et al., 2016; Goddard et al., 2015). When sharing goals and working toward improvements, principals who use effective communication and motivating language demonstrate their behavioral integrity and credibility, achieving their desired results in all areas while reducing staff stress and misconceptions (Holmes & Parker, 2018).

Model the Way

To reinforce the idea of Kouzes and Posner's Modeling the Way (2012), Murphy (2020) assessed leaders' effectiveness by surveying 21,008 employees. The study found that roughly 20% of employees felt that their leader openly shared the challenges they were facing, and 21% of employees said they felt that their leader was never open about challenges. Although sharing vulnerabilities is part of modeling behavior, leaders are often uncomfortable doing this because they do not wish to be perceived as weak. However, according to Kouzes and Posner (2012), the opposite holds: Building trust occurs when a leader is willing to open up to show vulnerability. Trust in others is needed before a leader can expect others to trust them. Since high levels of performance only comes from trust and willingness to collaborate, trust in one another is vital (Kouzes & Posner, 2012)

Bass and Riggio (2006) and Burns (1978) described a leader's desired behaviors by using idealized influence, which refers to how leaders must behave as role models and in a manner that their followers can emulate. Specific traits of idealized influence include persistence,

determination, and engaging in high moral and ethical conduct levels. In their 3-year mixed-methods national study, Day et al. (2016) sought to determine the association between principals' effective behaviors, student examination outcomes, and assessment results at twenty primary and secondary schools in England. Day et al. defined principals' effective behaviors as positive values that include compassion, integrity, fairness, and a love of lifelong learning. These leadership behaviors are critical factors when evaluating student outcomes. According to Day et al., by combining transformational and instructional leadership strategies, successful principals, directly and indirectly, achieved and sustained improvement. In other words, by emphasizing their effective behaviors, principals cultivated in teachers and students their shared values, beliefs, and attitudes, which improved student academic performance. Furthermore, the study showed that student outcomes were not directly the result of leadership style; instead, they resulted from the principal's understanding of the school's needs and the articulation of their educational values.

Inspire Shared Vision

Shared visions also increase collective efficacy, which is the shared belief that, by working together, everyone in the organization can make a positive difference to the school climate (Cansoy & Parlar, 2018). Leaders can accomplish this by developing and achieving goals that matter to everyone through collaborative processes and mutual operating principles. A shared vision should be a continual focus of the principal (Hitt & Tucker, 2016). It should be a regular part of their communications, through conversations with teachers regarding changes needed or status updates to evaluate the progress within the school.

Kouzes and Posner (2003, 2012) stated that followers must envision the leader's goals. Effective leaders can imagine their desired outcome, and then they enlist others, inspiring a

shared vision. By persuading their followers and enlisting support, leaders can use their aspirations to create a common end goal, including pathways to achieving this goal. However, it is not enough for a leader to have futuristic goals. A leader has to clarify their vision, which will require the leader to be self-aware, self-reflective, and willing to expose vulnerabilities (Ackerman, 2020). For example, a principal can learn a good deal about their teachers' needs, wants, challenges, and concerns by simply being present and listening deeply because the best leaders are also the best listeners.

To help leaders in formulating their vision and the message that it will convey to their followers, Kouzes and Posner (2012) posed four questions that leaders should ask themselves:

1. What is your prominent message?
2. What is your recurring theme?
3. What idea, feeling, aspiration, or concern grabs hold of you and will not let you go?
4. What do you most want people to envision every time they think about the future? (p. 106)

A shared vision should have a clear theme or message to generate mutual excitement among leaders and followers working towards a common purpose (Kouzes & Posner, 2012). Sharing a clear message is not always an easy task, but successful leaders are visionaries who remain optimistic and committed. Leaders begin with their end goals in mind. By having a shared vision that includes all stakeholders, leaders can take pride in inspiring followers to be emotionally invested as they strive to achieve the desired goals.

To be effective, a principal has a clear vision, enlists teachers, parents, and students in creating that vision, and encourages them to work together in making that vision happen. Sun

and Leithwood (2012) expounded on effective leadership practices in their meta-analysis of transformational school leadership (TSL) research conducted over 14 years, and they arrived at four conclusions regarding the nature of TSL and its effects on student achievement based on the study:

- Most TSL studies on student achievement have been based on narrow conceptions of TSL that do not recognize organizational contexts.
- Some TSL practices are more advantageous to student achievement than others.
- Even narrowly designed TSL models have shown small but meaningful improvements in student achievement.
- Studies that used indirect designs had mixed results.

Although this meta-analysis recognized other leadership practices, one of the essential practices was improving the instructional program, which includes (a) planning and supervising instruction, (b) instructional support, (c) monitoring of school progress, and (d) limiting distractors.

By proactively supporting teachers' instructional efforts, such as making any necessary modifications to their instructional methods and materials, principals are bolstering teachers' efficacy in their classroom leadership roles. Principals also strengthen teacher efficacy by encouraging and providing opportunities for professional development to improve teachers' instructional skills. Under a shared vision of student academic success that does not compromise academic standards, principals are improving instruction by enabling teachers to teach at their best, in turn, allowing students to learn at their utmost (Agasisti et al., 2018; Day et al., 2016).

Challenge the Process

Good leaders embrace change. To do this, Kouzes and Posner (2003, 2012) believed that leaders must be willing to “challenge the process,” or the status quo, if they expect their followers to embrace change. When leaders realize that something is not working, they formulate a solution to the problem, enlisting others to take the initiative and execute the desired outcome . They never stop experimenting and taking risks. Leaders must be willing to venture out and continually search for opportunities to innovate, grow, and improve (Kouzes & Posner, 2003). Through these continual efforts for improvement, leaders can encourage followers to do the same. They make it possible for followers to try, fail, learn, and try again.

Successful principals, as transformational leaders in schools, motivate teachers and students to change by modeling integrity and fairness, setting clear goals, having high expectations, and providing support and recognition. Specifically, transformational leaders exhibit four different practices: (a) idealized influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration (Bass & Riggio, 2006).

Classroom instruction must be effective to produce positive student outcomes. To achieve this, leaders must be knowledgeable about effective instructional practices (Goddard et al., 2015; Leithwood & Jantzi, 2008; Tan, 2016). Principals who possess this knowledge can facilitate learning and increase teachers’ pedagogical knowledge (Goddard et al., 2015). Effective leaders also need to provide a support system that promotes instructional improvement specific to the shared vision of professional development (Goddard et al., 2015; Leithwood & Jantzi, 2008). That provides time for these improvements to take shape. Additionally, solid instructional strategies should focus on all teachers and be a part of the shared vision (Cansoy & Parlar, 2018; Goddard et al., 2015; Leithwood & Jantzi, 2008). Cansoy and Parlar (2018) found significant connections between “school principals’ instructional leadership behaviors, teacher self-efficacy,

and collective teacher efficacy" when surveying 427 teachers working in elementary, middle, and high schools in Turkey (p.550). Principals can accomplish these significant and positive relationships between themselves and their teachers through increasing opportunities for teacher collaboration around instructional improvement. To improve teacher self-efficacy and collective teacher efficacy, principals with effective instructional leadership behaviors are always looking for ways to improve the school climate through growth and innovation, which can only happen when they challenge the process with a solid commitment to change.

Enable Others to Act

The social interactions in a school climate may include teachers with students, teachers with other teachers, teachers with parents, and all of these groups with the principal. Because school principals have more power in social exchanges with teachers, they influence teacher interactions and incredibly collaborative attempts (Lockton, 2019). High-achieving school principals who maintain a delicate balance of power when interacting with their staff use supportive, empathetic, and precise language (Holmes & Parker, 2018). Supportive and compassionate language helps principals build relationships with faculty and staff. A principal's practical communication skills can improve the school climate of collaboration, self-efficacy, and motivation.

Effective principals ascertain what their teachers need to do their job (Kouzes & Posner, 2012). They build a collaborative team focused on a common purpose and mutual respect . Specifically, the principals use instructional leadership to build a team with the common sense of improving teaching quality in the classroom (Pietsch & Tulowitzki, 2017). Strong collaborative communities, where teachers are empowered, have been shown to positively influence teacher perceptions (Sanchez et al., 2020). Principals can enable teachers to act by balancing teachers'

autonomy with effective collaboration (Park & Ham, 2014). Widespread and frequent collaboration is necessary for school improvement (Park & Ham, 2014; Pietsch & Tulowitzki, 2017). According to Richards et al. (2018), professional development and other forms of collaboration can be used to build trusting relationships with colleagues and increase the general school climate, promoting teacher positivity and decreasing stress.

Trust and teamwork must be high priorities if a leader wants to motivate and strengthen followers to act (Kouzes & Posner, 2012). If a principal seeks to enable teachers to take more responsibility and ownership in a shared vision, the principal leads the way and models this behavior for their teachers. An effective principal can establish this trust and motivate teachers to work enthusiastically in independent roles while keeping in mind the shared vision. When principals assign teachers independent positions to use their judgment, they prove their confidence in their teachers' capabilities. Enabling teachers in cooperative behavior requires a principal to demonstrate that teachers accomplish something they would not achieve independently, and working together makes their accomplishments possible. In the end, a principal does not only reward teachers' efforts. The principal rewards teachers' collaborative hard work because the principal and teachers understand that an individual could not have achieved the group's shared goal.

Encourage the Heart

Principals who take a positive approach when dealing with faculty changes foster improvement by creating a supportive environment (Cansoy & Parlar, 2018). For instance, if teachers do not feel competent regarding changes, they can be guided by those who have more professional experience, which can help them feel more capable and productive as part of a group and receptive to feedback. School leaders, such as principals and department heads, can

build a positive school climate by encouraging and helping teachers to overcome difficulties and engendering a strong sense of purpose (Cansoy & Parlar, 2018; Özdemir & Yalçın, 2019). High-achieving schools have principals who encourage discussion from staff on instructional issues, forms of collaboration, and administrative issues (Tan, 2016). Principals can also foster individual and collective efficacy by including teachers in the decision-making process where appropriate (Cansoy & Parlar, 2018).

A school's success should not focus solely on academic effectiveness; it should define success in broader terms (Cansoy & Parlar, 2018; Day et al., 2016). Principals need to focus on student learning but consider that several variables collectively influence the end goal. Student success is achieved when teachers create synergy across several variables (Day et al., 2016). Synergy in education can identify areas of weakness, leading to practical solutions under a shared vision. Principals can ensure the requisite synergy in the school among a school's parents, teachers, and policymakers who labor to improve education. Variables to create a synergy that should be considered are shared values and norms, high-quality instruction and using data to improve instruction, professional development, access to necessary resources, and creating positive relationships among teachers, students, parents, and the community. Schools with a high rate of academic success focus on all of these variables (Cansoy & Parlar, 2018).

While principals aim for a synergistic collaboration in their schools, they also encourage the heart when recognizing individual teachers' contributions (Kouzes & Posner, 2012). Not all teachers are alike, and a one-size-fits-all approach makes principal actions feel forced or thoughtless. When individuals know that their leaders took time out of their day to seek them out and personally thank or reward them, this personalization encourages the heart and improves self-efficacy. For principals to undertake this kind of personalized recognition, they must get

close to their teachers. Principals must take an active interest in their teachers' lives and encourage teachers to think about situations or act in ways that come naturally (Llopis, 2014). This spirit of appreciation can set the tone for each new school year, encouraging faculty members to keep growing and improving.

Leadership Practices Inventory in Action

Kouzes and Posner (2012) found that exceptional leaders exhibit practices covering all five areas of Leadership Practices. Similar studies in education show influential leaders have characteristics that fall in all five areas (Sanchez et al., 2020). This 2020 study not only examined previous studies but also used the LPI to survey 401 high school teachers and their perceptions of their principal's leadership practices. The LPI was scored using Kouzes and Posner's instrument instructions. Sanchez et al. found some linear relationships between all subscales of the LPI and teacher perceptions of school climate and morale. This study did find that school climate had the strongest correlation with teachers who perceived their principals as modeling the way, and principals who challenged the process had teachers who perceived the supportive environments. Sanchez et al. concluded that teachers' perceptions of leadership practices indicate how important the principal's support of teachers is and how it is established through effective leadership practices as supported by the LPI.

Tie Between Leadership Practice Inventory and Transformational Leadership

When focusing on leadership, the effectiveness of different leadership styles is often the focus. However, leadership is not about the title or the power; it is about what the leader does and brings about greatness (Kouzes & Posner, 2012). Comparable to Burns's (1978) and Bass and Riggio's (2006) definitions of transformational leadership, Kouzes and Posner (2012) examined how leaders could positively influence their followers through behavior. Kouzes and

Posner believed that leadership is not about personality but the leader's behavior. Leithwood & Sun's (2016) study supported the idea that behavior had a more significant influence. Kouzes and Posner (2003) identified this as setting the personal example and behaving to demonstrate and reinforce the values a leader wants to see in others.

Transformational leadership is when a leader can inspire others, create innovative problem solvers, and develop others' leadership capabilities (Bass & Riggio, 2006). To lead in this manner, one must look inward and focus on personal behaviors (Kouzes & Posner, 2012). Additionally, the LPI framework is consistent with (a) idealized leadership, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration, all of which are identified as critical components of transformational leadership (Bass & Riggio, 2006). The Leadership Practices Inventory focuses on practices that provide the groundwork for leaders to become influential leaders through self-assessment and feedback (Posner, 2016).

Summary

Principal leadership has been a continual focus within education. Researchers have sought to understand how principals can influence student achievement. Researchers have extensively examined types of leadership and found a fixed leadership style is not singularly effective. Instead, research has sought to identify key behaviors that indirectly influence student achievement by positively affecting the school climate (Hitt & Tucker, 2016; Maxwell et al., 2017). The key behaviors identified impact school climate are known as The Five Practices of Exemplary Leadership: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

CHAPTER THREE: METHODS

Numerous studies have evaluated school leadership in terms of leadership styles and their influences on teacher satisfaction. Still, they have not effectively agreed on those styles nor focused on specific areas that improve teacher satisfaction. This study intends to fill that gap. This study seeks to determine if a relationship exists between teacher motivation and self-efficacy and five specific leadership behaviors that emerged as crucial skills in previous studies. These behaviors are (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. This chapter will discuss the research design, research questions and hypothesis, participants and setting, instrumentation, procedures, and data analysis. Chapter Three will fully outline the methodology for this research study.

Design

This study used a quantitative, predictive correlational design. Correlational research is non-experimental research in which two variables will be measured to determine if a statistical relationship exists between them (Jhangiani et al., 2019). This correlational study was used to determine if a statistical relationship exists between the perceptions of certain principal behaviors and teacher motivation and self-efficacy. A correlational design was chosen for this research because the researcher sought to evaluate the extent of the relationship between teacher perceptions of administrator's behaviors and how these perceived behaviors influence a teacher's motivation and self-efficacy. A cross-sectional design was used; therefore, teaching staff was surveyed one time. This method was used because the researcher did not manipulate the principal or the staff; therefore, a longitudinal study was unnecessary.

The predictor variables studied was the five behaviors exhibited by the principal, including the following behaviors, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart (Kouzes & Posner, 2003).

These variables are defined as:

- **Model the Way.** Behavior in which leaders are willing to walk the talk (do what they say they will do) and follow through on their values.
- **Inspire a Shared Vision.** Behavior in which leaders have a vision of the exciting and enabling future.
- **Challenge the Process.** Behavior in which leaders seek innovative ways to change, grow, plan, and improve others and themselves.
- **Enable others to Act.** Behavior in which collaboration is promoted and others are strengthened by knowing they are a vital part of the environment.
- **Encourage the Heart.** Behavior in which leaders encourage others to carry on and recognize individuals' efforts, celebrating their work and victories.

Motivation and self-efficacy were the two criterion variables studied because they influence student achievement, resulting in an individual's attempts to satisfy levels of need (Maslow, 1943). Specifically, the need to satisfy feelings of association, respect, and self-actualization (Fisher & Royster, 2016). Teacher motivation is the intrinsic factor that influences their teaching behaviors, including their instructional behavior and enthusiasm (Keller et al., 2016). Self-efficacy, or a teacher's belief in their successes as a teacher, will influence the effort they expend, the amount of time a person will invest in their perseverance, and their resilience to failure (Bandura, 1977, 1994; Leithwood & Jantzi, 2008).

Research Questions

RQ1: How accurately can teacher motivation be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart?

RQ2: How accurately can teacher self-efficacy be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart?

Hypotheses

H₀₁: There is no statistically significant predictive relationship between teacher motivation and the linear combination of predictor variables ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

H₀₂: There is no statistically significant predictive relationship between teacher self-efficacy and the linear combination of predictor variables ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

Participants and Setting

The participants for the study were drawn from the First District RESA. Within this district, 37 high schools consisted of approximately 148 administrators and 1,948 teachers. These school districts are located in South Georgia, heavily influenced by commercial businesses, including Gulfstream Aerospace, a large private and corporate jets manufacturer. The Port of Savannah employs over 400,000 people and represents nine percent of the entire state's employment. This region can be further separated into two counties, which would reduce the high schools to 5, but still include 482 certified teachers. The target schools had faculty consisting of 162 males and 320 females. This population consisted of 4 Asian, 84 Black, 12

Hispanic, 6 Multiracial, 2 Native American, and 374 White teachers, as gathered by the Governor's Office of Student Achievement (GOSA, 2021). A convenience sample of certified teachers in these five high schools was used during the spring of the 2021-2022 school year. Upon approval at both the district and school level, teachers from each of the 5 high schools located within these South Georgia counties were contacted via email requesting voluntary participation in the electronic survey. Email addresses were compiled using the most recent teacher directory for each high school found on each school's website.

For this study, the number of participants sampled was 78. This number exceeded the required minimum for a multiple regression when assuming a medium effect size with a statistical power of .7 and alpha level, $\alpha = .05$ (Gall et al., 2007). *A priori* power analysis for a multiple regression analysis required a minimum of 69 participants.

The researcher developed four demographic questions to obtain gender, ethnicity, teaching experience, and school setting. This information will ensure that the sample size reflects the population of the chosen systems' high school teachers. Additionally, teaching experience data was included to ensure that any teachers in their first year of teaching are removed from the data analyzed. These teachers were removed to ensure that surveyed teachers had experience and interactions with the high school principals. Data regarding the school setting included a single question that identified the county in which the teacher responding was currently employed. This information was only gathered to satisfy school districts' requests that they receive county-specific survey results.

Each county's respective Board of Education (BOE) has a specific review approval process to research within their school system. During the application process, each county was made aware that school-specific information and teacher-specific data (names or other

identifying information) were not gathered, merely county identifiers to provide the requested county-specific data. Additionally, both counties required their specific county data to be provided to the BOE upon completion of the study, including a copy of the final research paper. The sample demographic included 15 Male and 63 Female, which was further evaluated to include 2 Asian, 14 Black, 4 Hispanic, 3 Multiracial, 00 Native American, and 55 White teachers as self-reported in the survey, representing both counties surveyed. Those who responded were 5 teachers with 1-2 years of teaching experience, 11 teachers with 3-5 years teaching experience, 10 teachers with 6-10 years teaching experience, 11 teachers with 11-15 years teaching experience, 15 teachers with 16-20 years teaching experience, and 26 teachers with 21 or more years teaching experience.

Instrumentation

The three survey instruments utilized in this study were the Leadership Practices Inventory (LPI) (Kouzes & Posner, 2003), The Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), and the Teacher Motivation & Job Satisfaction Survey (TMJSS) (Mertler, 1992). Collectively this included 92 questions, four of which were demographic questions. Survey Monkey estimated the completion time for all questions, including demographic questions, to be 6-7 minutes. Following is a description of each instrument.

The Leadership Practices Inventory

Leadership Practices Inventory (LPI) (Kouzes & Posner, 2003) consisted of 30 questions regarding leadership behaviors. The purpose of this instrument was to measure what teachers considered as perceived leadership characteristics in their principal. Although Kouzes and Posner had developed an additional tool for administrators to self-reflect, this study will not use it.

Kouzes and Posner developed the LPI to use feedback to build leaders and improve leadership. The tool was used in numerous studies, such as Knab (2009) & Sanchez et al. (2020).

As cited in Posner (2016), nearly 2.8 million respondent data and findings in several hundred studies worldwide were evaluated to investigate the reliability and validity of the LPI. Posner's review evaluated empirical validity through further evaluation of four studies using the LPI. These studies involved evaluating the following groups: corporate respondents, managers from a community college, MBA students in several countries, and pastoral staff. All studies revealed that the LPI contains five factors and that all of these behavioral performance measures were mirrored in all areas used.

Additionally, the validity of the LPI was evaluated using face validity. The LPI instrument meets face validity. This is because the questions and responses of the survey are related to the qualitative findings from interviews with leaders, matching comments from leaders and observers on their own leadership experiences (Posner, 2016).

There are two types of respondents to the LPI: Self and Observer. These two groups measured similar reliability, with their Cronbach's alpha scores ranging between 0.810 and 0.922 (Posner, 2016). These studies also evaluated the LPI in different languages and found Cronbach's alpha ranged from 0.930 to 0.994. The internal reliability has been observed to be .93 to .95 of Cronbach's alpha for public high school teachers (Kouzes & Posner, 2021). From the perspective of internal reliability, any instrument with a Cronbach's alpha over 0.60 is considered good, and over 0.80 is considered very strong (Gall et al., 2007); these studies supported the claims of the LPI, therefore giving this survey reasonable validity (Posner, 2016).

The survey's 30 questions are divided evenly between the five leadership styles, having six questions per category. These questions are ranked on a 10-point Likert scale and ask

teachers to evaluate their perceptions of leadership behaviors and characteristics of the principal (or administrators). Kouzes and Posner (2003) instructed participants to respond with this scale: “1= Almost Never, 2= Rarely, 3= Seldom, 4= Once in a While, 5= Occasionally, 6= Sometimes, 7= Fairly Often, 8= Usually, 9= Very Frequently, and 10= Almost Always” (p.4). The total scores range is 30-300, with each of the five subgroups ranging from 6-60. For each subset, scores indicate the frequency in which the behavior is modeled; higher numbers indicate a greater frequency in which behavior is perceived. Respondents are asked to use the rating scale and answer the question, “How frequently does this person engage in the behavior described?” regarding the 30 behavior statements that follow (Kouzes & Posner, 2017). Upon completing the surveys, the researcher used the company-provided hand scoring guides. The Wiley Corporation granted permission to use the LPI, which is included in Appendix A

The Teacher’s Sense of Efficacy Scale

Tschannen-Moran and Woolfolk Hoy (2001) developed the Teacher Self-Efficacy Scale (TSES). The purpose of this instrument is to measure respondents' self-efficacy concerning their teaching and abilities. As discussed previously, Bandura’s theory of self-efficacy was used as a basis to describe self-efficacy. An updated survey by Bandura for teachers exists, but the “reliability and validity information has not been made available” (Tschannen-Moran & Woolfolk Hoy, 2001, p.791). Therefore, the TSES Short Form was chosen for this study. This scale was developed to measure teacher self-efficacy and its influence on commitment, persistence, and retention. This study chose the short form to be respectful of respondents’ time. A factor analysis exists on behalf of the developer to further break down efficacy areas into Student Engagement, Instructional Strategies, and Classroom Management (Nie et al., 2012). The short-form scale has an overall reliability of .98, as reported using Cronbach’s Alpha

(Tschannen-Moran & Woolfolk Hoy, 2001). In the validation study, the researchers conducted three studies that aimed to support their research. The third study supported good construct validity through its comparison to the General Teacher Efficacy survey ($r=.64, p<0.01$). Additionally, follow-up studies by Heneman et al. (2006) and Nie et al. (2012) supported the good construct validity of this measure, especially the short form.

The short form consists of 12 questions and uses a nine-point Likert scale. The questions ask teachers, “how much or to what extent can you...” and then provide a range for 1=None at all, 3=Very Little, 5=Some Degree, 7=Quite A Bit, 9=A Great Deal with “in the middle numbers” existing between these five options. The range of total scores is 24-216 and includes the subcategories of efficacy in student engagement, instructional practices, and classroom management. Permission for the use of this instrument was obtained. (See Appendix B).

The Teacher Motivation & Job Satisfaction Survey

The purpose of the Teacher Motivation and Job Satisfaction Survey (TMJSS) (Mertler, 2002) is to measure intrinsic and extrinsic job satisfaction factors. Mertler conducted a pilot study (1992) to test the validity and reliability of the test questions. Mertler subsequently modified his questions and removed ones that were deemed unnecessary. Subsequent studies refined the TMJSS, and in 2002, Mertler conducted a final study establishing content validity. The TMJSS scale has an overall reliability of .876, as reported using Cronbach’s Alpha (Mertler, 2002). This survey has a total of 34 questions, including five general questions. These questions ask surveyors to rank their satisfaction with their job, their belief in their fellow teachers’ satisfaction, their likelihood to choose a different career if given the opportunity, their idea that teachers are motivated, and if they believe they work with unmotivated teachers. The other 29 questions use a Likert six-point scale ranging from Highly Motivating to Highly Unmotivating,

with 1= Highly Unmotivating and 6= Highly Motivating, and are split between incentives to motivate and aspects that serve as motivating. The range of total scores is 28-168. Permission for the use of this instrument was obtained. (See Appendix C).

Procedures

The researcher obtained permission to conduct this study through Liberty University's Institutional Review Board (IRB); see Appendix D for the approval letter. Before conducting research, approval was obtained from all counties surveyed. All counties identified as counties A and B have individual approval measures.

After receiving approval, the researcher sent an introduction email to every high school principal, including the letter of approval from the coordinating school board. See Appendix E for the participant consent form. This email allowed the researcher to introduce herself and discuss the purpose of the surveys, providing the administrator with an opportunity to review the study. See Appendix F for the email to principals. The survey and the means to collect this data was discussed with the principal. Once the principal was informed, the researcher asked the principal to alert the faculty that they will receive this survey and convey the county's approval to complete it.

This study used the Survey Monkey platform to collect survey responses. This format allowed the survey to be conducted electronically and anonymously. Teachers received an email introducing the researcher, briefly discussing the research, and directions on how to complete the survey, including the link. Teachers were reminded that this survey was voluntary and confidential. All identifiers, such as email addresses or names, were not requested or recorded through Survey Monkey, ensuring that results remained confidential. Participation was voluntary, and teachers gave their implied consent when they completed the survey

independently and electronically. Consent (see Appendix E) and contact information for the researcher was provided on the first page of the survey. Once teachers navigated past the consent page, they had a page consisting of four demographic questions regarding gender, ethnicity, teaching experience, and school setting. The survey instruments, LPI, TSES, and TMJSS, were presented on individual pages using their respective Likert scale. Participants could close the window and withdraw consent at any time without penalty.

Survey completion time was estimated at 6-7 minutes of the respondents' time. Survey responses were automatically recorded on the survey website and was then accessed by the researcher. The survey window was open for three weeks. After that timeframe, responses were evaluated for the number of responses to ensure an adequate number of responses, and if necessary, the window was extended. If more respondents were needed, the researcher sent a follow-up email encouraging participation in the survey.

Once all surveys were completed, access to the survey was ended, and available data was downloaded. All data gathered was stored on the researcher's home computer with a personal password and pin protection. This additional level of protection ensured that the data was secured and confidential. If any information is printed, it was secured in a filing cabinet under lock and key at the researcher's office. The researcher's Google Drive has additional password protections, and data was only stored there through the length of the survey. Currently, only compiled data of all schools, not specific schools or teacher personal information, was collected, and was only collected at the request of participating Boards of Education.

Data Analysis

Data was collected and recorded in an Excel program to allow the researcher to further separate data into the leadership practices: (a) model the way, (b) inspire a shared vision, (c)

challenge the process, (d) enable others to act, and (e) encourage the heart as well as teacher self-efficacy and motivation. Data was collected via Survey Monkey, which ensured that all questions were answered. This method helped ensure that no questions or sections were skipped. IBM's Statistical Package for the Social Sciences (SPSS) version 26 software was used to analyze the data collected by the researcher.

The researcher conducted a multiple linear regression analysis to examine the predictive relationship between the criterion variable teacher self-efficacy and the predictor variables leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. Multiple regression is used when a researcher seeks to examine the predictive relationship between a set of predictor variables for a single criterion variable (Gall et al., 2007). The criterion and predictor variables were measured on a continuous scale.

Additionally, the researcher conducted a multiple linear regression analysis to examine the predictive relationship between the criterion variable teacher motivation and the predictor variables leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. Multiple linear regression is the most appropriate test due to two or more predictor variables, and the criterion variable is measured on a continuous scale (Gall et al., 2007).

Data was visually screened for missing information and inaccurate entries. A scatterplot was used to examine the assumptions of bivariate normal distribution and linearity. A Variance Inflation Factor Test was conducted to ensure the absence of multicollinearity between teacher motivation and self-efficacy (Warner, 2013). For multiple regression analysis, R^2 showed a medium effect size if r^2 is $\geq .13$. Standards require an alpha level of 0.05 and a confidence level

of 95% since two multiple regressions were conducted. The use of this alpha kept the likelihood of a type I and type II error low (Gall et al., 2007). Due to two tests of significance being run, a Bonferroni correction was needed to guard against type I error. The alpha level was calculated to be $0.05/2 = .025$, rounded to .03 (Warner, 2013).

CHAPTER FOUR: FINDINGS

Overview

This quantitative, predictive correlational design tested how transformational leadership influences high school teachers' self-efficacy and motivation. The predictor variables were five perceived principal leadership behaviors identified in this study as (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. The criterion variables were teacher motivation and self-efficacy.

Chapter Four includes the sample population, results of the survey, data analysis, and a summary of the study results. A multiple linear regression analysis was conducted to analyze the predictive relationship between the criterion variable teacher motivation and the predictor variables leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

Research Questions

RQ1: How accurately can teacher motivation be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart?

RQ2: How accurately can teacher self-efficacy be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart?

Null Hypotheses

H₀₁: There is no statistically significant predictive relationship between teacher motivation and the linear combination of predictor variables ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart).

H₀₂: There is no statistically significant predictive relationship between teacher self-efficacy and the linear combination of predictor variables ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart).

Data Screening

The researcher sorted the data and scanned for inconsistencies in each variable, missing information, and inaccurate entries. No data errors or inconsistencies were identified. A matrix scatter plot was used to detect bivariate outliers between the predictor variables for leadership behaviors ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart), and criterion variables teacher motivation and efficacy. No outliers were identified. See Figures 1 and 2 for the motivation and efficacy matrix scatter plots.

Figure 1

Matrix Scatter Plot Motivation

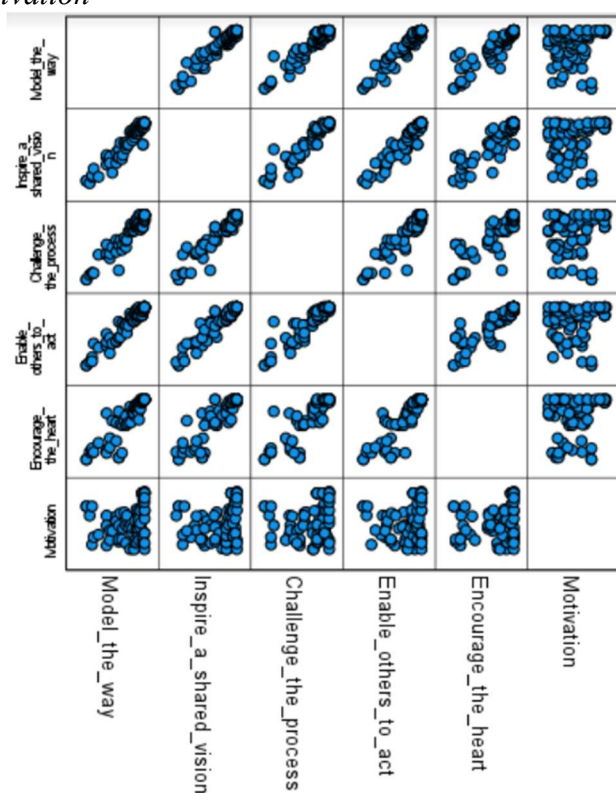
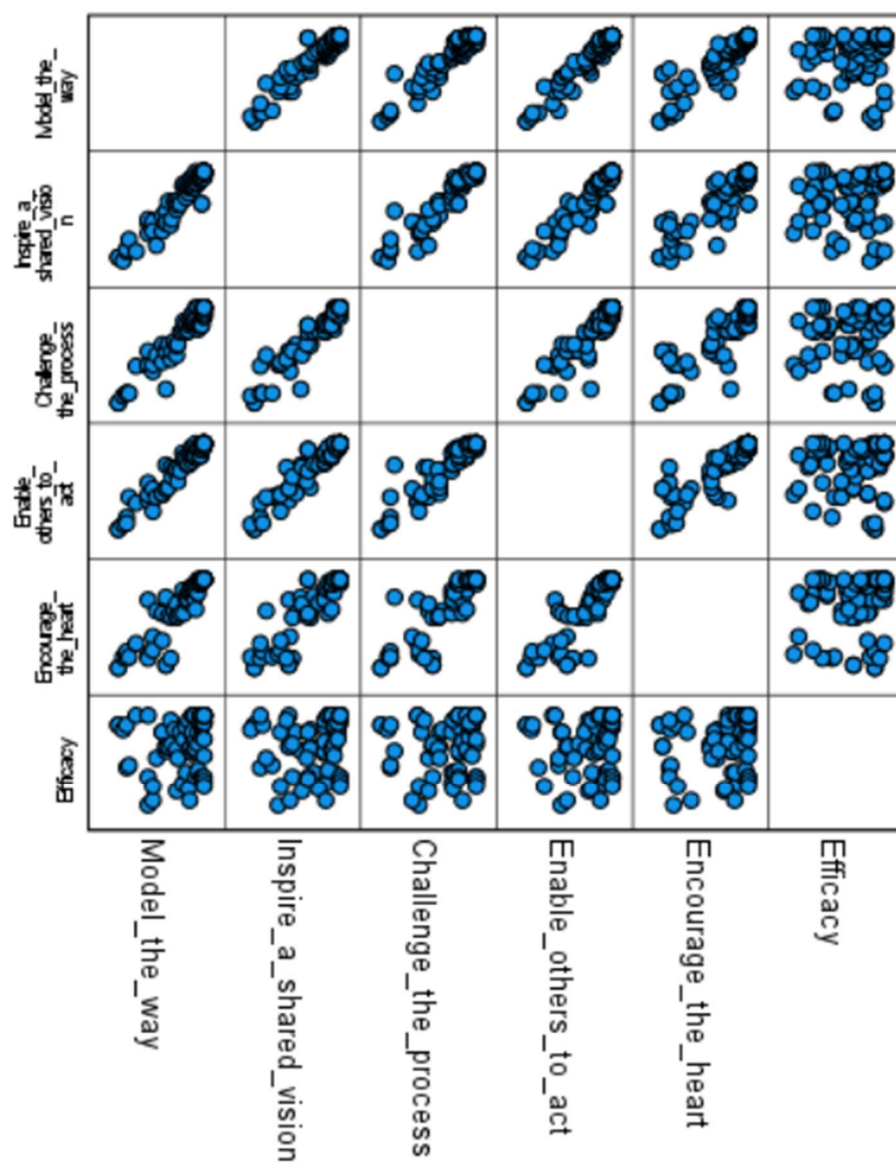


Figure 2

Matrix Scatter Plot Efficacy



Descriptive Statistics

Descriptive statistics were obtained on each of the variables. The sample population included 482 certified teachers. The target schools had faculty consisting of 162 males and 320

females. This population consisted of 4 Asian, 84 Black, 12 Hispanic, 6 Multiracial, 2 Native American, and 374 White teachers, as gathered by the Governor's Office of Student Achievement (GOSA, 2021). Seventy-eight participants responded to the survey. However, teachers with 1-2 years of teaching experience were removed from the data analysis. The final sample consisted of 73 certified public high school teachers, and these were used in the study analysis. Most of the sample consisted of women ($n = 59$, 80.8%) and white respondents ($n = 52$, 71.2%). The survey population demographics included 14 Male, and 59 Females, which was further evaluated to include 2 Asian, 12 Black, 4 Hispanic, 3 Multiracial, 0 Native American, and 52 White teachers as self-reported in the survey and represented both counties surveyed. These numbers are similar to the sample population for this region. However, Asian (2.7%), Multiracial (4.1%), and Hispanic (5.5%) were slightly higher than the sample population. This can be attributed to the small numbers in the sample population, and, therefore, the percentages are easily skewed by any respondents. Teaching experiences of the population used included 11 teachers with 3-5 years of teaching experience, 10 teachers with 6-10 years of teaching experience, 11 teachers with 11-15 years of teaching experience, 15 teachers with 16-20 years of teaching experience, and 26 teachers with 21 or more years teaching experience.

Scores on the survey ranged from 1 to 10 for the leadership behavior variables, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart, 1 to 9 for teacher efficacy, and 1 to 6 for teacher motivation. For leadership behaviors, scores close to 10 indicated that leaders "almost always" exhibited leadership traits, and close to 1 indicated a frequency of "almost never." The teacher efficacy scale rated the influence teachers had over situations, with a score of 9 indicating "a great deal" of influence and 1 as an ability to do "nothing." The teacher motivation scale scored 6 as "highly motivating" and

1 as “highly UNmotivating.” The descriptive statistics to determine the mean and standard deviation for each variable (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, (e) encourage the heart, motivation, and efficacy can be found on Table 1. The results of the analysis were as follows: model the way ($M = 8.14$, $SD = 2.06$), inspire a shared vision ($M = 7.87$, $SD = 2.20$), challenge the process ($M = 8.00$, $SD = 1.96$), enable others to act ($M = 8.14$, $SD = 2.03$), encourage the heart ($M = 8.17$, $SD = 2.12$), efficacy ($M = 7.76$, $SD = 1.10$), and motivation ($M = 4.54$, $SD = 0.78$).

Table 1

Descriptive Statistics

	<i>N</i>	Min.	Max.	<i>M</i>	<i>SD</i>
Model_the_way	73	2.80	10.00	8.14	2.06
Inspire_a_shared_vision	73	2.50	10.00	7.87	2.20
Challenge_the_process	73	3.00	10.00	8.00	1.96
Enable_others_to_act	73	2.80	10.00	8.14	2.03
Encourage_the_heart	73	3.50	10.00	8.17	2.12
Efficacy	73	5.20	9.00	7.76	1.10
Motivation	73	3.32	6.00	4.54	0.78
Valid <i>n</i> (listwise)	73				

Results of Cronbach’s alpha for the researcher’s survey were .916, which suggests very strong internal reliability. From the perspective of internal reliability, any instrument with a Cronbach’s alpha over 0.60 is considered good, and over 0.80 is considered very strong (Gall et al., 2007).

Assumption Testing

Assumption of Linearity

The multiple linear regression requires that the assumption of linearity be met. Linearity was examined using a scatter plot. The predictor variables (x); (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart and the criterion variable of (y) teacher motivation. The assumption of linearity was met. These results are displayed in Figure 1.

A scatterplot was used to examine the assumption of bivariate normal distribution and linearity. The predictor variables (x); (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart and the criterion variable of (y) teacher efficacy. These are displayed in Figure 2 and demonstrate that the assumption of bivariate outliers was met.

Assumption of Bivariate Normal Distribution

The multiple linear regression requires that the assumption of bivariate normal distribution be met. The assumption of bivariate normal distribution was examined using a scatter plot. The assumption of bivariate normal distribution was met. See Figures 1 and 2 for the matrix scatterplot.

Assumption of Multicollinearity

A Variance Inflation Factor (VIF) and a Tolerance test were run to ensure the absence of multicollinearity. A Variance Inflation Factor (VIF) and a Tolerance test were run on these two variables and are shown in Table 2. Tolerance measures are between 0.001 to 1.00, and coefficients that are close to one are considered to show an absence of multicollinearity (Warner, 2013). The VIF score was 1.00 for the variables teacher motivation and self-efficacy and

suggested an absence of multicollinearity because this value is well below 10. This analysis shows that there is an absence of multicollinearity between hypotheses one and two.

Table 2

Variance Inflation Test for Efficacy and Motivation

Variable	Tolerance	VIF
1 Efficacy	1.000	1.000

a. Dependent Variable: Motivation

Results Null Hypotheses One

A multiple linear regression was conducted to predict teacher motivation based on five perceived principal leadership behaviors (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. The researcher rejected the null hypothesis at the 95% confidence level, where $F(5, 67) = 4.475, p = 0.001$. There was a statistical relationship between the predictor variables: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart) and the criterion variable (teacher motivation). Table 3 provides the regression model results.

Table 3*Regression Model Results for H₀₁*

Model		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
1	Regression	11.096	5	2.219	4.475	.001 ^b
	Residual	33.225	67	.496		
	Total	44.320	72			

a. Dependent Variable: Motivation

b. Predictors: (Constant), Encourage_the_heart, Challenge_the_process, Enable_others_to_act, Inspire_a_shared_vision, Model_the_way

The model had a medium effect size where $R = 0.500$. Furthermore, $R^2 = 0.250$ indicates that the linear combination of predictor variables can explain approximately 25% of the variance of teacher motivation. Table 4 provides a summary of the model.

Table 4*Multiple Regression Model summary for H₀₁*

Model	<i>R</i>	<i>R</i> ²	<i>Adjusted R</i> ²	<i>SEM</i>
1	.500 ^a	.250	.194	.704

a. Predictors: (Constant), Encourage_the_heart, Challenge_the_process, Enable_others_to_act, Inspire_a_shared_vision, Model_the_way

Because the researcher rejected the null, an analysis of coefficients was required. Based on the coefficients, it was found that inspire a shared vision where $p = 0.005$ and enable others to act where $p < 0.001$ were the best predictors of teacher motivation. Table 5 provides the coefficients.

Table 5*Coefficients*

		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
Model		<i>B</i>	<i>SE</i>	<i>B</i>		
1	(Constant)	4.568	.383		11.913	<.001
	Model the way	.356	.200	.937	1.782	.079
	Inspire a shared vision	.448	.153	1.256	2.929	.005
	Challenge the process	-.244	.153	-.611	-1.601	.114
	Enable others to act	-.664	.170	-1.719	-3.900	<.001
	Encourage the heart	.110	.094	.297	1.170	.246

a. Dependent Variable: Motivation

Results Null Hypotheses Two

A multiple linear regression was conducted to predict teacher efficacy based on five perceived principal leadership behaviors: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. The researcher failed to reject the null hypothesis at the 95% confidence level, where $F(5, 67) = 1.089$, $p = 0.375$. There was not a statistical relationship between the predictor variables: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart) and the criterion variable (efficacy). Table 6 provides the regression model results.

Table 6*Regression Model Results for H₀₂*

Model		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>
1	Regression	6.551	5	1.310	1.089	.375 ^b
	Residual	80.637	67	1.204		
	Total	87.187	72			

a. Dependent Variable: Efficacy

b. Predictors: (Constant), Encourage_the_heart, Challenge_the_process, Enable_others_to_act, Inspire_a_shared_vision, Model_the_way

The model had a small effect size, $R = 0.274$. Furthermore, $R^2 = 0.075$ indicates that the linear combination of predictor variables can explain approximately 7.5% of the variance in teachers' efficacy. Table 7 provides a summary of the model.

Table 7*Multiple Summary for H₀₂*

Model	Model			
	<i>R</i> ²	<i>R</i>	<i>Adjusted R</i> ²	<i>SEM</i>
1	.075 ^a	.274	.006	1.09706

a. Predictors: (Constant), Encourage_the_heart, Challenge_the_process, Enable_others_to_act, Inspire_a_shared_vision, Model_the_way

Because the researcher failed to reject the null, an analysis of coefficients was required. Based on the coefficients, it was found that no variables had a p value below .05. Table 8 provides the coefficients.

Table 8*Coefficients*

		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
Model		<i>B</i>	<i>SE</i>	<i>B</i>		
1	(Constant)	<i>7.534</i>	<i>.597</i>		12.614	<.001
	Model the way	<i>.114</i>	<i>.312</i>	<i>.214</i>	<i>.366</i>	<i>.716</i>
	Inspire a shared vision	<i>.306</i>	<i>.238</i>	<i>.611</i>	<i>1.283</i>	<i>.204</i>
	Challenge the process	<i>-.011</i>	<i>.238</i>	<i>-.019</i>	<i>-.046</i>	<i>.964</i>
	Enable others to act	<i>-.482</i>	<i>.265</i>	<i>-.890</i>	<i>-1.818</i>	<i>.074</i>
	Encourage the heart	<i>.111</i>	<i>.146</i>	<i>.213</i>	<i>.756</i>	<i>.452</i>

a. Dependent Variable: Self-efficacy

CHAPTER FIVE: CONCLUSIONS

Overview

This study sought to determine if a relationship existed between the leadership behaviors (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart and teacher motivation and efficacy. Around 8% of teachers move schools every year, and 8.3% of high school teachers leave the teaching profession (NCES, 2019). Twenty-three percent of these movers and leavers cite school factors as why they left a certain school. The purpose of this predictive correlation study focused on leadership behaviors and how they influenced teacher motivation and efficacy. In this study, the criterion variables were teacher motivation and efficacy, and the predictive variables were the five principal leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. This chapter explores the study's results and contains conclusions and how it relates to the literature about the theoretical constructs of this study. This chapter also includes the implications, limitations, and suggestions for future research.

Discussion

This quantitative, predictive correlational design aimed to test how transformational leadership influences high school teachers' self-efficacy and motivation. The researcher sent an email to 482 teachers within the sample population with directions and links to the survey. Overall, 78 teachers responded, and 73 responses were used for an overall 16.2% participation rate in the research study. In addition to the questions of the three instruments, participants of this study were also asked demographic questions related to their county of employment, ethnicity, gender, and years of teaching experience.

The survey contained three validated and reliable instruments, including the Leadership Practices Inventory (LPI) (Kouzes & Posner, 2003), The Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), and the Teacher Motivation & Job Satisfaction Survey (TMJSS) (Mertler, 1992). Correlations between leadership behaviors, as identified in the LPI, and teacher efficacy, as identified in the TSES, and correlations between leadership behaviors, as identified in the LPI, including teacher motivation, as identified in the TMJSS, were researched in this study. The relationships between the variables in the study were analyzed by conducting a multiple regression analysis using SPSS version 26.

This study was framed by Maslow's (1943) Theory of Motivation and Bandura's (1994) Theory of Self-Efficacy. Maslow focused on the order of needs that a person must satisfy before moving toward the ultimate level of self-fulfillment. This theory was appropriate for this study in that, beyond basic needs, teachers seek love and belonging and wish to have their self-esteem validated through prestige and reputation. School administrators can influence such feelings through their praise, treatment, and general behaviors toward teachers in the work environment. When using Maslow's hierarchy to evaluate teacher motivation, school administrators must fulfill teachers' love, belonging, and esteem needs to ensure effective teachers. Bandura's (1994) Theory of Self-efficacy focused on four ways in which teachers' self-efficacy improved. This theory was appropriate for this study because all four levels, mastery, vicarious experiences, social persuasion, and emotional state, can be influenced by school administrators. When using Bandura's theory to evaluate teacher self-efficacy, school administrators must provide ways to positively influence teachers at all four levels.

Null Hypothesis One

The first research question for this study asked: How accurately can teacher motivation be predicted by their perception of their principal's leadership practices: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart? The first null hypothesis stated: There is no statistically significant predictive relationship between teacher motivation and the linear combination of predictor variables ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart). To evaluate the null hypothesis, a multiple regression analysis was conducted. The researcher was able to reject the null hypothesis, $F(5, 67) = 4.475, p = 0.001, R^2 = 0.250$, and the results of this study suggested that there is a statistically significant predictive relationship between teacher motivation and the linear combination of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

According to the data analysis for null hypothesis one, teacher motivation can be influenced by the principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. The survey results indicated a medium effect size (Gall et al., 2007), whereby 25.0% of the variance in teacher motivation is explained by the five identified principal leadership behaviors. This study supports this claim by showing that the five leadership practices identified by Kouzes and Posner (2013) positively explained teachers' motivation. This also supports the research that effective leaders improve school climate and culture by motivating staff (Özdemir & Yalçın, 2019).

When evaluating the importance of a principal's behavior, teacher motivation is a vital consequence of one's actions. Teachers are the most influential factor in student success (Day et

al., 2016; Leithwood et al., 2019). A motivated teacher experiences higher levels of innovation and deals better with daily changes in their job (Klaeijssen et al., 2018). Maslow's (1943) theories focused on need fulfillment as the driving force behind one's motivation. Although his theories evaluated people's lives in a specific hierarchy, in which one cannot move to the other until the previous one is full (Rutledge, 2011), he failed to look at the interactions of other humans and social overlaps. Based on the literature, the LPI reviews that human connection and evaluates how a specific outside person who has power over a teacher influences the fulfillment of their needs and influences their motivation to fulfill their needs through the workplace.

Maslow's (1943) theory of motivation was further expanded into specific school environments through Eyal and Roth's (2010) study, and they described Maslow's highest needs as competence, connection, and autonomy within a classroom setting for teachers. These three higher-level needs are ones that teachers strive to fill within the workplace. Eyal and Roth (2010) and Castro-Silva et al. (2017) specifically evaluated the school climate as an influencer of teacher motivation. By consistently modeling and exhibiting the behaviors as identified by the LPI, principals are meeting teachers' needs. By showing respect, appreciation, and recognition, principals fulfill teachers' esteem needs and motivate them in the workplace (Maslow, 1943).

The LPI had three specific areas that seemed to influence teacher motivation the most, model the way ($p = .079$), inspire a shared vision ($p = .005$), and enable others to act ($p < .001$). To model the way for teachers, principals can share challenges being faced (Murphy, 2020) and behave as role models (Bass and Riggio, 2006), both of which can influence trust and motivation. To inspire a shared vision, principals must continually share the ideas and goals of the school, using constant regular communication (Hitt & Tucker, 2016). Teachers must be brought into the principal's vision so they can share the end goals (Sun & Leithwood, 2012). The

last area with the greatest influence was enable others to act. Principals who balance the power and interact with their staff, allowing teachers to have more responsibility and ownership are building confidence in their teachers and their capabilities (Kouzes & Posner, 2012). All of these behaviors increase teacher motivation through the satisfaction of Maslow's love and esteem needs hierarchy.

Null Hypothesis Two

The second research question for this study asked: How accurately can teacher self-efficacy be predicted by their perception of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart? The second null hypothesis stated: There is no statistically significant predictive relationship between teacher self-efficacy and the linear combination of predictor variables ((a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart). To evaluate the null hypothesis, a multiple regression analysis was conducted. The researcher was unable to reject the null hypothesis, $F(5, 67) = 1.089$, $p = 0.375$, $R^2 = 0.075$, and the results of this study revealed that there is not a significant predictive relationship between teacher efficacy and the linear combination of their principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

According to the data analysis for null hypothesis two, teacher efficacy is not influenced by the principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart. The survey results indicated a small effect size (Gall et al., 2007), whereby 7.5% of the variance in teacher efficacy is explained by the five identified principal leadership behaviors. This study does not support the

claim that Kouzes and Posner (2013) identified the five leadership practices positively explain teachers' motivation. Although this study did not find a statistically significant relationship between teacher efficacy and the combination of principal leadership behaviors, this study will add to the body of literature on teacher efficacy.

Self-efficacy, according to Bandura (1994), has internal and external influences. This research focused on the external influences of principals and certain leadership behaviors—specifically, mastery experiences, vicarious experiences, and social persuasion. Mastery experiences are gained by successfully tackling new challenges (Lopez-Garrido, 2020). Vicarious experiences are a success by others that encourage one to believe that they can experience similar success (Bandura, 1977). Social persuasions are the influences felt by others, typically in the form of feedback.

Previous research led the researcher to believe that these external behaviors tie to the LPI when beginning this research. Initial research supported the researcher's idea that modeling the way is tied to vicarious experiences, challenge the process tied to mastery experiences, and social persuasion tied to encourage the heart. However, results from the study did not support any overlap between teacher motivation and self-efficacy, other than a potential close relationship which enable others to act ($p = .074$). Although research suggests that self-efficacy is influenced by internal and external influences, this research suggested that the leadership practices as described by the LPI does not have a significant influence on teacher self-efficacy. This research believes that behaviors of the principal do influence self-efficacy, but not the ones examined in this study.

Implications

Every year eight percent of teachers move to another school, and another eight percent leave the teaching profession (NCES, 2019). Having roughly 16% teacher turnover per school is a worrisome issue that needs evaluation, especially when 23% of those leavers cite school factors as the reason they are leaving. This study sought to build upon theoretical knowledge of teacher motivation and self-efficacy and to evaluate the effects that principal's leadership practices, (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart have on each.

This study contributes to the literature and research on teacher motivation by supporting the researcher's theory that principal leadership practices influence teacher motivation. Ouellette et al. (2018) noted that principal leadership could lead to the most consistently predicted stress or satisfaction influences reported by teachers. Understanding behaviors that result in positive motivation is especially important. It is also important to note that table 5 showed that different variables had a different influence on motivation. Modeling the way ($p = 0.079$), inspire a shared vision ($p = 0.005$), and enable others to act ($p < 0.001$) had a greater significance than challenge the process ($p = 0.114$), and encourage the heart ($p = 0.246$).

This study contributes to the literature and research on teacher efficacy by not supporting the researcher's theory that a principal's leadership practices can influence teacher efficacy. Bandura (1977) considered how a person's faith in their abilities (self-efficacy) influences their accomplishments. This study supports this theory because teachers' perceptions of a principal's leadership behavior do not influence their faith in their abilities but is not influenced by principal leadership in the work environment. Table 8 showed that different variables had varying influences on efficacy. Enable others to act ($p = 0.074$) was close to a significant influence, with

modeling the way ($p = 0.716$), inspire a shared vision ($p = 0.204$), challenge the process ($p = 0.964$), and encourage the heart ($p = 0.452$) being much less significant.

Limitations

Although this study provides empirical evidence to build upon the theoretical knowledge of teacher motivation and self-efficacy, it does have limitations. A limitation of this study was the sample size. This study was selected based on a convenience sample. There were 78 participants and 73 surveys that could be used from two school systems with five high schools. The research requested and received permission to survey teachers from three school systems. Unfortunately, the third county refused to send out the survey when the time came and was removed from the study. Initially, the research anticipated 100 participants in the survey but was limited to the sample population.

A second limitation is using a cross-sectional design where the data came from a single point in time. Although this survey was timed well before spring break and end of the year testing, the cross-sectional design only tested views at one point in time.

A third limitation is the removal of first-year teachers from the data. A possible bias was discussed and identified as first-year teachers who have not had enough interactions to give accurate measurements of principal leadership behaviors and their influence on their motivation and efficacy.

A fourth limitation is the limitations of correlational designs. Correlational designs can show correlations. However, this does not show causation and cannot be used to identify causal relationships.

Recommendations for Future Research

After a review of the results from this study, the following recommendations are made for further research related to this study.

- Increase the sample size and increase the numbers of high schools surveyed. At the time of this survey, specific research in high school settings was limited.
- This study could split the criterion variables or the predictor variables into multiple studies. Future studies could separate the efficacy and motivation portions of this survey with the LPI or focus on specific leadership practices that showed the most influence. For this survey concerning motivation, model the way ($p = 0.079$), inspire a shared vision ($p = 0.005$), enable others to act ($p < 0.001$), and with respect to efficacy, enable others to act ($p = 0.074$) had the greatest influence. Specifically, focusing on these behaviors may provide further insight into their influence.
- In future research, evaluations of teacher experience levels and their perceptions may also be helpful. Although teacher experience levels were collected, they were only used to remove teachers in their first years of teaching who may not have had enough principal interactions to have true perceptions of their behaviors and how it affects them. Future studies could use these subgroups to evaluate if these subgroups do vary in their perceptions.

REFERENCES

- Ackerman, C. E. (2020, December 21). What is self-efficacy theory in psychology?
PositivePsychology.com. <https://positivepsychology.com/self-efficacy/>.
- Agasisti, T., Bowers, A. J., & Soncin, M. (2018). School principals' leadership types and student achievement in the Italian context: Empirical results from a three-step latent class analysis. *Educational Management Administration & Leadership*, 47(6), 860–886.
<https://doi.org/10.1177/1741143218768577>
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2013). Classroom management SELF-EFFICACY and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26(1), 101–126. <https://doi.org/10.1007/s10648-013-9244-0>
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York, NY: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego, CA: Academic Press, 1998)
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295x.84.2.191>
- Bass, B. M., & Riggio, R. E. (2006). Transformational leadership.
<https://doi.org/10.4324/9781410617095>
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cansoy, R., & Parlar, H. (2018). Examining the relationship between school principals' instructional leadership behaviors, teacher self-efficacy, and collective teacher efficacy. *International Journal of Educational Management*, 32(4), 550–567.
<https://doi.org/10.1108/ijem-04-2017-0089>

- Castro-Silva, J., Amante, L., & Morgado, J. (2017). School climate, principal support and collaboration among Portuguese teachers. *European Journal of Teacher Education*, 40(4), 505–520. <https://doi.org/10.1080/02619768.2017.1295445>
- Center for Creative Leadership (CCL). (2021, August 4). The importance of empathy in the workplace. CCL. <https://www.ccl.org/articles/leading-effectively-articles/empathy-in-the-workplace-a-tool-for-effective-leadership/>.
- Day, C., Gu, Q., & Sammons, P. (2016). The Impact of leadership on student outcomes. *Educational Administration Quarterly*, 52(2), 221–258. <https://doi.org/10.1177/0013161x15616863>
- Eyal, O., & Roth, G. (2011). Principals' leadership and teachers' motivation. *Journal of Educational Administration*, 49(3), 256–275. <https://doi.org/10.1108/09578231111129055>
- Fisher, M. H., & Royster, D. (2016). Mathematics teachers' support and retention: using Maslow's hierarchy to understand teachers' needs. *International Journal of Mathematical Education in Science and Technology*, 47(7), 993–1008. <https://doi.org/10.1080/0020739x.2016.1162333>
- Gall, M. D., Borg, W. R., & Gall, J. P. (2007). *Educational research: An introduction*. Pearson.
- Gess-Newsome, J., Taylor, J. A., Carlson, J., Gardner, A. L., Wilson, C. D., & Stuhlsatz, M. A. (2019). Teacher pedagogical content knowledge, practice, and student achievement. *International Journal of Science Education*, 41(7), 944–963. <https://doi.org/10.1080/09500693.2016.1265158>
- Goddard, R., Goddard, Y., Sook Kim, E., & Miller, R. (2015). A Theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective

- efficacy beliefs in support of student learning. *American Journal of Education*, 121(4), 501–530. <https://doi.org/10.1086/681925>
- Governor’s Office of Student Achievement (GOSA). (2021). The governor's office of student achievement. <https://gosa.georgia.gov/>.
- Greenberg, M., Brown, J., & Abenavoli, R. (2020, June 4). Teacher stress and health effects on teachers, students, and schools. *Robert Wood Johnson Foundation*.
<https://www.endominance.com/teacher-stress-and-health-effects-on-teachers-students-and-schools/>.
- Heneman, H. G., III, Kimball, S., & Milanowski, A. (2006, October). The teacher sense of efficacy scale: Validation evidence and behavioral prediction (WCER Working Paper No. 2006-7). Madison: University of Wisconsin–Madison, Wisconsin Center for Education Research. Retrieved [e.g., October 15, 2006,] from
<http://www.wcer.wisc.edu/publications/workingPapers/papers.php>
- Hitt, D. H., & Tucker, P. D. (2016). Systematic review of key leader practices found to influence student achievement. *Review of Educational Research*, 86(2), 531–569.
<https://doi.org/10.3102/0034654315614911>
- Holmes, W. T., & Parker, M. A. (2018). The relationship between behavioural integrity, competence, goodwill, trustworthiness, and motivating language of a principal. *School Leadership & Management*, 38(4), 435–456.
<https://doi.org/10.1080/13632434.2018.1430687>
- Huang, S., Yin, H., & Lv, L. (2019). Job characteristics and teacher well-being: The mediation of teacher self-monitoring and teacher self-efficacy. *Educational Psychology*, 39(3), 313–331. <https://doi.org/10.1080/01443410.2018.1543855>

- National Center for Education Statistics (NCES). (2021). Institute of Education Sciences. Home Page, part of the U.S. Department of Education. <https://nces.ed.gov/>.
- Jambo, D. G., & Hongde, L. (2019). The Effect of principal's distributed leadership practice on students' academic achievement: A systematic review of the literature. *International Journal of Higher Education*, 9(1), 189. <https://doi.org/10.5430/ijhe.v9n1p189>
- Jhangiani, R., Chiang, I.-C. A., Cuttler, C., Leighton, D. C., & Price, P. (2019). *Research methods in psychology*.
- Keller, M. M., Neumann, K., & Fischer, H. E. (2016). The impact of physics teachers' pedagogical content knowledge and motivation on students' achievement and interest. *Journal of Research in Science Teaching*, 54(5), 586–614. <https://doi.org/10.1002/tea.21378>
- Klaeijssen, A., Vermeulen, M., & Martens, R. (2018). Teachers' innovative behaviour: The importance of basic psychological need satisfaction, intrinsic motivation, and occupational self-efficacy. *Scandinavian Journal of Educational Research*, 62(5), 769–782. <https://doi.org/10.1080/00313831.2017.1306803>
- Knab, D. (2009). A comparison of the leadership practices of principals of high schools that work schools as measured by the leadership practices inventory. *Academic Leadership: The Online Journal*, 7(2). <https://doi.org/https://core.ac.uk/download/pdf/214517621.pdf>
- Kouzes, J. M., & Posner, B. Z. (2003). Leadership practices inventory (LPI): Facilitator's guide (3rd ed.). Pfeiffer.
- Kouzes, J. M., & Posner, B. Z. (2017). Leadership practices inventory (LPI): Observer. Wiley.

- Kouzes, J. M., & Posner, B. Z. (2012). *The leadership challenge: How to make extraordinary things happen in organizations*. Jossey-Bass.
- Kouzes, J. M., & Posner, B. Z. (2021). Bringing the rigor of research to the art of leadership. *The Leadership Challenge*.
<https://www.leadershipchallenge.com/LeadershipChallenge/media/SiteFiles/research/TL-C-Research-to-the-Art-of-Leadership.pdf>.
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school Leadership revisited. *School Leadership & Management*, 40(1), 5–22.
<https://doi.org/10.1080/13632434.2019.1596077>
- Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration Quarterly*, 44(4), 496–528.
<https://doi.org/10.1177/0013161x08321501>
- Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership. *Educational Administration Quarterly*, 48(3), 387–423.
<https://doi.org/10.1177/0013161x11436268>
- Leithwood, K., Sun, J., & Schumacker, R. (2019). How school leadership influences student learning: A test of “the four paths model.” *Educational Administration Quarterly*, 56(4), 570–599. <https://doi.org/10.1177/0013161x19878772>
- Liebowitz, D. D., & Porter, L. (2019). The effect of principal behaviors on student, teacher, and school outcomes: A systematic review and meta-analysis of the empirical literature. *Review of Educational Research*, 89(5), 785–827.
<https://doi.org/10.3102/0034654319866133>

- Llopis, G. (2014, July 29). Leadership is about enabling the full potential in others. *Forbes*.
<https://www.forbes.com/sites/glennllopis/2014/07/29/leadership-is-about-enabling-the-full-potential-in-others/?sh=796984cf6698>.
- Lockton, M. (2019). Chasing joint work: Administrators' efforts to structure teacher collaboration. *School Leadership & Management*, 39(5), 496–518.
<https://doi.org/10.1080/13632434.2018.1564269>
- Lopez-Garrido, G. (2020, August 9). Self-efficacy theory. *Self-Efficacy Theory Simply Psychology*. <https://www.simplypsychology.org/self-efficacy.html>.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
<https://doi.org/10.1037/h0054346>
- Maxwell, S., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2017). The impact of school climate and school identification on academic achievement: Multilevel modeling with student and teacher data. *Frontiers in Psychology*, 8.
<https://doi.org/10.3389/fpsyg.2017.02069>
- Mertler, C. A. (2002). Job satisfaction and perception of motivation among middle and high school teachers. *American Secondary Education*, 31(1), 43–53.
<https://doi.org/https://www.jstor.org/stable/41064589>
- Mertler, C. A. (1992). Teacher motivation and job satisfaction of public school teachers. (Master's Thesis). Ohio State University.
- Murphy, M. (2020). The state of leadership development. *Leadership IQ*.
<https://www.leadershipiq.com/blogs/leadershipiq/leadership-development-state>.

- Newman-Carlson, D., & Horne, A. M. (2004). Bully busters: A psychoeducational intervention for reducing bullying behavior in middle school students. *Journal of Counseling & Development*, 82(3), 259–267. <https://doi.org/10.1002/j.1556-6678.2004.tb00309.x>
- Nie, Y., Lau, S., & Liao, A. (2012). The teacher efficacy scale: A reliability and validity study. *Asia Pacific Journal of Education*, 21(2), 414–421.
- Özdemir, N., & Yalçın, M. T. (2019). Examination of the relationships between academic achievement and the variables at the levels of school and students in secondary schools: Two-level path analysis. *Education and Science*, 44(200), 93–116. <https://doi.org/10.15390/eb.2019.8056>
- Ouellette, R. R., Frazier, S. L., Shernoff, E. S., Cappella, E., Mehta, T. G., Maríñez-Lora, A., Cua, G., & Atkins, M. S. (2018). Teacher job stress and satisfaction in urban schools: Disentangling individual-, classroom-, and organizational-level influences. *Behavior Therapy*, 49(4), 494–508. <https://doi.org/10.1016/j.beth.2017.11.011>
- Park, J.-H., & Ham, S.-H. (2014). Whose perception of principal instructional leadership? Principal-teacher perceptual (dis)agreement and its influence on teacher collaboration. *Asia Pacific Journal of Education*, 36(3), 450–469. <https://doi.org/10.1080/02188791.2014.961895>
- Park, J.-H., Lee, I. H., & Cooc, N. (2018). The role of school-level mechanisms: How principal support, professional learning communities, collective responsibility, and group-level teacher expectations affect student achievement. *Educational Administration Quarterly*, 55(5), 742–780. <https://doi.org/10.1177/0013161x18821355>
- Pietsch, M., & Tulowitzki, P. (2017). Disentangling school leadership and its ties to instructional practices – an empirical comparison of various leadership styles. *School Effectiveness*

and *School Improvement*, 28(4), 629–649.

<https://doi.org/10.1080/09243453.2017.1363787>

- Posner, B. (2016). Investigating the reliability and validity of the leadership practices inventory®. *Administrative Sciences*, 6(4), 17. <https://doi.org/10.3390/admsci6040017>
- Richards, K. A., Hemphill, M. A., & Templin, T. J. (2018). Personal and contextual factors related to teachers' experience with stress and burnout. *Teachers and Teaching*, 24(7), 768–787. <https://doi.org/10.1080/13540602.2018.1476337>
- Rousmaniere, K. (2007). Presidential Address: Go to the principal's office: Toward a social history of the school principal in North America. *History of Education Quarterly*, 47(1), 1–22. <https://doi.org/10.1111/j.1748-5959.2007.00072.x>
- Rutledge, P. (2011, November). Social networks: WHAT Maslow misses. *Psychology Today*. <https://www.psychologytoday.com/us/blog/positively-media/201111/social-networks-what-maslow-misses-0>.
- Sakız, H., Ekinci, A., & Sarıçam, H. (2019). Teachers' perceptions of their school managers' skills and their own self-efficacy levels. *International Journal of Leadership in Education*, 23(5), 585–603. <https://doi.org/10.1080/13603124.2018.1562094>
- Sanchez, J. E., Paul, J. M., & Thornton, B. W. (2020). Relationships among teachers' perceptions of principal leadership and teachers' perceptions of school climate in the high school setting. *International Journal of Leadership in Education*, 1–21. <https://doi.org/10.1080/13603124.2019.1708471>
- Sehgal, P., Nambudiri, R., & Mishra, S. K. (2017). Teacher effectiveness through self-efficacy, collaboration and principal leadership. *International Journal of Educational Management*, 31(4), 505–517. <https://doi.org/10.1108/ijem-05-2016-0090>

- Sorge, S., Keller, M. M., Neumann, K., & Möller, J. (2019). Investigating the relationship between pre-service physics teachers' professional knowledge, self-concept, and interest. *Journal of Research in Science Teaching*, 56(7), 937–955.
<https://doi.org/10.1002/tea.21534>
- Sun, J., & Leithwood, K. (2012). Transformational school leadership effects on student achievement. *Leadership and Policy in Schools*, 11(4), 418–451.
<https://doi.org/10.1080/15700763.2012.681001>
- Sun, J., & Leithwood, K. (2015). Direction-setting school leadership practices: a meta-analytical review of evidence about their influence. *School Effectiveness and School Improvement*, 26(4), 499–523. <https://doi.org/10.1080/09243453.2015.1005106>
- Tan, C. Y. (2016). Examining school leadership effects on student achievement: the role of contextual challenges and constraints. *Cambridge Journal of Education*, 48(1), 21–45.
<https://doi.org/10.1080/0305764x.2016.1221885>
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and Policy in Schools*, 3(3), 189–209. <https://doi.org/10.1080/15700760490503706>
- Tschannen-Moran, M., & Gareis, C. R. (2004). Principals' sense of efficacy. *Journal of Educational Administration*, 42(5), 573–585.
<https://doi.org/10.1108/09578230410554070>
- Tschannen-Moran, M., & Woolfolk Hoy, A. W. (2001). Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783–805.
[https://doi.org/10.1016/s0742-051x\(01\)00036-1](https://doi.org/10.1016/s0742-051x(01)00036-1)

- Warner, R. M. (2013). *Applied statistics: from bivariate through multivariate techniques*. SAGE Publications.
- Webb-Williams, J. (2017). Science self-efficacy in the primary classroom: Using mixed methods to investigate sources of self-efficacy. *Research in Science Education*, 48(5), 939–961. <https://doi.org/10.1007/s11165-016-9592-0>
- Weller, L. D. (1982). Principals, meet Maslow: A prescription for teacher retention. *NASSP Bulletin*, 66(456), 32–36. <https://doi.org/10.1177/019263658206645605>
- Wirawan, H., Tamar, M., & Bellani, E. (2019). Principals' leadership styles: The role of emotional intelligence and achievement motivation. *International Journal of Educational Management*, 33(5), 1094–1105. <https://doi.org/10.1108/ijem-04-2018-0127>
- Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being. *Review of Educational Research*, 86(4), 981–1015. <https://doi.org/10.3102/0034654315626801>

APPENDICES

Appendix A

WILEY

April 20, 2021

Amanda Conner:

Thank you for your request to use the LPI®: Leadership Practices Inventory® (the "LPI") in your research. This letter grants you permission to use the print LPI [Self/Observer/Self and Observer] instrument[s] in your research Subject to your payment of a \$100 fee, a discounted one-time cost of purchasing a single copy. If you prefer to use the electronic distribution of the LPI you will need to separately contact Gabriel Sims (Lpiapproval@wiley.com)] directly for further details regarding product access and payment. Please be sure to review the product information resources before reaching out with pricing questions. You shall have access to the LPI for 1 year and will receive a copy of the LPI Observer form and/or Self form.

Permission to use either the written or electronic versions is contingent upon the following:

- (1) The LPI may be used only for research purposes and may not be sold or used in conjunction with any compensated activities;
- (2) Copyright in the LPI, and all derivative works based on the LPI, is retained by James M. Kouzes and Barry Z. Posner. The following copyright statement must be included on all reproduced copies of the instrument(s): "Copyright © 2013 James M. Kouzes and Barry Z. Posner. Published by John Wiley & Sons, Inc. All rights reserved. Used with permission";
- (3) One (1) electronic copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data must be sent promptly to my attention at the address below;
- (4) We have the right to include the results of your research in publication, promotion, distribution and sale of the LPI and all related products; You shall provide us with a copy of your dissertation and a specific abstract that you have prepared that addresses of the use of the LPI in your research as well as the outcomes, following the template attached hereto as Exhibit A;
- (5) Wiley shall be permitted to reprint the abstract and excerpts of your dissertation so long as we give you credit. Wiley may edit the abstract or dissertation as long as we do not changing the substance;
- (6) You shall not make any changes to the Items in the LPI in the course of your research or in your dissertation;
- (7) If you wish to post any materials from the LPI in a third party survey provider, you shall give us notice beforehand of your intentions and the platform in which you intend to use as well as the start and end date of the post; and
- (8) You may not distribute any photocopies of the LPI except for specific research purposes and in those cases you must reach out for permission to reproduce.

Permission is limited to the rights granted in this letter and does not include the right to grant others permission to reproduce the instrument(s) except for versions made by nonprofit organizations for visually or physically handicapped persons. No additions or changes may be made without our prior written consent. You understand that your use of the LPI shall in no way place the LPI in the public domain or in any way compromise our copyright in the LPI. This license is nontransferable. We reserve the right to revoke this permission at any time, effective upon written notice to

WILEY

you, in the event we conclude, in our reasonable judgment, that your use of the LPI is compromising our proprietary rights in the LPI.

Best wishes for every success with your research project.
Cordially,

Gabriel Sims

Appendix B

Re: Permission to use your TSES instrument

Anita Woolfolk Hoy [REDACTED]

Fri 4/2/2021 6:40 PM

To:

- Maslen Conner <maslen84@hotmail.com>

You are welcome to use the TSES in your research as you describe below. This website might be helpful to you:

<http://u.osu.edu/hoy.17/research/instruments/>

Best wishes in your work.

Anita

Anita Woolfolk Hoy, PhD
Professor Emerita
The Ohio State University
7655 Pebble Creek Circle, Unit 301
Naples, FL 34108
anitahoy@mac.com
415-640-2017

Ohio State Website: <http://u.osu.edu/hoy.17/>

Personal Website
<https://anitawoolfolkoy.com>

On Apr 2, 2021, at 5:03 PM, [REDACTED] wrote:

Dr. Hoy,

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 "Actions of the principal: Influences on teacher self-efficacy and motivation" and the purpose of my research is to evaluate behaviors of school principals and their influences on teacher self-efficacy and motivation.

I am writing to request your permission to utilize your Teachers' Sense of Efficacy Scale in my survey to high school teachers. Participants would be asked to complete one survey, in which I would like to include your survey questions. This survey would be used for research purposes for my dissertation only. I would like to include these questions inside of a three-part electronic survey that will be sent to teachers in Georgia's First District RESA.

Additionally, when I successfully defend my dissertation, I will be required to publish my dissertation through Liberty University's digital repository. I would like to request additional permission to publish your survey in my appendices.

Thank you for your time and consideration,
Amanda Maslen Conner, Ed. S in Curriculum and Instruction

Appendix C

Re: Permission to use Teacher Motivation and Job Satisfaction Survey

Dr. Craig Mertler <[REDACTED]>

Fri 4/2/2021 5:23 PM

To: [REDACTED] >

1 attachments (214 KB)

Mertler TMJSR Survey.pdf;

Hello Amanda,

Yes, you have permission to use the survey for your dissertation research purposes. I have attached the complete survey to this email...please excuse the formatting, as I distributed the survey using Qualtrics and it doesn't lend itself to good translation into a PDF format.

Best of luck with your research, and let me know if you have any questions.



professor // author // consultant // speaker // novelist

www.craigmertler.com

On Fri, Apr 2, 2021 at 2:18 PM [REDACTED] > wrote:

Dr. Mertler,

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 "Actions of the principal: Influences on teacher self-efficacy and motivation" and the purpose of my research is to evaluate behaviors of school principals and their influences on teacher self-efficacy and motivation. I am writing to request your permission to utilize your Teacher Motivation and Job Satisfaction Survey in my survey to high school teachers. Participants would be asked to complete one survey, in which I would like to include your survey questions. This survey would be used for research purposes for my dissertation only. I would like to include these questions inside of a three-part electronic survey that will be sent to teachers in Georgia's First District RESA.

Additionally, when I successfully defend my dissertation, I will be required to publish my dissertation through Liberty University's digital repository. I would like to request additional permission to publish your survey in my appendices.

Thank you for your time and consideration,
Amanda Maslen Conner, Ed. S in Curriculum and Instruction

Appendix D

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

February 28, 2022

Amanda Conner
Rich Jensen

Re: IRB Exemption - IRB-FY21-22-637 ACTIONS OF THE PRINCIPAL: INFLUENCES ON TEACHER SELF-EFFICACY AND MOTIVATION

Dear Amanda Conner, Rich Jensen,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

Research Ethics Office

Appendix E

Consent

Title of the Project: Actions Of The Principal: Influences On Teacher Self-Efficacy And Motivation

Principal Investigator: Amanda Maslen Conner, Doctoral Candidate, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 years of age or older, a certified teacher, and currently teaching in a high school classroom. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about and why is it being done?

The purpose of the study is to determine if a relationship exists between certain behaviors of administrators and a teacher's self-efficacy and motivation. This study will look at teacher perceptions of administrator behaviors and their own feelings regarding their self-efficacy and motivation.

What will happen if you take part in this study?

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

1. Complete a four-section survey, which will take approximately 10 minutes to complete. This survey will consist of sections regarding demographics, self-efficacy, motivation, and perceptions of leadership behavior.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a better understanding of the connection between principals' behaviors and teachers' feelings of self-efficacy and motivation.

What risks might you experience from being in this study?

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

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous.
- 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.

Is study participation voluntary?

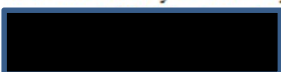
Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting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

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Amanda Maslen Conner. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at

 You may also contact the researcher's faculty sponsor, Dr. Jensen, at

Whom do you contact if you have questions about your rights as a research participant?

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.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

Appendix F

[Date]

Dear Principals!

Below is the information and link to a survey for teachers to voluntarily complete. I would truly appreciate your time in forwarding this email! Additionally, you will find below the email with approval from [REDACTED] to conduct the survey via email in the high school.

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to evaluate perceptions of the leadership behaviors of administrators and how these perceptions affect self-efficacy and motivation, and I am writing to invite eligible participants to join my study.

Participants must be 18 years of age or older, certified teachers, and currently teaching in a high school classroom. Participants, if willing, will be asked to complete a 10-minute survey through SurveyMonkey. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please click here (hyperlink will be added upon IRB approval).

A consent document is provided on the first page of the survey and is attached to this email. The consent document contains additional information about my research. After you have read the consent form, please click the button to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the survey.

Sincerely,

Amanda Maslen Conner E.D. Candidate
[REDACTED]