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Middle School Leaders' Perceptions of Self-Efficacy in an Urban School District Along the Texas-Mexico Border

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MIDDLE SCHOOL LEADERS' PERCEPTIONS OF SELF-EFFICACY IN AN URBAN SCHOOL DISTRICT ALONG THE TEXAS-MEXICO BORDER

A Dissertation

by

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ABSTRACT

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The purpose of the case study was to comprehend the relationship between the accountability movement as characterized by the Texas A-F Accountability System and ESSA on a middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. The case study employed an explanatory sequential mixed methods research design and allowed for the collection and analysis of quantitative and qualitative data in two consecutive phases within one study to investigate the research questions in depth. The quantitative portion of this mixed methods case study relied on the use of the Principal Sense of Efficacy Scale (PSES) to capture middle school principals' sense of efficacy and qualitative data was sourced via one-on-one, in-depth semi-structured interviews to provide a deeper examination of principal's perceptions of their efficacious outlooks. There was a marginally significant difference, $t(4.00) = 2.14$, $p < 0.100$, between middle school principals of school improvement and non-school improvement campuses for item 17 on the PSES. Question 17 on the PSES asked the sample population to rate the extent that they could cope with stress of the job and in this case study middle school principals of school improvement campuses believed that they could manage the rigors of the

principalship better than school leaders of non-improvement campuses. In addition, there were statistically significant correlations between individual PSES questions and categorical variables. In describing how their self-efficacy beliefs were shaped all participants shared that their efficacious outlooks were influenced by enactive mastery experiences, vicarious experiences, emotional arousal, and verbal persuasion. In describing factors that influenced their level of self-efficacy beliefs, participants professed that an increase in student achievement, state test scores, and student growth positively influenced their efficacious outlooks and that stress, frustration, worry, and lack of control negatively influenced principals' sense of efficacy. Furthermore, implications for practice and recommendations for future research are offered.

DEDICATION

The completion of my doctoral studies was far from being a solo endeavor and would not have been possible without the support of my family. Their unending love and encouragement during this process have sustained my efforts. I also thank God for providing me the strength, courage, wisdom, and grace to finally make this a reality.

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CHAPTER I

INTRODUCTION

The landscape of public school education has drastically changed as schools nationwide become ethnically, linguistically, culturally, and economically diverse. Faced with the enhanced accountability measures of the Every Student Succeeds Act (ESSA) of 2015 (2015) and the challenge of adhering to multifaceted reform efforts intended to improve public school education, school leaders are tasked to creatively use multiple sources of data to help guide their instructional decision-making. To further complicate matters, the spectrum of data available for instructional leaders to engage in educational problem solving geared towards the support of student learning varies from classroom focused to large-scale types of formative and summative assessments such as: daily assignments, progress monitoring assessments, student benchmarks, weekly tests, report card grades, state administered assessments, etc. (Brookhart, 2016).

Beyond high quality instruction there are limited strategies available to educational leaders to meet these increased demands (Brookhart, 2016; DuFour & Marzano, 2011; Gentilucci & Muto, 2007; Herman et al., 2017; Leithwood, 2007; Leithwood & Riehl, 2003; Marzano, Waters, & McNulty, 2005; Pearce, 2020; Robinson, 2007; Silva, White, & Yoshida, 2011; Waters & Cameron, 2007). Leithwood and Riehl (2003) contend that after curriculum and instruction, learning-focused leadership considerably impacts student achievement. However, not all public school leaders have the capacity to maximize the use of complementary types of data and provide the instructional leadership required to address the challenges and prospects of this comprehensive piece of legislation to better inform and enhance educational practice (Brookhart,

2016; Herman et al., 2017). ESSA (2015) presents a renewed emphasis on school leadership and recognizes the significance of effective principals to frame the conditions for high-quality teaching and student learning (Herman et al., 2017). Accordingly, the intent of this case study was to comprehend the relationship between the accountability movement as characterized by the Texas A-F Accountability System and ESSA on a middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Background

In order to lead educational institutions in this increasingly complex learning environment, it is vital that school and district leaders set a leadership tone that reflects the changing realities of the public school system under the hegemonic discourse of standards and accountability (Brookhart, 2016; DuFour & Marzano, 2011; Herman et al., 2017; Jazzar & Algozzine, 2007; Taubman, 2009; Tschannen-Moran, 2007; Pearce, 2020). Given the burgeoning task of providing leadership to facilitate school improvement under ESSA, it is critical for educational leaders at various levels of school organizations to systematically utilize multiple factors such as academic achievement, student growth, progress in English language proficiency, and postsecondary readiness to inform instructional decision-making (Boudett, City, & Murnane, 2005; Brookhart, 2016; DuFour & Marzano, 2011; Supovitz & Klein, 2003). The language of educational policy compels school administrators to refocus their efforts on leadership practices that will foster a culture of inquiry that encourages ongoing and sustained investigations into the types of data, actions, and processes that will enhance instruction and improve student learning outcomes (Boudett et al., 2005; Brookhart, 2016; DuFour & Marzano, 2011; Herman et al., 2017; Leithwood, 2007; Supovitz & Klein, 2003). Moreover, to support

ongoing teaching and learning school leaders need to systematically utilize educational data beyond a conventional and superficial manner to minimize the widening achievement gap as well as leverage positive school and learner outcomes (Brookhart, 2016; DuFour & Marzano, 2011; Stringfield, Wayman, & Yakimowski, 2005).

Educational leaders at all levels of school systems exist in the paradoxical position of being both "data rich" and "information poor" (Stringfield et al., 2005, p. 137). Many educators lack efficient, versatile access to a burgeoning amount of available student data and have been provided limited professional development to learn how to interpret and act upon the analysis of complementary types of data to meet rigorous academic achievement standards (Boudett et al., 2005; Brookhart, 2016; DuFour & Marzano, 2011; Stringfield et al., 2005; Supovitz & Klein, 2003). The rapid expansion in the volume of student performance data has a limited usefulness in leveraging instructional improvement unless it can be transformed into information and knowledge which can easily be interpreted and presented to those working at both the school and individual classroom levels (Boudett et al., 2005; Brookhart, 2016; DuFour & Marzano, 2011; Supovitz & Klein, 2003). Thus, there is a need in the field of instructional leadership to chronicle the nuances of leading campus-based change under ESSA's system of standards, accountability, and postsecondary readiness into the routines of school leaders to continually cultivate and refine their professional expertise (Brookhart, 2016; DuFour & Marzano, 2011; Herman et al., 2017; Pearce, 2020).

As the key agents who are central to the transformation of teaching and schooling practices, it is critical that instructional leaders understand those behaviors that will impact their ability to assist students achieve instructional and curricular objectives (Herman et al., 2017). An intriguing, but scarcely explored construct to understanding educational leaders' behaviors is

leader self-efficacy; especially the efficacious beliefs of the principal (Tschannen-Moran & Gareis, 2004, 2007). A school leaders' sense of self-efficacy is a belief about one's own ability to achieve a specified performance outcome in a particular context (Bandura, 1977, 1982, 1993, 1997; Tschannen-Moran & Gareis, 2004, 2007). Bandura (1997) posits that a person's efficacy beliefs will determine how much effort is spent on an activity, the amount of time they will dedicate to persevere when faced with challenges, and their level of resilience in adversarial conditions.

Contemporary literature pertaining to the self-efficacy of educational leaders is growing and the findings are promising to advance the knowledge and measurement of educational leaders' sense of efficacy. Existing empirical studies indicate that efficacious beliefs are related to school leaders' success because it impacts effort and persistence on a particular task in a specified context (Aderhold, 2005; Azah, 2014; Dwyer, 2017; Federici & Skaalvik, 2012; Holleb, 2016; Leithwood & Jantzi, 2008; Leithwood, Strauss, & Anderson, 2007; Lehman, 2007; Lovell, 2009; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004, 2007). Moreover, research demonstrates that if principals believe they have the ability to achieve a specified task through effort and persistence, then their level of performance and self-efficacy increases (Aderhold, 2005; Azah, 2014; Dwyer, 2017; Holleb, 2016; Leithwood & Jantzi, 2008; Leithwood et al., 2007; Lehman, 2007; Lovell, 2009; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith, Guarino, Strom & Adams, 2006; Tschannen-Moran & Gareis, 2004, 2007). However, there is scant empirical research that examines middle school principals' perceptions of their self-efficacy within the context of the current accountability climate in South Texas as well as evaluates their beliefs regarding their ability to engage in those leadership behaviors that improve educational

praxis and student outcomes (Azah, 2014; Nye, 2008; Pearce, 2020; Tschannen-Moran & Gareis, 2004, 2007; Santamaria, 2008; Versland & Erickson, 2017).

Conceptual Framework

Simply defined self-efficacy is a belief about one's ability to produce certain outcomes, not actual ability to produce outcomes (Bandura, 1977, 1982, 1993, 1997). This case study was based on the theoretical framework of the self-efficacy component of social cognitive theory. In particular, this case study aimed to understand middle school principals' sense of self-efficacy within the context of the Texas A-F Accountability System and ESSA in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. A more in depth understanding of the triadic reciprocal causation model of social cognitive theory as it applies to the construct of principal self-efficacy under the current accountability climate in Texas will add to the growing literature in this field of instructional leadership.

Bandura's (1997) triadic reciprocal causation model explains human behavior in terms of the bi-directional interaction between environment, individual behavior, and personal factors. In the context of this case study, the determinants were represented by the performance standards of the Texas A-F Accountability System, school leadership praxis, and the efficacious beliefs of middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. A brief description of these variables are offered and elucidated in more depth in the literature review.

Context

When ESSA replaced the No Child Left Behind Act (NCLB) in 2015, the Texas Education Agency (TEA) moved to unite the Texas accountability system and the federal accountability system into one system. The implementation of the new A-F Accountability System took effect

with the release of 2018 accountability ratings, thereby maintaining alignment with provisions of ESSA requirements [Texas Education Agency (TEA), 2020]. In particular, the indicators in the Closing the Gaps domain as well as the domain's structure, aligned the A-F Accountability System with ESSA requirements (TEA, 2020). This alignment of the Closing the Gaps domain and federal accountability requirements allowed TEA to identify campuses for comprehensive support and improvement to enhance the provision of resources for those schools that are in greatest need of assistance (TEA, 2020). During the 2018-2019 school year, 43% of public schools in Texas were identified for comprehensive, targeted, or additional targeted support based on their Closing the Gap A-F grade (TEA, 2020). Of the 43% of public schools identified to engage in accountability interventions, 12% were middle schools identified as comprehensive, targeted, or additional targeted support campuses (TEA, 2020).

As academic standards continue to increase for educational institutions in Texas, it is highly likely that the number of schools required to participate in accountability interventions as delineated by statutory requirements will rise across the state. Consequently, there exists a sense of urgency to understand how the evolving accountability climate in Texas will influence principals' beliefs in their abilities to employ instructional leadership behaviors that will multiply effective teaching and learning practices to improve learner outcomes. For those principals that are tasked with leading schools under the A-F Accountability system, especially those identified for comprehensive support and improvement, it is imperative to understand how their efficacious outlooks are impacted by the changing language of Texas educational policy. Bandura (1982) states that perceptions of self-efficacy are determined by the amount of effort and persistence expended by individuals in aversive situations. Those who have a strong sense of self-efficacy exert greater effort to succeed (Bandura, 1977, 1982, 1993, 1997). A deeper understanding of the

construct of principal self-efficacy may help inform school leaders in similar contexts how to navigate their roles as instructional leaders to elicit improved student achievement (Aderhold, 2005; Azah, 2014; Dwyer, 2017; Holleb, 2016; Leithwood & Jantzi, 2008; Lehman, 2007; Lovell, 2009; Moak, 2010; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith, Guarino, Strom & Adams, 2006; Tschannen-Moran & Gareis, 2004, 2007). Accordingly, this case study examined the relationship between environmental determinants (i.e. school improvement status) and the efficacious beliefs of middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Behavior

Strong instructional leadership abilities are crucial for principals to successfully lead their schools in an age of transformation and heightened accountability (DuFour & Marzano, 2011; Herman et al., 2017). Principal self-efficacy impacts leadership behaviors through multifaceted means. Educational research demonstrates that the efficacious beliefs of principals impacts instructional leadership behaviors by impacting perseverance and leadership decisions (Azah, 2014; Dwyer, 2017; Federici & Skaalvik, 2012; Holleb, 2016; Lyons & Murphy, 1994; McCollum & Kajs, 2009; Pearce, 2020; Tschannen-Moran & Gareis, 2004, 2007). Similarly, research demonstrates links between the behaviors of school leaders and improved academic achievement of students (Branch, Hanushek, & Rivkin, 2012; DuFour & Marzano, 2011; Goddard et al., 2015; Gentilucci & Muto, 2007; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Nye, 2008; Pearce, 2020; Robinson, 2007; Silva et al., 2011; Waters & Cameron, 2007). A comprehensive analysis of contemporary leadership scholarship goes beyond the aims of this case study, but what is focused on is the importance of the principal

to lead schools in a focused direction toward school improvement. This line of research supports the decision to focus solely on the leadership practices of middle school principals in an urban school district located in the Rio Grande Valley along the Texas-Mexico border and examine their perceived self-efficacy beliefs.

Personal Factors

Literature on self-efficacy in an academic setting is replete with studies focused on individual and collective teacher efficacy (Ashton & Webb, 1982, 1986; Bandura, 1993, 1997; Calik, Sezgin, Kavgaci, & Kilinc, 2012; Collier, 2005; Featherstone, 2005; Schumacher, 2009; Versland & Erickson, 2017; Winn 2018). Prior studies have mainly relied on quantitative methods via the use of questionnaires and/or survey instruments to associate perceptions of self-efficacy to school demographics, personal attributes, and/or academic achievement of students. The efficacious beliefs of principals is a promising area of research that will further contribute to understanding the relationship between various demographic characteristics of schools, school leaders, and self-efficacy (Branch et al., 2012; Dwyer, 2017; Federici & Skaalvik, 2012; Lehman, 2007; Lovell, 2009; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004, 2007). Moreover, educational scholars have yet to uncover significant relationships between any demographic elements of campuses and educational leaders to the efficacious beliefs of the principal. Consequently, this case study focused on examining the link between school improvement status, especially identification for comprehensive support and improvement, and a middle school principals' sense of self-efficacy to add to this body of educational literature (Holleb, 2016; Lehman, 2007; Lovell, 2009; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004, 2007).

Statement of the Problem

After the passage of ESSA in 2015, TEA moved to unite the Texas accountability system and the federal accountability system into one system. ESSA acknowledges that quality school leadership can act as a powerful school-level determinant of student achievement and allows local educational agencies (LEA) to allocate funds for initiatives that improve campus instructional leadership (Herman et al., 2017). Likewise, educational research suggests that school leadership, especially the leadership behaviors of the principal, is an important lever for the improvement of the instructional program (DuFour & Marzano, 2011; Gentilucci & Muto, 2007; Herman et al., 2017; Leithwood, 2007; Leithwood & Riehl, 2003; Marzano et al., 2005; Pearce, 2020; Robinson, 2007; Silva et al., 2011; Waters & Cameron, 2007). Branch, Hanushek, and Rivkin (2012) contend that a principal scoring one standard deviation above the mean for principal effectiveness in a value-added model could possibly move the mean academic achievement of learners from the 50th to the 58th percentile in one school year. This result is substantial considering that there are fewer principals leading our nation's schools than teachers and each has the potential to impact the academic needs of far more learners (Branch et al., 2012).

The construct of principal self-efficacy is a promising area of contemporary educational research that may provide insight into the leadership behaviors of principals that positively contribute to improved student learning and why others do not (Goddard, Goddard, Kim, & Miller, 2015; Leithwood & Jantzi, 2008; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004, 2007). Moreover, principals who feel efficacious about meeting challenging student expectations strive to engage in education-improvement activities that will advance student outcomes (Smith et al., 2006). Consequently, understanding the

efficacy beliefs of the principal is vital to provide school leaders information to improve their praxis and more importantly, support schools' capacities to enhance educational programs for students as well as maximize academic outcomes.

In the current context, during the 2018-2019 school year, 43% of public schools in Texas were identified for comprehensive, targeted, or additional targeted support based on their Closing the Gap A-F grade (TEA, 2020). Of the 43% of public schools identified to engage in accountability interventions, 12% were middle schools identified as comprehensive, targeted, or additional targeted support campuses (TEA, 2020). With student performance standards on the rise, the propensity for more schools in Texas having to participate in the school improvement process is expected. Consequently, there is a need to gain insight into how the changing and heightened language of accountability in Texas will impact the perceptions of self-efficacy among principals to facilitate the creation of teaching and learning environments that will improve the academic achievement of students.

Purpose of the Study

The purpose of this case study was to conduct a mixed methods analysis of the relationship between school improvement status, especially identification for comprehensive support and improvement, and a middle school principals' sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Individual and school-level demographic variables examined in other studies were included in the principal sense of efficacy scale utilized in this case study to reaffirm or challenge previous findings (Aderhold, 2005; Azah, 2014; Dwyer, 2017; Holleb, 2016; Lehman, 2007; Leithwood & Jantzi, 2008; Lovell, 2009; Lyons & Murphy, 1994; Moak; 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith & Guarino, 2005; Smith el al., 2006; Tschannen-Moran

& Gareis, 2004, 2007). Additionally, two new school-level demographic variables were introduced to shed light on the relationship of a principal sense of self-efficacy with other variables.

Research Questions

This case study was guided by the following research questions to examine the relationship between accountability interventions and a middle school principals' sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border:

1. Is there a relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?
2. What factors, if any, contribute to a middle school principal's sense of self efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?

Hypothesis

The following hypothesis was tested in this case study:

Research Question 1:

H_0: There is no relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and a campus's school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

H_1: There is an inverse relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and a campus's school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Significance of the Study

Educational scholars agree that the efforts of the principal to improve learner outcomes is second only to those of classroom teachers (Leithwood & Riehl, 2003). Leadership studies have also identified the leadership behaviors of principals that are most likely to shape conditions for high-quality teaching and to support student achievement (Branch et al., 2012; DuFour & Marzano, 2011; Gentilucci & Muto, 2007; Herman et al., 2017; Leithwood & Riehl, 2003; Marzano et al., 2005; Robinson, 2007; Silva et al., 2011). As compared to the number of studies in an academic setting focusing on individual and collective teacher efficacy, principal self-efficacy is an understudied area of research. A more in depth understanding of the construct of principal self-efficacy may inform school leaders on how to change leadership behaviors and practices to improve instruction and school climate to maximize student performance (Aderhold, 2005; Azah, 2014; Calik et al., 2012; Dwyer, 2017; Herman et al., 2017; Lehman, 2007; Leithwood & Jantzi, 2008; Leithwood, Strauss, & Anderson, 2007; Lovell, 2009; McCullers & Bozeman, 2010; Moak, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004, 2007; Versland & Erickson, 2017). However, the intent of this case study was to understand the link between accountability measures in Texas, rather than leadership practices, and middle school principals' perceptions of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Results of this case study may inform principals of professional development activities to enhance their

own sense of self-efficacy, leadership behaviors that bolster teacher and collective efficacy levels to enhance student learning outcomes, principal preparation programs, and increase principals' awareness of the potential impact of standards and accountability on their own sense of self-efficacy.

Limitations

This case study was limited to ten middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Hence, the results of this case study may not be generalized beyond this population because of the situation-specific nature of the investigation and further studies are needed to assess the generalizability of these findings. In addition, this case study was limited to the self-disclosed perceptions of efficacy of the middle school principals who chose to participate and not actual leadership behaviors. Although every effort was made to protect the confidentiality and anonymity of respondents to the principal efficacy survey and interviews, some respondents may have chosen to be less than candid in their responses. This lack of candor may have skewed the findings. The case study relied upon the participants accurately reporting their demographic data. Due to the anonymity of the participants, there was no way to verify the reported demographic data. This case study employed the use of the Principal Sense of Efficacy Scale (PSES) to measure the self-disclosed perceptions of efficacy of the middle school principals who decided to participate. Tschannen-Moran and Gareis (2004) contend that the PSES is a valid and reliable instrument to measure the construct of principal self-efficacy, but other leadership studies have utilized a variation of efficacy scales to capture principals' sense of efficacy (Leithwood & Jantzi, 2008). The correlational procedures that were utilized for this case study cannot determine causality or the specific constructs that are related.

Definition of Terms

In an effort to provide uniformity of understanding and meaning in this case study, the following definition of terms apply:

Accountability: Accountability was based primarily on student assessment results in reading, mathematics, writing, science, and social studies from the State of Texas Assessments of Academic Readiness (STAAR). Performance targets for Texas A-F Accountability System are ninety percent of tests meeting or exceeding the Approaches Grade Level standard, sixty percent of tests meeting or exceeding the Meets Grade Level standard, and thirty percent of tests meeting or exceeding the Masters Grade Level standard (TEA, 2020).

Effective Schools Framework (ESF): ESF is comprised of a set of evidence-based district commitments and essential actions for schools identified for comprehensive, targeted, or additional targeted support for both state and federal accountability requirements in Texas. The ESF facilitates the continuous improvement process by establishing a common language around the best practices of effective schools, support improvement efforts through an aligned diagnostic process, and the positioning of resources to the needs of each school identified for accountability interventions [Effective Schools Framework (ESF), 2020].

Every Student Succeeds Act (ESSA): Legislation that replaced the No Child Left Behind Act in 2015. Requires states to test all public school students annually in mathematics and reading or language arts in grades 3 through 8 and at least once in grades 9 through 12 as well as science at least once in grade spans 3 through 5, 6 through 9, and 10 through 12 (ESSA, 2015). Replaced the current adequate yearly progress system to a state defined index system with federally required components.

Local Educational Agency (LEA): As defined in ESSA, a public board of education or other public authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public elementary schools or secondary schools [United States Department of Education (USDE), 2020].

Principal: Persons certified for the position of school leader as prescribed by the State Board for Educator Certification (SBEC) in Texas and who are designated by a school board as the chief administrator of a public school.

Principals' Sense of Efficacy for Instruction: Aspect of the principalship defined by Tschannen-Moran and Gareis (2004) to include creating a positive learning environment, facilitate student learning, raise student achievement on standardized tests, manage change, motivate teachers, and generate enthusiasm for a shared vision for the school.

Principals' Sense of Efficacy for Management: Aspect of the principalship defined by Tschannen-Moran and Gareis (2004) to include handling the paperwork required of the job, handle the time demands of the job, cope with the stress of the job, prioritize among competing demands of the job, maintain control of the daily schedule, and shape the operational policies and procedures that are necessary to manage a school.

Principals' Sense of Efficacy for Moral Leadership: Aspect of the principalship defined by Tschannen-Moran and Gareis (2004) to include promoting acceptable behavior among students, handle effectively the discipline of students, promote spirit among a large majority of the student

population, promote ethical behavior among school personnel, promote the prevailing values of the community, and promote a positive image of the school with the media.

Principal Sense of Efficacy Scale (PSES): An instrument designed by Tschannen-Moran and Gareis (2004) to measure principals' sense of efficacy in the areas of instructional leadership, management leadership, and moral leadership.

Self-Efficacy: A belief about one's own ability to achieve a specified performance outcome in a particular context (Bandura, 1997; 1982; 1993, 1997).

State Educational Agency (SEA): According to 34 CFR 77.1 (c) [Title 34-Education; Subtitle A], a State board of education or other agency or officer primarily responsible for the supervision of public elementary and secondary schools in a State. In the absence of this officer or agency, it is an officer or agency designated by the Governor or State law (USDE, 2017).

Urban: The United States Census Bureau delineates a metropolitan area with a population greater than 50,000 as an urbanized area [United States Census Bureau (USCB), 2020]. The site of the case study was a school district located in an urban area at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Organization of the Study

The student performance challenges associated with public school education are not new and will continue to increase as the language of education policy changes. Given the significant contributions that principals make to school effectiveness it is important to understand what can be done to build their efficacious beliefs as well as improved student achievement (Aderhold, 2005; Azah, 2014; Federici & Skaalvik, 2012; Goddard et al., 2015; Herman et al., 2017; Holleb, 2016; Leithwood & Jantzi, 2008; Lehman, 2007; Lovell, 2009; Lyons & Murphy, 1994; McCollum & Kajs, 2009; Moak, 2010; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020;

Santamaria, 2008; Smith et al., 2006; Tschannen-Moran & Gareis, 2004). By investigating the construct of principal self-efficacy, this case study examined the relationship between the accountability movement, as characterized by identification for comprehensive support and improvement, and middle school principals' sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

This case study is presented in five chapters. The first chapter provided an introduction, background, statement of the problem, purpose of the study, research questions, hypothesis, significance of the study, limitations, and a definition of terms used throughout the case study. Additionally, the conceptual foundation of the case study was established. Chapter II provides an overview of the context of the case study and details the accountability mandates set forth by educational policy. Following this overview, this chapter provides a review of relevant literature related to the importance of leadership in the academic setting; especially focusing on the leadership behaviors of the principal and concludes with a review of literature germane to the construct of principal self-efficacy. Methodology for this case study is presented in Chapter III and includes the procedures utilized to complete the case study. Chapter IV provides a presentation and analysis of data. Chapter V details the findings, implications, as well as recommendations for future research.

CHAPTER II

REVIEW OF LITERATURE

Spurred by the current educational discourse pertaining to standards and accountability, educational leaders are called to enact meaningful and sustained change that will transform teaching and schooling practices. Faced with the challenges associated with ESSA, school leaders are called to craft safe and supportive learning environments that will assist students achieve instructional and curricular objectives (DuFour & Marzano, 2011; Herman et al., 2017; Leithwood, 2007; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005). While some public schools have experienced success in response to the increased accountability pressure, there remain several others that have not been able to alter the organizational conditions needed for school improvement (DuFour & Marzano, 2011; Herman et al., 2017; Holme & Rangel, 2012). As a result, school leaders are compelled to critically examine educational and leadership praxis that promote efforts to improve student achievement.

Tschannen-Moran and Gareis (2004, 2007) contend that principals with a strong efficacious outlook are more tenacious in accomplishing their objectives, malleable to change, and more likely to adjust actions to meet contextual circumstances. This case study acknowledges the leadership complexities facing school leaders and examined the relationship between the heightened accountability climate in Texas and the perceptions of self-efficacy among middle school principals to improve the academic achievement of students in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Until educational and leadership scholars gain a deeper insight into the construct

of principal self-efficacy, endeavors to effectively manage principals' self-efficacy to confront the leadership and academic responsibilities of their positions under the hegemonic discourse of standards and accountability will continue to be uninformed.

The purpose of this review of literature was to emphasize the importance of a principal's sense of self-efficacy through the lens of social cognitive theory as applied to the current state of accountability in Texas. Bandura's (1997) triadic reciprocal causation model emphasizes the mutual influences of environment, individual behavior, and personal factors. In the context of this case study, the determinants were represented by the performance standards of the Texas A-F Accountability System (environment), educational leadership praxis (individual behavior), and the efficacious beliefs of middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border (personal factors).

The research studies included in this review of literature were located through the use of online education databases from the University of Texas Rio Grande Valley library website. Articles related to educational leadership, self-efficacy, and principal efficacy were accessed from journals found within EBSCO Host, Education Full Text (H. W. Wilson) and Sage Journal databases. The following Boolean operators were employed to garner applicable results from the referenced databases: "principal efficacy", "principals' self-efficacy", "principals' sense of efficacy", "principal self-efficacy", "school leadership and self-efficacy", "measuring principal self-efficacy", and "studies related to principal efficacy". In addition to the keywords, delimiters were applied to construct queries that would locate pertinent research studies. Only peer-reviewed, portable document format (PDF) articles were included in the search of educational literature. After reviewing the results obtained from the multiple searches, the studies selected

expressed a need to investigate the efficacious beliefs of school leaders, especially principal self-efficacy, in order to improve school conditions and student learning.

This chapter begins with an overview of the context of the case study and details the accountability mandates set forth by educational policy. Following this overview, this chapter reviews literature related to dimensions of principal leadership in the academic setting; especially focusing on aspects of the principalship represented on the Principal Sense of Efficacy Scale (PSES). The chapter will conclude with a critical examination of the construct of efficacy and its relevance to the field of education.

The Context

In response to concerns expressed by educators and families, Congress passed ESSA in 2015 through bipartisan measures. This reauthorization of the Elementary and Secondary Education Act (ESEA) reduced federal control over education and allowed states to make key decisions regarding public school accountability. Moreover, ESSA replaced NCLB's prescriptive requirements that had become progressively unworkable for educational institutions and educators and provided states with new flexibility to develop a state accountability system to meet federal accountability requirements (USDE, 2020).

Under ESSA, State Educational Agencies (SEA) shall submit a plan to the United States Department of Education that is developed with timely and meaningful consultation with the Governor, members of the state legislature, state board of education, LEAs, educators, and parents (ESSA, 2015). Each state's plan shall provide an assurance that the state has adopted challenging academic content and achievement standards in mathematics, reading or language arts and science (ESSA, 2015). The achievement standards shall include no less than three levels of achievement and apply to all public schools and public school students in the state (ESSA,

2015). States must also demonstrate in their plan that they have adopted English language proficiency standards to annually assess the proficiency levels of English learners and must be aligned with the challenging state academic standards (ESSA, 2015). Moreover, each state education agency must provide an assurance to the Department of Education that the state's standards are aligned with entrance requirements for credit-bearing coursework at state higher education institutions and with relevant state career and technical education standards (ESSA, 2015).

States are also required under ESSA to implement a set of high-quality student academic assessments in mathematics, reading or language arts, science, and may implement assessments in other subjects (ESSA, 2015). These assessments must be administered to all elementary, middle, and high school students, must measure the achievement of all students, and must be aligned with challenging state academic standards (ESSA, 2015). The legislative bill also keeps the current schedule of federally required statewide assessments (ESSA, 2015). Mathematics and reading or language arts have to be assessed yearly in grades 3 through 8, and once in grades 9 through 12 (ESSA, 2015). Science must be assessed at least once in grades 3 through 5, grades 6 through 9, and once in grades 10 through 12 (ESSA, 2015). These assessments must involve multiple measures of student achievement, include measures that assess higher-order thinking skills and understanding, which may include measures of student growth, and may be partially delivered in the form of portfolios, projects, or extended performance tasks (ESSA, 2015). The statewide assessments must also provide appropriate accommodation for children with disabilities (ESSA, 2015). Results must also be disaggregated by each state, LEA, and school by: major racial and ethnic group; economically disadvantaged students as compared to students who

are not economically disadvantaged; children with disabilities as compared to children without disabilities; English proficiency status, gender; and migrant status (ESSA, 2015).

State Defined Index System

One of the most important changes from NCLB to ESSA is the decreased focus on adequate yearly progress system to a state defined index system with federally required components (ESSA, 2015). Under the reauthorization of the bill, the statewide accountability system approved by the Department of Education must include multiple factors to meaningfully differentiate between all public schools in a state and identify low-performing campuses and students (ESSA, 2015). In general, each statewide accountability system must have established ambitious state-designed long-term goals for all students and each subgroup of students in the state for improved academic achievement as measured by proficiency on annual state assessments; high school graduation rates including the four-year adjusted cohort graduation rate; and percent of English learners making progress in achieving English language proficiency (ESSA, 2015).

The approved state-defined index system must also include the following indicators measured for all students and subgroups, except for the English learner proficiency indicator: academic achievement as measured by proficiency on annual assessments; a measure of student growth on annual assessments; four-year adjusted cohort graduation rate for high schools; progress in achieving English proficiency for English learners in each of the grades 3 through 8 and the same high school grade in which the state assess for mathematics and reading or language arts; and a measure of school quality and student success (ESSA, 2015). The measure of school quality or student success may include one or more of the following: student and educator engagement; access and completion of advanced coursework; postsecondary readiness;

school climate and safety; and another state selected indicator that meets the requirements of the clause (ESSA, 2015). Moreover, states must also measure the achievement of not less than 95% of all students and subgroups of students in public schools (ESSA, 2015).

As stated in ESSA (2015), a state must use the statewide accountability system to meaningfully differentiate all public schools based on the academic indicators for all students and subgroups of students. Beginning in the 2017-2018 school year and then at least every three years subsequently, the state must establish a methodology to identify those schools in need of comprehensive support and improvement, which will include the lowest performing five percent of all schools receiving Title I funds; any high school failing to graduate one third or more of their students; and schools for which a subgroup is consistently underperforming in the same manner as a school under the lowest five percent category for a state determined number of years (ESSA, 2015). The system must also differentiate any school in which any of previously identified subgroup of students is consistently underperforming and will result in a school-level targeted support and improvement program (ESSA, 2015).

School Improvement

Different from NCLB, identification for school improvement, corrective action, restructuring, public school choice, and supplemental educational services is replaced with two categories under ESSA (2015): comprehensive support and improvement and targeted support and improvement. In partnership with stakeholders, schools that meet the previously identified criteria for comprehensive support and improvement must develop and implement comprehensive support and improvement plans (ESSA, 2015). Plans are required to improve student outcomes through the use of evidence-based interventions, be based on a school-level needs assessment, identify resource inequities, and be approved by the school, LEA, and the

SEA (ESSA, 2015). The comprehensive support and improvement plans shall also be periodically monitored and reviewed by the SEA (ESSA, 2015). ESSA (2015) also requires that LEAs provide students enrolled in a school identified for comprehensive support and improvement with the option to transfer to another public school, including paying for transportation costs, if state law permits. To ensure continued support for a school and local school districts, the SEA must establish statewide exit criteria for schools identified for comprehensive support and improvement (ESSA, 2015). If exit criteria are not satisfied by an identified school within four years, it shall result in a more rigorous state-determined action (ESSA, 2015).

In addition to identification for comprehensive support and improvement, the State must annually notify LEAs of schools identified with consistently underperforming subgroups (ESSA, 2015). In partnership with stakeholders, schools identified for improvement must develop and implement a school-level targeted support and improvement plan to improve outcomes for subgroups through the use of evidence-based interventions; be approved by the local school district, and be monitored by the LEA (ESSA, 2015). Additionally, if a targeted support and improvement plan is not successfully implemented by an identified school after a LEA determined number of years, additional state-determined action must be taken (ESSA, 2015). Schools for which plans are developed where subgroup performance, on its own, would lead to identification for comprehensive support and improvement as in the lowest five percent must also identify resource inequities to be addressed through plan implementation (ESSA, 2015). As with other schools which are identified, notification for targeted support and improvement will begin with the 2017-2018 academic year (ESSA, 2015). For the purpose of understanding the

accountability context of this case study, focus will shift to the changing and heightened language of educational policy in Texas.

Texas A-F Accountability System

From 2013 to 2017, the SEA in Texas relied on the use of the following four indices to underpin the academic accountability system framework and assign either a Met Standard or Improvement Required rating to districts and campuses: Student Achievement, School Progress, Closing the Performance Gaps, and Postsecondary Readiness (TEA, 2020). In June of 2017, Governor Greg Abbott signed into law House Bill 22 (HB 22), 85th Texas Legislature, which overhauled significant aspects of the accountability system in Texas, including the reduction of indicators to three domains: Student Achievement, School Progress, and Closing the Gaps (TEA, 2020). The implementation of the new A-F Accountability System took effect with the release of 2018 accountability ratings, thereby maintaining alignment with the reauthorized provisions of ESSA requirements (TEA, 2020). HB 22 also required the education commissioner of TEA to adopt rules to assign districts a rating of A, B, C, D, or F for overall performance, as well as for performance in each domain, beginning in August 2018 (TEA, 2020). As per requirements of HB 22, each campus in Texas received A-F ratings beginning in August 2019 (TEA, 2020). Each of the three domains of the A-F Accountability System will be unpacked to further comprehend the complexities of educational accountability mandates in Texas.

Domains

The Student Achievement domain of the A-F Accountability System evaluates school districts and school performance based on student achievement in three areas: student performance on STAAR assessments, College, Career, and Military Readiness (CCMR) indictors, and high school graduation rates (TEA, 2020). HB 22 also requires the A-F Accountability System in the

School Progress domain to evaluate the percentage of students who met the standard for improvement as well as the overall student performance of a district or campus compared to similar districts or campuses (TEA, 2020). Hence, the School Progress domain appraises district and campus performance in two areas: Part A-Academic Growth and Part B-Relative Performance. Academic Growth assesses the number of students that grew at least one year academically as measured by STAAR outcomes (TEA, 2020). Specifically, districts and campuses are awarded points based on whether a student achieves expected or accelerated growth on the STAAR progress measure or maintained proficiency from the prior year to the current year (TEA, 2020). Relative Performance takes into account the achievement of students relative to districts or campuses with similar economically disadvantaged demographics (TEA, 2020).

The indicators in the Closing the Gaps domain, as well as the domain's configuration, align the A-F Accountability System with ESSA requirements (TEA, 2020). Through the use of disaggregated data, the objective of this domain is to reveal variances among racial/ethnic groups, socioeconomic backgrounds, and other factors to safeguard that the lowest-performing student groups receive focused interventions (TEA, 2020). In particular, the Closing the Gaps domain ensures students are doing well regardless of racial group, special education status, and socioeconomic status for all indicators required by HB 22 and ESSA including English Language proficiency and school quality indicator for elementary and secondary schools that are not high schools (TEA, 2020). Moreover, this alignment of the Closing the Gaps domain and federal accountability requirements allows TEA to identify campuses for comprehensive support and improvement to enhance the provision of resources for those schools that are in greatest need of assistance (TEA, 2020). During the 2018-2019 school year, 43% of public schools in Texas

were identified for comprehensive, targeted, or additional targeted support based on their Closing the Gap A-F grade (TEA, 2020). Of the 43% of public schools identified to engage in accountability interventions, 12% were middle schools identified as comprehensive, targeted, or additional targeted support campuses (TEA, 2020).

Comprehensive Support and Improvement Identification. TEA rank orders the Closing the Gaps domain scaled score for all public schools in Texas to identify campuses for comprehensive support and improvement. Campuses that receive Title I, Part A funds and score in the lowest five percent are identified for comprehensive support and improvement (TEA, 2020). In addition, secondary campuses, regardless of Title I status, that do not meet a 67% four-year federal graduation rate for the all students group are also identified for comprehensive support and improvement (TEA, 2020). Furthermore, any Title I campus engaged in targeted support and improvement for three successive years for the same student group(s) is then identified for comprehensive support and improvement (TEA, 2020). During the 2018-2019 academic year, 543 schools were identified in Texas for comprehensive support and improvement of which 136 were middle schools (TEA, 2020). In the context of this case study, none of the middle schools in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border were identified for comprehensive support and improvement during the 2018-2019 academic year. Accountability mandates require schools identified for comprehensive support and improvement to engage in the Effective Schools Framework (ESF) continuous improvement process, prepare and implement a targeted improvement plan, identify members of the campus leadership team, document support mechanisms in the campus improvement plan, and participate in ongoing school improvement training provided by a local service center (ESF, 2020).

Targeted Support and Improvement Identification. The SEA annually utilizes the Closing the Gaps domain to identify campuses that have consistently low-performing student groups. A student group that misses long-term and interim benchmark goals for ESSA federal accountability in at least the same three indicators, for three successive years, is considered "consistently underperforming" (TEA, 2020). Any campus not identified for comprehensive support and improvement that has at least one persistently underperforming student group is identified for targeted support and improvement. During the 2018-2019 academic year, 2,563 schools were identified in Texas for targeted support and improvement of which 808 were middle schools (TEA, 2020). In the context of this case study, 5 of the middle schools in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border were identified for targeted support and improvement during the 2018-2019 academic year. Accountability mandates require schools identified for targeted support and improvement to engage in the ESF continuous improvement process, prepare and implement a targeted improvement plan, identify members of the campus leadership team, document support mechanisms in the campus improvement plan, and participate in ongoing school improvement training provided by a local service center (ESF, 2020).

Additional Targeted Support and Improvement Identification. Any elementary, middle, high school that is not identified by the TEA for comprehensive or targeted accountability intervention is identified for additional targeted support and improvement if an individual student group's overall percentage is at or below the percentage used to identify that campus type for accountability support (TEA, 2020). Identification for additional targeted support and improvement occurs on an annual basis by TEA. During the 2018-2019 academic year, 712 schools were identified in Texas for additional targeted support and improvement of

which 82 were middle schools (TEA, 2020). In the context of this case study, none of the middle schools in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border were identified for additional targeted support and improvement during the 2018-2019 academic year. Accountability mandates require schools identified for additional targeted support and improvement to engage in the ESF continuous improvement process, prepare and implement a targeted improvement plan, identify members of the campus leadership team, document support mechanisms in the campus improvement plan, and participate in ongoing school improvement training provided by a local service center (ESF, 2020).

Effective Schools Framework

The Effective Schools Framework (ESF) is comprised of a set of evidence-based district commitments and essential actions for schools identified for comprehensive, targeted, or additional targeted support to improve learning outcomes. The objective of the ESF is to provide districts and schools a clear vision to support powerful teaching and learning (ESF, 2020). The ESF delineates 5 prioritized levers that are critical in high performing campuses and include: strong school leadership and planning; effective, well-supported teachers; positive school culture; high-quality curriculum; and effective instruction (ESF, 2020). The ESF also facilitates the continuous improvement process by establishing a common language around the best practices of effective schools, support improvement efforts through an aligned diagnostic process, and the positioning of resources to the needs of each school identified for accountability interventions (ESF, 2020). The ESF is also rooted in a continuous improvement process that consists of building a common vision of the highest leverage school practices, assess the current state of school practice in relation to the vision, prioritize gaps in systems and practices based on

data, and connect effective capacity builders to ultimately improve teaching and learning (ESF, 2020). A brief explanation of the ESF school improvement pathway follows to further appreciate the discourse of standards and accountability in Texas.

Each school identified for comprehensive, targeted, or additional targeted support must assemble a campus leadership team to reflect on current practices in relation to the ESF in order to determine the highest leverage focus areas of improvement (ESF, 2020). Led by the school principal, the school leadership team collectively analyzes longitudinal student data to identify trends in subject areas and/or grade levels, teacher level data to gain insight into teacher level performance, A-F Accountability domain data to determine performance goals for the next school year, and teacher and student needs assessment data to further reveal practices that led to a need for accountability interventions (ESF, 2020). In addition, the ESF self-assessment tool encourages the principal and leadership team to collect and analyze school-based evidence to determine the implementation of each essential action to inform the development of the targeted improvement plan (ESF, 2020).

The purpose of the targeted improvement plan is to support long-term, sustainable campus improvement by recording findings from the needs assessment, establish annual goals, identify 90 day outcomes, and create a 90 day cycle action plan (ESF, 2020). The development of a 90 day cycle action plan provides the principal and leadership team an opportunity to describe how the campus will look and sound at the end of the cycle with the implementation of best practices recognized for effective schools (ESF, 2020). The campus leadership team also identifies barriers the campus may face in the implementation of the 90 cycle to take necessary steps to improve the prioritized focus areas (ESF, 2020). The sum of all three 90 day cycle outcomes should lead to achieving the annual desired outcome for school improvement and

ultimately meet accountability intervention mandates (ESF, 2020). Cycle 4 of the 90 day action plan is designed to prepare for the upcoming school year and make adjusts to ensure the campus remains on the school improvement pathway.

Educators in Texas have been shocked and awed by the language of disaster that is the hegemonic discourse driving the transformation of public education (Taubman, 2007). The peril, vulnerability, and pressures on school administrators who lead schools labeled as in need of improvement will grow as ESSA is fully implemented in Texas and may lead to lower levels of efficacy (Azah, 2014; Daly, 2006; Leithwood & Jantzi, 2008; McCullers & Bozeman, 2010; Nichols & Berliner, 2007; Pearce, 2020; Santamaria, 2008). In this environment in which it is the expectation that educational leaders restructure schools in a focused direction towards improvement, it is vital that educational and leadership scholars comprehend the degree that principals' self-efficacy beliefs are determinants of their ability to improve learner outcomes. Thus, this case study attempted to understand the link between comprehensive support and improvement and middle school principals' sense of efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Dimensions of the Principalship

The role of the principal, as the designated leader of instructional improvement in our nation's public schools, has been a central focus of educational reform efforts. Informed by decades of school-based reform research and challenged by the leadership expectations of the current accountability climate, principals in the 21st century seek leadership practices to guide their instructional decision-making (Gentilucci & Muto, 2007; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Silva et al., 2011; Waters & Cameron, 2007). The purpose of this section of the literature review is intended to evaluate scholarship to clarify

the nature of the following three dimensions of the principalship represented on the Principal Sense of Efficacy Scale (PSES): management leadership, instructional leadership, and moral leadership. A comprehensive analysis of contemporary educational leadership research goes beyond the centerpiece of this case study, but what is focused on is the importance of the principal to multiply the impact of effective teaching practices to enhance student outcomes. This thread of educational and leadership research supports the decision to focus solely on the leadership practices of middle school principals in an urban school district located in the Rio Grande Valley along the Texas-Mexico border and examine their perceived self-efficacy beliefs.

Management Leadership

Within the last four decades, the definition of an effective school principal has transformed to include leadership qualities that focus on teaching and learning as well as being morally responsive (Institute of Educational Leadership, 2000). Prior to the landmark *A Nation at Risk* educational reform report, the epitome of being an effective school principal was being an effective building manager (Institute of Educational Leadership, 2000). Although more traditional aspects of the principalship such as maintaining the security of the learning environment, managing student discipline, balancing categorical funds, addressing personnel issues, and attending to all the other managerial aspects of schools are still important, more dynamic responsibilities of campus leaders have become increasingly relevant as school reform efforts have grown (DiPaola & Tschannen-Moran, 2003). While schools and the principalship are changing dramatically under the heightened language of educational policy, campus leaders are still expected to handle the paperwork required of the job, handle the time demands of the job, cope with the stress of the job, prioritize among competing demands of the job, maintain control of their daily schedule, and shape the operational policies and procedures that are

necessary to manage a school (Tschannen-Moran & Gareis, 2004). The principalship has always been a demanding position and the managerial dimension of school leadership continues to grow, but educational reform efforts seem to conclude that school leaders must do more in an environment of relentless, expansive change (Institute of Educational Leadership, 2000). More and more the evolving and diverse needs of schools require principals to embrace other more pressing aspects of the principalship, such as instructional and moral leadership, to meet the difficulties of unprecedented legislative mandates and, ultimately, improve student achievement outcomes.

Instructional Leadership

Schools with desirable levels of instructional and student outcomes are consistently shown by scholars to have strong principal instructional leadership (Gentilucci & Muto, 2007; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Silva et al., 2011; Waters & Cameron, 2007). Leithwood and Riehl (2003) concluded that after curriculum and instruction, learners benefit most from effective instructional leadership practices. To be an effective school leader a principal must draw on a set of core competencies to influence learning and maximize student performance (Leithwood & Riehl, 2003). The three components of effective instructional leadership, as identified by Leithwood and Riehl (2003), include: (1) setting directions; (2) developing people; and (3) developing the organization. These broad dimensions of school leadership behaviors indirectly impact student achievement and are necessary ingredients to overcome the complexities of accountability and school improvement mandates (Leithwood & Riehl, 2003).

Marzano et al.'s (2005), meta-analysis of 69 principal leadership studies also focused on the impact leadership behaviors can have upon the academic achievement of pupils. In their

analysis of empirical studies, Marzano et al. (2005) found an average effect size of .25 between principal leadership and student achievement. This correlation indicated a potential for a 10% increase in achievement of students on norm referenced test (Marzano et al., 2005). Not only did the researchers determine a correlation between principal behaviors and student achievement, Marzano et al. (2005) also identified 21 responsibilities of the principal that are statistically associated with the academic achievement of learners. Similar to the findings of Leithwood and Riehl (2003), the research of Marzano et al. (2005) demonstrated a causal link between effective principal instructional leadership and student achievement.

To further provide 21st century school leaders with effective instructional leadership strategies, Waters and Cameron (2007) conducted a meta-analysis of school leadership practices that improve the quality of instruction for students. Upon review of 69 high quality studies in the academic setting, Waters and Cameron (2007) concluded that school level leadership does statistically impact student achievement. In addition, it was determined that 21 characteristics of an instructional leader along with 69 corresponding behaviors that cultivate those traits were recognized to correlate to increased student performance (Waters & Cameron, 2007). These behaviors were synthesized by the researchers into a construct termed the Balanced Leadership Framework (Waters & Cameron, 2007). Moreover, the findings of Waters & Cameron (2007) demonstrated that strong leadership practices that negatively impact student achievement are referred to as the differential impact of leadership.

Waters and Cameron (2007) also employed a factor analysis to determine whether the 21 leadership responsibilities were related and to what degree a principal's leadership practices led to first- and second-order change. Upon analysis of the data, there was insufficient evidence to merit merging any of the 21 responsibilities and all were shown to lead to constructive first-order

change. Moreover, 11 of the 21 characteristics of leadership were shown to correlate to second-order change. The cornerstone of Waters and Cameron's (2007) Balanced Leadership Framework is the premise that through the implementation of the 21 characteristics, a strong educational leader will emerge that will positively affect student performance. Similar to the findings of Waters and Cameron (2007), the research of Robinson (2007) also established a link between effective principal leadership and improved teaching and learning practices.

The findings from a study conducted by Leithwood and Strauss (2009) resulted in the identification of eight characteristics to successful turnaround school instructional leadership. Accomplished in two phases, the researchers initially collected interview data from 4 elementary and 4 secondary schools as well as 8 parent and student focus groups (Leithwood & Strauss, 2009). The second phase of data collection comprised of survey responses from 472 teachers and 36 administrators in 11 elementary and 3 secondary schools (Leithwood & Strauss, 2009). After synthesizing the evidence, Leithwood and Strauss (2009) determined that low performing schools required effective instructional leadership practices to turn around the declining performance and achieve enhanced student learning outcomes. Moreover, Leithwood and Strauss (2009) acknowledged eight dimensions to successful turnaround instructional leadership: (1) low performing schools need strong, effective leaders; (2) the implementation of the core leadership practices identified by Leithwood and Riehl (2001) were critical to schools' turnaround efforts; (3) the core leadership practices encompassed most of the turnaround schools' school improvement efforts; (4) core leadership practices are employed differently according to the turnaround schools' needs; (5) core leadership practices were narrowly distributed to specific sources of leadership; (6) as turnaround school performance begins to improve, leadership becomes increasingly shared and collaborative; (7) leadership challenges at the beginning stages

of the turnaround process were similar across school contexts; and (8) leaders must also focus on changing the culture and climate of school stakeholders to be successful. Consequently, the scholarship of Leithwood and Strauss (2009) identified the leadership conditions that drive effective school improvement efforts that lead to improved student learning outcomes.

There is also a growing body of leadership research in the field of education that has emerged that supports the notion that principals can have a profound direct effect on the academic achievement of studies. One such study conducted by Gentilucci and Muto (2007) investigated student perceptions of principals' instructional leadership behaviors elicited by NCLB and the influence those actions had on students' academic achievement. The researchers determined that students at three middle schools believed that principals who engaged in certain instructionally-focused behaviors do impact student learning (Gentilucci & Muto, 2007). Additionally, the students identified principal visibility and approachability, interactive classroom visits, and teacher-principal actions as high-influence instructional leadership behaviors elicited by the leadership expectations of NCLB (Gentilucci & Muto, 2007). The findings of Gentilucci and Muto (2007) are valuable because they provide evidence from a student perspective of how principals' leadership behaviors influenced their learning and academic achievement.

Similarly, Silva et al. (2011) analyzed specific principal instructional leadership behaviors that led to the types of student achievement gains required by NCLB. The researchers employed a quantitative experimental study to determine the degree principals' direct instructional leadership behaviors elicited by NCLB impacted student achievement. Silva et al. (2011) declared that the *t* test of independent samples was significant, indicating a moderately large effect size for the treatment condition. The findings also revealed that specific

instructionally-focused principal behaviors compelled by NCLB had a direct and significant effect on students' achievement gains on state reading assessments (Silva et al., 2011).

Although the authors of these two independent studies (Gentilucci & Muto, 2007; Silva et al., 2011) framed their research problems differently, both explored the degree of influence that the language of education policy had on the instructional leadership capacity of school principals. The educational mandates of NCLB and recent studies pertinent to instructional leadership under heightened student performance mandates has caused school leaders, especially the principal, to reevaluate basic assumptions of their roles as instructional leaders. Furthermore, each of these studies (Gentilucci & Muto, 2007; Silva et al., 2011) examined the need for principals to reshape their roles as instructional leaders into order to assist their students achieve academic success as necessitated by the accountability climate in which our nation's public schools exist.

Moral Leadership

The moral leadership dimension of the principalship is an important aspect of school leadership scholarship to unpack in order to further understand the context of this case study. Currently, principals are encouraged to lead in a manner that not only leverages the teaching and learning practices of their schools, but also empowers campus stakeholders to embrace the morally responsive values and behavioral norms that will withstand the external pressures of school reform efforts (Greenfield, 2004). Leithwood (1999) has noted that school leaders tend to have well defined personal ethics derived from their individual values and professional experiences as teachers and, in general, are morally driven. Moreover, a review of literature as it relates to moral leadership focuses on improving principal's moral literacy habits, skills, and competencies towards a higher ethical standard in order to empower their decision-making process and

leadership behaviors that directly and indirectly impact student achievement (Cherkowski, Walker, & Kutsyuruba, 2015; Fullan, 2003; Sergiovanni, 1992; Starratt, 2004; Taylor, 2011).

Sergiovanni (1992) has argued against leadership practices that emphasize logic and objectivity for more a more advocated approach that underscores emotions, group membership, and meaning making. By focusing on the human dimensions of schools, Sergiovanni (1992) asserted that moral leadership practices help principals develop a sense of community within their schools that is focused on shared values and morals that will eventually lead to a shift in the culture of the learning environment to better support academic outcomes. Thus, by focusing on the values and behavioral norms of the learning community rather than on rules and regulations, morally responsive school principals can potentially influence the degree to which teachers and other campus stakeholders embrace education improvement activities that will result in improved student achievement (Sergiovanni, 1992).

Building on the work of Sergiovanni (1992), Starratt (1994; 2004) articulated the three ethical leadership virtues that exists in schools. Starratt (1994; 2004) posits that the leadership virtues of responsibility, authenticity, and presence serve to improve teacher capacity, academic outcomes, and the transformation of school cultures by energizing school leaders and personnel to mobilize resources. The ethical virtue of responsibility requires principals to value the leadership and learning of teachers to build capacity via morally focused professional development activities (Starratt, 1994; 2004). Additionally, Starratt (1994; 2004) expressed that when school leaders authentically place the needs of students and teachers first it improves the communal work of teaching and learning. Moreover, the ethical value of presence encourages principals to treat all individuals, teachers and students, within the school environment with dignity and worth in order to enrich the learning community (Starratt, 1994; 2004). Accordingly,

by integrating the moral virtues of responsibility, authenticity, and presence into the repertoire of principals' leadership praxis it encourages a morally responsive approach to school improvement (Starratt, 1994; 2004).

Fullan (2003) defined moral leadership as a system in which all students learn, the gap between low and high student achievement is bridged, and student learning includes being a morally and knowledgeable member of society. Additionally, Fullan (2003) asserted that morally responsive principals have a high sense of integrity and possess mutual trust and respect for the teachers they lead. Similar to Sergiovanni (1992) and Starratt (1994; 2004), Fullan's definition of moral leadership also stressed the need for shared values and morals to shift the focus of the learning environment to the development of leadership capacities of all campus stakeholders to better support overall student achievement outcomes.

Taylor (2011) argued that the formalized and objectified institutionalization of our nation's schools has led to a lack of morality in school leadership. Taylor (2011) posits that a moral principal is someone that is visionary and encourages those same traits in all individuals, teachers and students, within the learning community in order to improve the quality of education for all learners. Within Taylor's (2011) definition of moral leadership school principals should engage in educational activities that empower their moral authority, encourage all campus stakeholders to be joyful, build unity while promoting diversity, resist egocentric tendencies while focusing on the higher purpose of the learning community, and identify relationship of dominance that destabilize the school in order to transform them into relationships of inter-dependence. Moreover, Taylor (2011) stressed that principals with strong moral leadership values strive to serve the members of the school community in order to set the

moral tone of the relationships that define the learning environment as well as support an equitable and quality instructional program for students.

The overwhelming influence of standardized reform efforts and the hegemonic discourse of standards and accountability has compelled educational leaders at various levels of school organizations to make credible instructional decisions based on researched practices and not blind intuition (DuFour & Marzano, 2011; Herman et al., 2017, Taubman, 2009). Moreover, the destabilizing effect of standard-based reform has required principals to accept and embrace their multi-dimensional roles as school leaders who know how to effectively implement change that will lead to sustained academic achievement for all students (DuFour & Marzano, 2011; Fullan, 2003; Gentilucci & Muto, 2007; Herman et al., 2017; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Sergiovanni, 1992; Silva et al., 2011; Starratt, 2004; Taubman, 2009; Taylor, 2011; Tschannen-Moran & Gareis, 2004; Waters & Cameron, 2007). Towards those ends, this section of the review of literature emphasized the nature of the three different dimensions of the principalship as represented on the PSES and the effects of successful principal leadership on student learning outcomes (Fullan, 2003; Gentilucci & Muto, 2007; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Sergiovanni, 1992; Silva et al., 2011; Starratt, 2004; Taylor, 2011; Tschannen-Moran & Gareis, 2004; Waters & Cameron, 2007). In sum, the leadership practices described do not represent an exhaustive presentation of the importance of leadership in an academic setting, but does reflect evidence that effective principal leadership is at the cornerstone of successful schools (DuFour & Marzano, 2011; Fullan, 2003; Gentilucci & Muto, 2007; Herman et al., 2017; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Sergiovanni, 1992; Silva et al., 2011; Starratt, 2004; Taubman, 2009; Taylor, 2011; Tschannen-Moran & Gareis, 2004; Waters

& Cameron, 2007). Therefore, this literature base supports the decision to focus solely on the leadership practices of middle school principals in an urban school district located in the Rio Grande Valley along the Texas-Mexico border and examine their perceived self-efficacy beliefs.

Efficacy

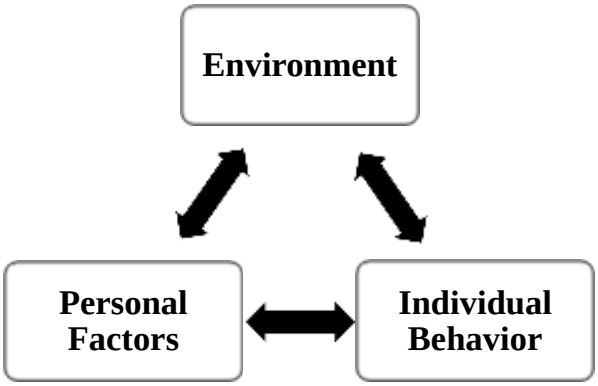
This final section of the review of literature aimed to unpack the construct of self-efficacy as well as contributing factors that impact and influence the perceptions of efficacy amongst principals in leading efforts to improve student achievement. Seminal studies conducted by Bandura (1977, 1982, 1993, 1997, 2001) are the basis of the conceptual foundation of the self-efficacy component of social cognitive theory and provide a framework for understanding, predicting, and changing human behavior. Bandura (1982) contends that perceived self-efficacy influences judgements of one's ability to execute courses of action to produce situational outcomes.

Bandura (1997) postulates that given a task, individuals with similar skill sets will achieve different outcomes based on variations in their personal efficacious outlooks. Additionally, the manner in which an individual chooses to employ their skills is largely determined by their perceived self-efficacy to accomplish desired tasks (Bandura, 1997). Moreover, Bandura (1997) posits that individual's with high self-efficacy beliefs set challenging goals, remain task-focused, attribute failure to insufficient effort, and when goals are accomplished their efficacious beliefs are reinforced. Whereas, inefficacious people shy away from difficult tasks, behave ineffectually, are less likely to persist in perceived adverse environments, and dwell on their deficiencies (Bandura, 1997). Thus, further diminishing their efficacious beliefs to produce desired outcomes.

Within the self-efficacy component of social cognitive theory, Bandura (1997) offers a model of triadic reciprocal causation to exhibit that human behavior is a bi-directional interaction between environment, individual behavior, and personal factors as illustrated in Figure 1. In this causation model, personal factors are represented by efficacy beliefs and human functioning is the product of the bi-directional interaction between personal, behavioral, and environmental determinants (Bandura, 1997). Bandura (1997) also asserted that of all personal factors attributed to human functioning, there is none more powerful than a person's efficacious beliefs to influence action. Accordingly, by exploiting one's own personal factors (i.e. efficacious outlook) an individual may affect the environmental outcomes of their own behavior (Bandura, 1997).

Figure 1

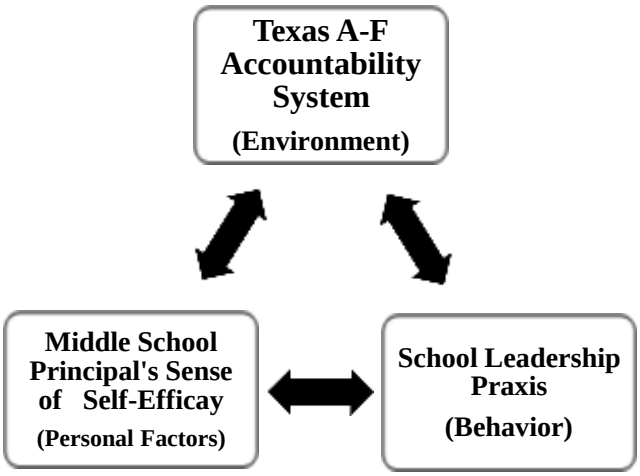
Triadic Reciprocal Causation Model (Bandura, 1997)



As applied within the context of this case study, the determinants of Bandura's (1997) triadic reciprocal causation model, as depicted in Figure 2, are represented by the performance standards of the Texas A-F Accountability System (environment), school leadership praxis (behavior), and the efficacious beliefs of middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border (personal factors).

Figure 2

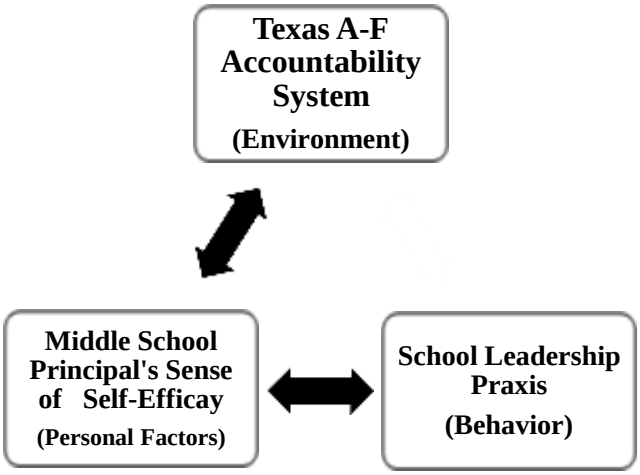
Bandura's (1997) Triadic Reciprocal Causation Model as applied within the context of this case study



Specifically, this case study shifts its focus on the construct of principal self-efficacy and how the performance standards of the Texas A-F Accountability System, rather than leadership practices, played a guiding force in determining perceptions of middle school principals' self-efficacy as illustrated in Figure 3.

Figure 3

Purpose of the case study was to explore the relationship between the Texas A-F Accountability System and middle school principals' sense of efficacy



According to Bandura (1977; 1997) expectations of personal efficacy are shaped by four experiences: (1) enactive mastery experience; (2) vicarious experience; (3) verbal persuasion; and (4) emotional arousal. These principal sources of information construct a person's perceptions of self-efficacy. In academic settings, several scholars have concluded that principals' sense of efficacy are influenced by the stimulation of efficacious beliefs in multiple areas and through several types of experiences (Azah, 2014; Dwyer, 2017; Holleb, 2016; Pearce, 2020). Moreover, dynamic interactions between all sources of self-efficacy dictate how and the extent a particular experience will shape a sense of personal efficacy (Azah, 2014; Bandura, 1997; Dwyer, 2017; Holleb, 2016; Pearce, 2020).

Enactive mastery experiences are defined as performance accomplishments in the face of adversity and through perseverant effort (Bandura, 1997). This source of efficacy has been found to be the most influential because it provides individuals the most tangible and authentic evidence of one's personal efficacy (Bandura, 1997). Bandura (1997) posits that as individuals experience repeated success within a specified context, especially when faced with obstacles, this results in a more robust perception of personal efficacy and leads to improved performance outcomes. This has significant implications in the educational setting. Azah (2014) found that mastery experiences such as job-embedded professional development and involvement in school-family sessions contributed most to principals' efficacy and lead to instructional improvements. Moreover, as a principal gains leadership efficacy, or one's ability to lead a group, that school leader is more likely to engage in leadership practices that will serve to increase their efficacious outlook (as cited in Azah, 2014; Dwyer, 2017; Holleb, 2016; Pearce, 2020). In essence, an individual's past performance in a particular context serves as an indicator of self-efficacy and has an enduring effect on perceptions of efficacy.

Efficacious appraisals are also influenced by the second source of efficacy: vicarious experiences. Vicarious experiences refer to the act of observing others perform specified tasks without adverse consequences (Bandura, 1977). This source of efficacy has been shown to be less dependable and influential in building a person's efficacious outlook, but does increase an individual's perceptions of self-efficacy by appraising their abilities to successfully master a task in relation to others that are similar to oneself (Bandura, 1997). This is especially important in the educational context where many academic concepts are modeled prior to actual implementation (Azah, 2014; Dwyer, 2017; Holleb, 2016; Pearce, 2020). Azah (2014) asserted that vicarious experiences in the form of observing other principals engage in leadership tasks were perceived by principals to have the least amount of influence on their sense of efficacy for school improvement. This is not to say that vicarious experiences nullifies the potential influence of modeling on self-efficacy. To the contrary, Bandura (1997) suggested that under certain conditions vicarious experiences have the potential to override the impact of weaker, negative direct experiences.

The third source of self-efficacy is verbal or social persuasion. Verbal persuasion alludes to leading a person to believe that they can successfully master a task through the use of suggestion, exhortation, or self-instruction (Bandura, 1977). Similar to vicarious experiences, verbal persuasion is not considered to be as influential in building efficacious outlooks as enactive mastery experiences (Bandura, 1997). Additionally, verbal persuasion has been shown to be most effective when an individual has confidence and is confident that the persuader has the knowledge and skills to strengthen self-efficacy beliefs (Bandura, 1997). Applied in the school setting, verbal persuasion may take the form of evaluative feedback, encouragement from a teacher, principal, or other school leader, or coaching from a supervisor (Azah, 2014; Dwyer,

2017; Holleb, 2016; Pearce, 2020). Azah (2014) contends that positive, constructive feedback provided by the superintendent enhanced principals' perceptions of self-efficacy to lead their school and become instructional leaders. Moreover, similar to Bandura's (1997) findings, Azah (2014) and Dwyer (2017) stated that the credibility of the source of verbal persuasion, in this context the superintendent, is significant to determining the impact on perceptions of principals' self-efficacy.

In the academic setting, verbal or social persuasion may also transpire from conversations between campus leaders who form communities of practice to address the needs of their schools and the challenges of unprecedented legislative mandates to improve student outcomes. According to Wenger (1998; 2006), communities of practice consist of practitioners (i.e. school principals) who share similar values and interests, engage in similar leadership tasks, seek feedback based on shared experiences, and problem-solve to develop a repertoire of mutual resources. This approach allows school leaders to regularly interact with their colleagues, offer encouragement, and shape their beliefs that they can successfully master a task through the use of recommendations, reassurance, or self-education (Bandura, 1977; Bouchamma & Michaud, 2011; Kearney, 2005; Wenger, 1998; 2006). In addition, the social interactions that emerge as a result of school leaders' participation in communities of practice offers members the time, space, and a pathway to improve leadership praxis and educational change through a process of collective learning in a shared domain (Wenger, 1998; 2006). Moreover, Wenger (1998; 2006) contends that communities of practice are well-suited to the school setting, especially for groups of school administrators, because the peer interactions and verbal persuasion between members enables them to explore innovative methods for school reform practices and the confidence to, ultimately, strengthen their perceived efficacious outlooks.

The fourth source of strengthening a sense of self-efficacy is emotional arousal. By diminishing physiological cues such as fear, stress, anxiety, and physical agitation, Bandura (1997) posited that perceptions of self-efficacy will improve. When an individual experiences aversive thoughts about their capabilities, these negative thoughts can in themselves trigger stress and agitation that will lead to inadequate performance and undermine perceptions of self-efficacy (Bandura, 1997; Pajares, 1996). Similar to all efficacy-shaping experiences, emotional arousal alone is not diagnostic of an individual's sense of efficacy, rather it's the perception and interpretation of the emotional arousal that has its effect on efficacy beliefs (Bandura, 1997). In the educational setting, several scholars have demonstrated that emotional arousal is an important predictor of a principals' sense of efficacy (Azah, 2014; Dwyer, 2017; Holleb, 2016; Pearce, 2020). Similar to Bandura (1997), Azah (2014) notes that emotional cues leads to avoidance behavior. In the current accountability climate, the hegemonic discourse of standards and accountability creates an environment in which principals' levels of fear, stress, and anxiety may be at an all-time high. As postulated by Bandura (1997), effects of fear, stress, and anxiety can lead to diminishing levels of principal efficacy and effectiveness of school reform efforts.

In addition to identifying the four sources in which efficacious appraisals are influenced, Bandura (1997) also shifted his research to investigate how contextual situations impact perceptions of self-efficacy. Several scholars have extended Bandura's (1997) work to examine the self-efficacy component of social cognitive theory in the field of education. Towards those ends, the construct of self-efficacy has been applied in the academic setting from three different perspectives: (1) teacher self-efficacy (Ashton & Webb, 1982, 1986; Calik et al., 2012; Collier, 2005; Featherstone, 2005; Gibson & Dembo, 1984; Guskey & Passaro, 1994; Poulou, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998;

Winn, 2018), (2) collective teacher efficacy (Bandura, 1993, 1997; Calik et al., 2012; Goddard, 2001; Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard, LoGerfo, and Hoy, 2004; Goddard & Skrla, 2006; Goddard et al, 2015; Hoy et al., 2002; Schumacher, 2009; Versland & Erickson, 2017), and more recently (3) principal self-efficacy (Aderhold, 2005; Azah, 2014; Dwyer, 2017; Hillman, 1986; Holleb, 2016; Lyons & Murphy, 1994; Lehman, 2007; Lovell, 2009; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004). The intent of each of these empirical studies was to investigate and clarify the nature of the relationship between an individual's perceptions of self-efficacy and learner outcomes as employed in an educational context. These three constructs of self-efficacy are unpacked in order to understand the evolution of the study of self-efficacy within the field of education.

Teacher Self-Efficacy

The relationship between teacher self-efficacy and student achievement has been well investigated and there exists a preponderance of scholarly evidence in the field of education that supports the conclusions that this powerful construct impacts learner outcomes (Ashton & Webb, 1982, 1986; Calik et al., 2012; Collier, 2005; Featherstone, 2005; Gibson & Dembo, 1984; Guskey & Passaro, 1994; Poulou, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Winn, 2018). Tschannen-Moran and Woolfolk Hoy (2001) define teacher self-efficacy as a belief of one's own judgement about their teaching abilities to result in improved student learning and engagement. Moreover, Tschannen-Moran et al. (1998) posits that highly efficacious teachers are more likely to improve the academic achievement of students than lower efficacious teachers in a particular context. Similarly, the findings of Collier (2005) also found that enhancing teachers' sense of efficacy beliefs leads to increasing teaching effectiveness and student achievement.

In a seminal study conducted by Ashton and Webb (1982, 1986), the researchers assert that teacher efficacy has a substantial impact on student achievement. Through a qualitative analysis, Ashton and Webb (1986) determined that highly efficacious teachers could lead to a 24% improvement in student math achievement scores and a 46% improvement in student achievement in language arts as measured by the Metropolitan Achievement Test. In addition, the researchers contend that highly efficacious teachers are more likely than their lower efficacious peers to believe that all students have the capability to learn and take ownership for student learning (Ashton & Webb, 1986; Calik et al., 2012). Moreover, Ashton and Webb (1986) established the following characteristics of highly efficacious teachers: (1) a significant amount of time is spent on individual and whole group instruction, (2) reassurance is regularly and consistently provided to students, (3) focused on student classroom behavior, (4) attend to student needs through coaching, (5) positive feedback and student praise was given as appropriate, and (6) ran a more efficient classroom. Consequently, the findings of Ashton and Webb (1986) provided strong evidence that there is a connection between teachers' sense of efficacy beliefs and student achievement.

The work of Gibson and Dembo (1984) also affirmed the characteristics of highly efficacious teachers and the behaviors that teachers exhibit in the classroom. Through the use of the Teacher Efficacy Scale, the researchers found that teachers with a higher sense of self-efficacy allocated twice the amount of time to whole class instruction than their lower efficacious peers (Gibson & Dembo, 1984). In addition, Gibson and Dembo (1984) determined that the time spent by teachers with higher levels of self-efficacy on whole group instruction allowed them to influence classroom and student behavior patterns that led to improved learner academic and behavioral achievement. Moreover, highly efficacious teachers dedicated their instructional

routines on academic learning, were less likely to criticize students after making incorrect responses, and persistently provided support to struggling learners until academic outcomes were achieved (Gibson & Dembo, 1984). Whereas, teachers with lower levels of self-efficacy spent time on non-academic pastimes, were more likely to move on to other students known to correctly answer questions, and not redirect off task behavior (Gibson & Dembo, 1984). Accordingly, teachers with strong efficacious appraisals in their instructional abilities created mastery experiences to improve student learning and educational outcomes (Gibson & Dembo, 1984).

Building on the work of Gibson and Dembo (1984), Guskey and Passaro (1994) brought enhanced clarity to analyses of teacher efficacy measures. A sample of 342 preservice and experienced teachers were administered a modified Teacher Efficacy Scale from the research of Gibson and Dembo (1984) to further examine teacher efficacy dimensions (Guskey & Passaro, 1994). The researchers found that the sample teachers surveyed in the study drew distinctions related to their beliefs about the influence they do and do not have on student learning (Guskey & Passaro, 1994). In essence, Guskey and Passaro (1994) determined classroom teachers' perceptions of efficacy included perceived beliefs that they influenced learner outcomes despite the effects of social, demographic, and economic factors that may play a role in their students' lives. More importantly, the work of Guskey and Passaro (1994) reaffirmed the construct of teacher self-efficacy as a perceived belief related to teachers' capabilities to impact student learning outcomes.

Featherstone (2005) authored a study that explored the differences in teacher efficacy among high, medium, and low performing elementary schools in a large urban school district. The researcher employed a quantitative study to determine if perceptions of teacher self-efficacy

varied according to school performance (Featherstone, 2005). Results from the Teacher Efficacy scale indicated that the efficacious appraisals of classroom teachers assigned to schools with high student achievement scores as measured by end-of-course tests were higher than their lower efficacious peers in low performing schools (Featherstone, 2005). Further analysis of survey results also indicated that only teachers' years of experience statistically influenced perceptions of teacher self-efficacy (Featherstone, 2005). The work of Featherstone (2005), reaffirmed findings of previous teacher efficacy scholarship (Ashton & Webb, 1982, 1986; Collier, 2005; Tschannen-Moran et al., 1998) that linked the efficacious outlooks of teachers to student achievement.

Poulou (2007) asserted that strong perceptions of teacher self-efficacy are a reliable predictor of teaching effectiveness and enhanced student achievement. Through the use of qualitative methods, the researcher also found that increased teacher self-efficacy is related to the implementation of alternative instructional practices, enhanced student motivation, and robust feelings about teaching and professional growth (Poulou, 2007). Additionally, Poulou (2007) noted that the primary sources of teachers' sense of efficacy were related to intrinsic motivation, strong relationships with students, and teachers' willingness to engage in professional practices that would enhance their teaching abilities to result in improved student achievement. Moreover, similar to the findings of Bandura (1997), teachers' enactive mastery experiences were correlated to more robust perceptions of teachers' sense of efficacy and enhanced beliefs in their ability to positively influence student learning outcomes (Poulou, 2007).

More recently, school leadership has also been connected to teacher efficacy. Winn (2018) investigated the relationship between teacher efficacy and principal leadership behaviors. In this mixed methods study a sample of 144 teachers from schools located in an urban school

district responded to a modified version of Teacher Sense of Efficacy Scale and Principal Leadership Questionnaire (Winn, 2018). Study participants were also interviewed to identify key leadership behaviors that campus leaders may employ to either enhance or hinder teacher efficacy beliefs (Winn, 2018). Results indicated a statistically significant relationship between a teachers' efficacious outlook and principal leadership practices (Winn, 2018). Findings also affirmed that effective principal leadership behaviors positively contribute to teachers' instructional practices and, ultimately, student achievement (Winn, 2018).

Though difficult to measure, evidence has indicated that teacher self-efficacy influences student learning outcomes. Teachers who are highly self-efficacious are more likely to plan innovative lessons that influence classroom and student behavior patterns to result in improved academic achievement, exert greater effort, and persist longer with struggling students in adverse contexts (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Poulou, 2007). Moreover, the overarching intent of the teacher self-efficacy studies (Ashton & Webb, 1982, 1986; Calik et al., 2012; Collier, 2005; Featherstone, 2005; Gibson & Dembo, 1984; Guskey & Passaro, 1994; Poulou, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran et al., 1998; Winn, 2018) was to establish a firm relationship between levels of teacher self-efficacy beliefs and student achievement. Towards those ends, researchers have also found there to be correlations between collective teacher efficacy and enhanced learner performance.

Collective Teacher Efficacy

Educational research in the area of collective teacher efficacy has provided evidence that the collective self-efficacy beliefs of teachers is associated with improved student learning outcomes (Bandura, 1993, 1997; Calik et al., 2012; Goddard, 2001; Goddard et al., 2000; Goddard et al., 2004; Goddard & Skrla, 2006; Goddard et al, 2015; Hoy et al., 2002; Schumacher, 2009;

Versland & Erickson, 2017). Bandura (1993, 1997) asserted that the construct of collective teacher efficacy measures the aggregate self-efficacy beliefs of teachers in their school's ability to encourage diverse levels of student achievement. Additionally, Bandura (1993, 1997) found that perceived collective efficacy independently and positively influenced educational outcomes despite the effects of student demographic characteristics, teacher demographic characteristics, and prior school level achievement. Moreover, Bandura's (1993, 1997) investigations in collective instructional efficacy indicated that teachers' perceived collective efficacy determines their efforts to motivate and teach students, despite their socio-economic and ethnic status, resulting in the highest percentile levels on national standards of language and mathematics.

Guided by the work of Bandura (1997), Goddard, Hoy, and Hoy (2000) examined how the perceptions of teachers in a school believed their collective efforts would influence student learning outcomes. In their qualitative study of 47 urban elementary schools, Goddard et al. (2000) revised the Teacher Efficacy Scale generated by Gibson and Dembo (1984) and developed a Collective Teacher Efficacy Scale to measure the construct of collective teacher efficacy. The researchers found that a 1 point increase in collective teacher efficacy was linked to an 8.62 point average gain in mathematics and an 8.49 point average gain in reading student achievement (Goddard et al., 2000). Similar to the relationships observed by Bandura (1997), the empirical evidence offered by Goddard et al. (2000; 2015) affirmed the connection between the collective efficacy perceptions of teachers with student achievement in mathematics and reading.

Building on previous research, Goddard (2001) investigated the degree in which mastery experiences influenced teachers' perceptions of collective efficacy and tested the relationship between collective efficacy and student learning outcomes. Utilizing student- and school-level data from 91 urban elementary schools and survey responses from a revised Collective Teacher

Efficacy Scale, Goddard (2001) found that mastery experiences are strongly related to teachers' collective efficacy perceptions. Goddard's (2001) assertions are consistent with the work of Bandura (1997) that mastery experiences have an enduring effect on perceptions of efficacy. Additionally, after accounting for student demographic characteristics and prior academic achievement, the collective efficacy perceptions of teachers was positively and considerably linked to variances among elementary school in mathematics and reading student outcomes (Goddard, 2001). In a later investigation of 96 high schools, Goddard, LoGerfo, and Hoy (2004) also found that collective teacher efficacy is positively influenced by past mastery experiences. In addition, after controlling for school-level characteristics, collective efficacy remained a valid predictor of student achievement across all content areas tested by state assessments (Calik et al., 2012; Goddard, LoGerfo, & Hoy, 2004; Goddard et al, 2015; Versland & Erickson, 2017).

In a study of 97 high schools in Ohio, Hoy, Sweetland, and Smith (2002) studied the effect academic press, or the extent to which a school is driven to achieve academic excellence, and collective teacher efficacy have on school achievement in mathematics. Statistical analyses indicated a significant relationship between the academic press of the school and student gains in mathematics (Hoy, Sweetland, & Smith, 2002). In addition, Hoy et al. (2002) found a compelling positive connection between collective efficacy perceptions of teachers and school achievement in mathematics. Accordingly, schools with strong collective efficacious appraisals were once again shown to be strong predictors of enhanced student learning and educational outcomes (Hoy et al., 2002).

Goddard and Skrla (2006) sought to determine the teacher- and school-level predictors of teachers' collective efficacious appraisals. Specifically, the researchers examined teacher-level variables such as race/ethnicity, gender, and teaching experiences as predictors of collective

efficacy (Goddard & Skrla, 2006). In addition, school-level variables such as the academic, racial, and socioeconomic composition of the student body and the experiential and racial composition of the faculty were also looked at as predictors of collective efficacy (Goddard & Skrla, 2006). Data drawn from the responses of 1,981 teachers in 41 K-8 urban schools to the Collective Efficacy Belief Scale indicated that past academic achievement, rate of special program placement for gifted learners, and faculty ethnic composition explained 46% of the difference among campuses in perceived collective efficacy (Goddard & Skrla, 2006). Additionally, Goddard and Skrla (2006) found a smaller, but statistically significant relationship between collective efficacy beliefs and educator race and experience. Moreover, Hispanic and African American teachers and those with more than 10 years teaching experience reported slightly higher levels of perceived collective efficacy (Goddard & Skrla, 2006). Consequently, student achievement as well as teacher race/ethnicity, and teacher experience are linked to collective efficacy beliefs (Goddard & Skrla, 2006).

Schumacher (2009) investigated the relationship between collective teacher efficacy and student achievement after controlling for socioeconomic status. Data from Collective Teacher Efficacy Scale responses of teachers from 56 elementary schools showed that collective teacher efficacy is significantly associated to student achievement in reading and mathematics (Schumacher, 2009). However, when accounting for the effects of socioeconomic status, there did not exist a connection between perceptions of collective teacher efficacy and reading student achievement (Schumacher, 2009). Yet, there was a significant positive relationship between collective teacher efficacy and mathematics student learning outcomes (Schumacher, 2009). The work of Schumacher (2009) affirmed the connection between perceptions of teachers' collective efficacy and mathematics student achievement.

A recent study conducted by Pearce (2020) affirmed a link between school leadership and collective teacher efficacy beliefs. In this mixed methods case study, Pearce (2020) purposefully sample elementary, middle, and high school principals and teachers to examine the efficacious outlook of principals and evaluated how it compared to collective teacher efficacy beliefs to improve student achievement. The study relied on the use of the PSES to measure principal efficacy beliefs, the Collective Teacher Efficacy Scale to measure collective teacher efficacy, and semi-structured interviews to evaluate the efficacious beliefs of principals (Pearce, 2020). Results indicated a statistically significant positive relationship between a principal self-efficacy and collective teacher efficacy (Pearce, 2020). The findings of Pearce (2020) also affirmed that levels of principal efficacy beliefs influenced school reform efforts because they have a direct influence on teaching and learning outcomes.

As it relates to an educational setting, collective efficacy is a measure of teachers' beliefs about the combined ability of educators in a school to impact student learning outcomes (Goddard et al., 2000). Scholarship in the field of collective teacher efficacy has provided significant evidence that teachers' perceptions of collective efficacy influence improved student achievement (Bandura, 1993, 1997; Calik et al., 2012; Goddard, 2001; Goddard et al., 2000; Goddard et al., 2004; Goddard et al., 2015; Goddard & Skrla, 2006; Hoy et al., 2002; Schumacher, 2009; Versland & Erickson, 2017). In addition, teacher mastery experiences (Goddard et al., 2000; Goddard et al., 2004), teacher demographic characteristics (Goddard & Skrla, 2006), and school demographic characters have also shown to contribute to levels of collective teacher efficacy (Goddard & Skrla, 2006; Hoy et al., 2002). The efficacious beliefs of principals is another promising area of educational research that will further contribute to

understanding the relationship between student achievement and perceptions of educator efficacy.

Principal Self-Efficacy

The crucial role of the principal in ensuring a quality education for all students has been largely influenced by the changing language of educational policy pertaining to standards and accountability (DuFour & Marzano, 2011; Herman et al., 2017; Leithwood, 2007; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005). School reform efforts that strive for focused acts of improvement to enhance student learning outcomes look to the principal, as the instructional leader, to spearhead transformation initiatives at the campus level (DuFour & Marzano, 2011; Herman et al., 2017; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Tschannen-Moran & Gareis, 2004, 2007). Educational scholars agree that the efforts of the principal to improve the academic achievement of students is second only to those of classroom teachers and leadership studies have evolved towards understanding behaviors and practices of principals that impact their effectiveness (Branch et al., 2012; DuFour & Marzano, 2011; Fullan, 2003; Gentilucci & Muto, 2007; Goddard et al., 20015; Herman et al., 2017; Leithwood & Riehl, 2003; Leithwood & Strauss, 2009; Marzano et al., 2005; Robinson, 2007; Sergiovanni, 1992; Silva et al., 2011; Starratt, 2004; Taylor, 2011; Waters & Cameron, 2007).

The efficacious beliefs of principals is a promising area of research that has been shown to encourage instructional leadership behaviors by impacting perseverance and leadership decisions (Federici & Skaalvik, 2012; Holleb, 2016; Lyons & Murphy, 1994; McCollum & Kajs, 2009; Tschannen-Moran & Gareis, 2004) as well as improved student achievement (Aderhold, 2005; Goddard et al., 2015; Leithwood & Jantzi, 2008; Lehman, 2007; Lovell, 2009; Moak,

2010; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith et al., 2006; Tschannen-Moran & Gareis, 2004, 2007). According to Tschannen-Moran and Gareis (2004, 2007), a principal's sense of efficacy is defined as a belief about one's own ability to achieve a specified performance outcome in a particular school leadership context. Moreover, highly efficacious principals are more tenacious in accomplishing their objectives, malleable to change, and more likely to adjust actions to meet contextual circumstances (Tschannen-Moran & Gareis, 2004, 2007). This implies that enhancing the efficacious appraisals of principals should be an important objective of educational and leadership scholars to gain insight about how to improve the quality of school leadership in our nation's public schools.

Hillman (1986) was among the first scholars to investigate and measure the construct of principal self-efficacy. The researcher sought to develop three separate instruments that would measure the self-efficacy levels of students, teachers, and principals within an educational context (Hillman, 1986). A sample of 19 elementary school principals were administered a self-efficacy instrument developed by Hillman (1986) to calculate a principal self-efficacy score. Participants were asked to respond to 16 scenarios and determine plausible reasons for the outcomes (Hillman, 1986). Findings from the study indicated that the efficacious beliefs of principals are linked to increased learner outcomes and the instrument used to measure principal self-efficacy was multi-dimensional, but required further validation (Hillman, 1986).

Guided by the research of Hillman (1986), Lyons and Murphy (1994) explored the relationship between the efficacious beliefs of principals and their use of power. The researchers used a self-efficacy instrument based on Hillman's (1986) work and surveyed 121 elementary, middle, and high school principals in a large metropolitan area to generate an overall school leader efficacy score (Lyons & Murphy, 1994). Lyons and Murphy (1994) found that principals

with high levels of self-efficacy tended to use expert and/or referent power bases when carrying out their instructional leadership roles in their schools. Moreover, highly efficacious principals were more willing to accept personal responsibility for student achievement, including negative outcomes (Lyons & Murphy, 1994). Whereas, low efficacious principals relied on external sources of power to influence subordinates through the use of coercion and did not believe in their ability as instructional leaders to either positively or negatively influence student achievement (Lyons & Murphy, 1994). Accordingly, principals with strong efficacious beliefs were more likely to hold themselves accountable for student learning outcomes (Lyons & Murphy, 1994).

In an effort to reliably capture the measure of principal self-efficacy, Tschannen-Moran and Gareis (2004) sought to develop a valid and reliable instrument. The researchers developed a new instrument modeled on the Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Woolfolk Hoy (2001) to understand principal self-efficacy (Tschannen-Moran & Gareis, 2004). As part of their development of the Principal Sense of Efficacy Scale, Tschannen-Moran and Gareis (2004) asked 544 elementary, middle, and high school principals to respond to 18 items categorized to measure principals' efficacy beliefs for management leadership, instructional leadership, and moral leadership. The instrument was subjected to factor analysis and construct validity tests and was determined to be a valid and reliable measure for the construct of principal self-efficacy (Tschannen-Moran & Gareis, 2004). The ability to reliably measure principals' perceptions of efficacy has expanded the investigation of this promising construct and continues to inform school leaders in similar contexts how to navigate their roles as instructional leaders to elicit improved student achievement.

Aderhold (2005) investigated the relationship between principal efficacy and student reading achievement. The researcher used the Principal Sense of Efficacy Scale (PSES) developed by Tschannen-Moran and Gareis (2004) to survey 165 elementary school principals in South Dakota about their perceptions of self-efficacy, instructional leadership behaviors, as well as personal and school demographic characteristics (Aderhold, 2005). Findings from the study indicated that there were no significant relationship between principals' sense of efficacy and student achievement in reading (Aderhold, 2005). However, Aderhold (2005) did detect a significant relationship between principals' efficacious beliefs and their instructional leadership behaviors. Lehman (2007) and Moak (2010) also examined the connection between principal efficacy and student reading achievement. Similar to Aderhold (2005), Lehman (2007) and Moak (2010) also surveyed elementary school principals using the PSES to measure the construct of principal self-efficacy. Findings from the study conducted by Moak (2010) also found no significant correlation between perceptions of principal efficacy beliefs and reading achievement. Conversely to Aderhold (2005) and Moak (2010), Lehman (2007) did identify a statistically significant relationship between principal sense of efficacy and student reading achievement.

Nye (2008) attempted to comprehend the relationships between principal self-efficacy beliefs in the instructional, moral, and management dimensions of the principalship and school leaders' personal characteristics, school demographics, and principal preparation programs. Nye (2008) also utilized the Principal Sense of Efficacy Scale (PSES) developed by Tschannen-Moran and Gareis (2004) to randomly survey 289 Texas, public school leaders across all three grade spans about their efficacious outlooks. Of the 12 categorical variables included in the study, statically significant relationships were found for gender, years of teaching experience,

grade span, socio-economic status, parental involvement, and student discipline with any of the principal efficacy dimensions represented on the PSES (Nye, 2008). Moreover, the factor structure and reliability calculated for the PSES in this study echoed the results of Tschannen-Moran and Gareis (2004); providing further evidence that the PSES is a valid and reliable measure for the construct of principal self-efficacy (Nye, 2008).

Santamaria (2008) sought to study the impact of NCLB status on levels of principal self-efficacy. Also using the Principal Sense of Efficacy Scale (PSES), the researcher surveyed 695 principals in California about their perceptions of self-efficacy and conducted a factor analysis of the PSES (Santamaria, 2008). Findings from the study indicated a significant positive correlation between low student achievement under NCLB and low principal self-efficacy (Santamaria, 2008). In addition to principals of schools that were in program improvement under NCLB having lower efficacy beliefs, Santamaria (2008) also determined that remaining in program improvement negatively impacted principals' perceptions of self-efficacy. The researcher also identified age as the strongest negative predicator of efficacy (Santamaria, 2008). In a later investigation of 112 principals in Florida, McCullers and Bozeman (2010) also determined that the accountability measures of NCLB negatively influenced principal self-efficacy beliefs. Accordingly, the findings of Santamaria (2008) and McCullers and Bozeman (2010) have suggested that the context of standards and accountability in our nation's public schools negatively impacts the efficacious appraisals of principals to successfully lead education improvement activities that will result in improved student achievement. That being said, there is limited research in the area of principal self-efficacy that investigates the relationship between the accountability movement as characterized by the Texas A-F Accountability System and a

middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Conclusion

The purpose of the literature reviewed within this chapter was to examine empirical evidence germane to the construct of principal self-efficacy. In addition, this chapter attempted to emphasize the importance of a principal's sense of self-efficacy through the lens of social cognitive theory as applied to the current state of accountability in Texas. The chapter began with an overview of the context of the case study and detailed the accountability mandates set forth by national and state educational policy. Following this overview, the chapter provided a review of relevant literature pertaining to the three dimensions of principalship represented on the Principal Sense of Efficacy Scale (PSES). The chapter concluded with a critical examination of the construct of efficacy, especially principal self-efficacy, and its relevance to the field of education.

By investigating the construct of principal self-efficacy, this case study examined the link between the accountability movement in Texas and middle school principals' sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border and add to extant research. Specifically, the following research questions were considered: 1). Is there a relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border? And 2). What factors, if any, contribute to a middle school principal's sense of self efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border? The

next chapter will provide an explanation of the research design, data collection, and analysis procedures that were employed in the completion of this case study.

CHAPTER III

METHODOLOGY

This chapter highlights the research methodology and procedures that were used in the case study and consists of the following sections: purpose of the study, research design, site, participants, instrumentation, procedure, data analysis, limitations, and researcher positionality. Given the scarce volume of research that has examined the impact of the accountability movement as characterized by the Texas A-F Accountability System and ESSA on a middle school principal's sense of self-efficacy, this case study employed a mixed methods approach to collect and analyze quantitative and qualitative data to evaluate the link between principals' efficacious outlooks and educational policy at the state and national level.

Purpose of the Study

The purpose of this case study was to conduct a mixed methods analysis of the relationship between school improvement status, especially identification for comprehensive support and improvement, and a middle school principals' sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Individual and school-level demographic variables examined in other studies were included in the principal efficacy scale utilized in this case study to reaffirm or challenge previous findings (Aderhold, 2005; Lehman, 2007; Lovell, 2009; Lyons & Murphy, 1994; Moak; 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith & Guarino, 2005; Smith el al., 2006; Tschannen-Moran & Gareis, 2004). Additionally, two new school-level demographic variables

were introduced to shed light on the relationship of a principal sense of self-efficacy with other variables.

This case study employed a mixed methods research design to address the following research questions:

1. Is there a relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?
2. What factors, if any, contribute to a middle school principal's sense of self efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?

The following hypothesis was tested in this case study:

Research Question 1:

H_1: There is an inverse relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and a campus's school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Research Design

The case study employed an explanatory sequential mixed methods research design to investigate the relationship between the perceptions of efficacy of middle schools principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border and the accountability movement as characterized by the Texas A-F Accountability System and ESSA. This research approach allowed for the collection and analysis

of quantitative and qualitative data in two consecutive phases within one study to investigate the research questions in depth (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015). The rationale for this integrated approach was supported by the need to comprehensively examine the construct of principal self-efficacy as well as balance the fundamental limitations of each method with the strengths of the other (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015). Additionally, quantitative and qualitative research approaches were utilized in this explanatory sequential mixed methods case study to triangulate data and capture different dimensions of the construct of principal self-efficacy as well as enhance the validity of the study (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015). Hence, this case study initially used a quantitative approach to provide a numeric description of the efficacious beliefs of middle school principals via the collection of survey data. This was followed by one-on-one, semi-structured interviews to understand participants' initial responses on the survey instrument and provide a deeper, in-depth examination of principal's perceptions in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Muijs (2011) contends that survey research is well suited to the complex and multifaceted educational setting because it allows researchers to investigate relationships between variables occurring in real life contexts. Creswell and Creswell (2018) also contend that quantitative data may often provide validity to a study that is not easily realized through interview data. For this reason, survey data was collected and analyzed to identify any significant relationships between the overall perceptions of self-efficacy of middle school principals in school improvement and non-school improvement contexts. Additionally, survey results were also evaluated to determine the existence of significant differences between school improvement status and middle school principals' perceptions of efficacy for each dimension of the principalship.

Creswell and Creswell (2018) posits that qualitative research methods allow for the investigation of educational phenomenon through detailed, in-depth data collection. Additionally, a case study approach was supported in this research endeavor because it allowed for the examination of a bounded system or case over time to provide rich and deep insight into the complexities of how middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border build their efficacy beliefs (Creswell & Creswell, 2018). For this reason, qualitative data was sourced via one-on-one, in-depth semi-structured interviews to understand the lived experiences or more subjective elements of the efficacious beliefs of middle school principals to capture the complex interactions between the participants and the environment (i.e. Texas A-F Accountability System) that influences their leadership behavior. (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015).

Site

The case study was conducted in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. All of the quantitative and qualitative data collected for the case study was sourced from middle school principals that currently serve as instructional leaders in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Moreover, the semi-structured interviews were conducted individually via the telephone at a time and place within the urban school district to best meet the middle school principals' schedules.

The urban school district encompasses 95 square miles, is the largest school district in South Texas, the 17th largest in the State of Texas, and is among the top 100 districts in the United States. In 2008, the urban school district was awarded the Broad Prize for Urban

Education and the Board of Trustees were the winners of the fifth Council of Urban Boards of Education (CUBE) Annual Award for Urban School Board Excellence. The urban school district educates approximately 44,356 students with diverse backgrounds and educational needs. Of the 44,356 students approximately ninety-eight percent (98%) are Hispanic, close to eighty-nine percent (89%) are from a low socioeconomic background, thereabouts sixty-seven percent (67%) of the pupils are identified as at-risk based on state-defined criteria, thirty-five percent (35%) of the student body is classified as Limited English Proficient (LEP), roughly eleven percent (11%) of the total student population receives special education services, and five percent (5%) are students that receive dyslexia services. The students of the urban school district are educated by a staff of 6,615 employees that includes teachers, administrators, counselors, paraprofessionals, and various support staff.

In the last five years, the students and staff of the urban school district have shown a steady increase in the areas of mathematics, English language arts and reading, writing, science and social studies on the State of Texas Assessments of Academic Readiness (STAAR) Test, the State's legislatively-mandated assessment instrument. In 2019, the overall Texas A-F Accountability Rating for the urban school district was an "A". In addition, the urban school district was ranked in the top 10 school districts in the region for overall student achievement on the STAAR, ranked number 4 in the region for student progress, ranked number 7 in the region for closing performance gaps, and ranked in the top 16 school districts in the region for preparing students for postsecondary readiness. Additionally, the urban school district outperformed several comparably-sized Texas districts across the State in several domains in the statewide accountability system.

Participants

A purposeful sample of middle school principals was utilized to provide an in-depth understanding of the construct of principal self-efficacy. The sample included 10 middle school principals that currently serve as instructional leaders in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. To accurately identify participants, the case study utilized the 2019 Statewide Accountability Ratings Report from the Texas Education Agency (TEA, 2020). The demographic portion of the survey instrument divided the population sample into two categories: (1) campuses in school improvement and (2) campus in non-school improvement. For the purpose of this case study, the respondents that represented campuses identified for comprehensive support and improvement were of the most value. The sample yielded 5 campuses identified for targeted support and 5 campuses not identified for comprehensive support and improvement. School demographic data for all 10 middle schools in the urban school district are shown in Table 1.

Table 1

School Demographic Data (2018-2019)

School	Principal	Enrollment	Economically Disadvantaged	Overall A-F Accountability Rating	Closing the Gaps Domain Rating	Comprehensive Support and Improvement Identification
S1	P1	1,102	96.6%	B	C	
S2	P2	982	93.4%	B	D	Targeted Support
S3	P3	996	86.1%	B	C	
S4	P4	710	98.2%	B	C	Targeted Support
S5	P5	752	80.1%	B	B	
S6	P6	698	97.4%	C	D	Targeted Support
S7	P7	849	92.8%	C	D	Targeted Support
S8	P8	1,085	89.7%	B	C	Targeted Support
S9	P9	1,098	59.5%	B	C	
S10	P10	906	81.9%	B	C	

Instruments

The quantitative portion of this mixed methods case study relied on the use of the Principal Sense of Efficacy Scale (PSES) to capture middle school principals' sense of efficacy (Appendix A). Following the collection of demographic data and a numeric description of the efficacious beliefs of middle school principals via the PSES, qualitative data was sourced via one-on-one, in-depth semi-structured interviews to provide a deeper examination of principal's perceptions in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Principal Sense of Efficacy Scale

The PSES was developed by Tschannen-Moran and Gareis (2004) and permission was granted by the author (Appendix F). The PSES is an 18-item measure that assess principals' self-perceptions of their capabilities as they relate to three dimensions of school leadership: instructional, managerial, and moral (Tschannen-Moran & Gareis, 2004). Tschannen-Moran and Gareis (2004) constructed the PSES as an adaptation of the Teacher Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001). Both the PSES and TSES instruments are modeled in accordance with recommendations from Bandura's (2006) self-efficacy scales.

In their quest to develop a reasonable and reliable measure to assess principals' sense of efficacy, Tschannen-Moran and Gareis (2004) developed the PSES instrument based upon the professional standards articulated by the Interstate School Leaders Licensure Consortium (ISLLC). Towards those ends, Tschannen-Moran and Gareis (2004) generated a 50 item instrument that investigated various aspects of the principalship and was subjected to a principal axis factor analysis. Using the principal axis factor analysis, the original 50 item PSES was

abridged to a measure with 18 items (Tschannen-Moran & Gareis, 2004). Questions that were removed from the original 50 item scale had a communality of less than 0.30, loaded on more than one factor, or a factor loading on one of the three principle factors of less than 0.40 (Tschannen-Moran & Gareis, 2004).

Three factors or subscales that each represent a dimension of the principalship emerged from the principal axis factor analysis (Tschannen-Moran & Gareis, 2004). The first factor included six items that centered on efficacy for managerial leadership and included: 1). handling the paperwork required of the job, 2). handling the time demands of the job, 3). coping with the stress of the job, 4). prioritizing among competing demands of the job, 5). maintaining control of the daily schedule, and 6). shaping the operational policies and procedures that are necessary to manage a school (Tschannen-Moran & Gareis, 2004). The authors reported loadings on this factor ranged from 0.53 to 0.82. The second factor that emerged from Tschannen-Moran and Gareis's (2004) study also included six items that focused on efficacy for instructional leadership and loadings ranged from 0.45 to 0.81. Self efficacy to measure the instructional aspects of the principalship included: 1). creating a positive learning environment, 2). facilitating student learning, 3). raising student achievement on standardized tests, 4). managing change, 5). motivating teachers, and 6). generating enthusiasm for a shared vision for the school (Tschannen-Moran & Gareis, 2004). The six items that represented the third factor was dedicated to efficacy for moral leadership, loadings ranged from 0.42 to 0.78, and included: 1). promoting acceptable behavior among students, 2). effectively handling the discipline of students, 3). promoting spirit among a large majority of the student population, 4). promoting ethical behavior among school personnel, 5). promoting the prevailing values of the community, and 6). promoting a positive image of the school with the media (Tschannen-Moran & Gareis, 2004).

The factor loadings reported for the three subscales ranged from 0.42 to 0.82 and aggregately represented 60% of the variance in principals' efficacious outlooks for this sample (Tschannen-Moran & Gareis, 2007). To further determine the validity and reliability of the PSES, the researchers also studied the construct validity by testing the association of the PSES with other known constructs to determine if projected relationships emerged. As Tschannen-Moran and Gareis (2007) anticipated, principals' efficacious appraisals were positively linked to trust in teachers, trust in students and parents, and significantly negatively connected to work alienation. In addition, using Cronbach's alpha of internal consistency the investigators determined the obtained reliability for the PSES for this sample to be 0.91. Moreover, each of the three factors that were identified by Tschannen-Moran and Gareis (2004) also had high reliability with 0.87 for principals' sense of efficacy for management, 0.86 for principals' sense of efficacy for instruction, and 0.83 for principals' sense of efficacy for moral leadership. Additionally, subsequent second-order factor analysis using principal axis factor analysis revealed that the three primary factors could be loaded together in one strong factor with an Eigen value of 2.10 accounting for 70% of the variance in the efficacious outlooks of principals in the sample (Tschannen-Moran & Gareis, 2007).

The PSES has been determined to be a reasonably valid and reliable measure to capture principals' self-efficacy beliefs and in order to further test construct validity, Tschannen-Moran and Gareis (2004) have encouraged the use of the PSES to determine whether the factor structure they identified in the instrument is stable across other populations. At present, there is a scarce volume of published studies (Aderhold, 2005; Lehman, 2007; Lovell, 2009; Moak, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008) using this instrument to capture principals' efficacious appraisals. In addition, there are even fewer published studies using the PSES to capture middle

school principals' sense of efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

As stated previously, the PSES is comprised of 18 items and contains three subscales which are identified as: Principals' Sense of Efficacy for Management, Principals' Sense of Efficacy for Instructional Leadership, and Principals' Sense of Efficacy for Moral Leadership. Each factor has six corresponding items to capture respondents' perceptions of efficacy for each dimension of the principalship and were sequenced on the instrument in a random order as shown in Table 2.

Table 2

Principal Sense of Efficacy Scale (PSES) Questions

Instrument Subscale	Questions
Efficacy for Management	Items 3, 11, 12, 15, 17, 18
Efficacy for Instructional Leadership	Items 1, 2, 4, 6, 7, 9
Efficacy for Moral Leadership	Items 5, 8, 10, 13, 14, 16

Bandura (1997) emphasized the contextualized nature of human behavior and perceptions of self-efficacy. Accordingly, the directions on the PSES requested participants to "please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position" (Tschannen-Moran & Gareis, 2004, p. 578). Moreover, each item on the PSES shared a common sentence stem: "In your current role as principal, to what extent can you…" (Tschannen-Moran & Gareis, 2004, p. 579). The nine-point Likert scale used to capture principals' efficacious beliefs was anchored in the following manner: 1 = None at All, 3 = Very Little, 5 = Some Degree, 7 = Quite a Bit, 9 = A Great Deal.

In addition to the 18 items that comprise the PSES, participants were asked to reply to a list of demographic items (Appendix B). The demographic portion of the instrument was modeled after Smith et al. (2006) principal survey in order to investigate potentially significant connections to levels of perceived principal self-efficacy. Principal-level variables embedded within this case study included: 1). Gender; 2). Age; 3). Ethnicity; 4). Highest degree earned; 5). Number of years as an educator; 6). Number of years as an educator in current school district; 7). Number of years as a principal; and 8). Number of years as a principal in current school. The eight remaining demographic variables were related to principals' school-level attributes and included: 9). School enrollment; 10). Percentage of students on free and reduced lunch (economically disadvantaged); 11).Percentage of English language learners; 12). Percentage of students receiving special education services; 13). Campus Comprehensive Support and Improvement Identification; and 14). Comprehensive Support and Improvement Identification. Participants were asked to respond to variable 14 based on their response to variable 13.

The selection of the fourteen individual and school-level demographic variables was purposeful and twelve of them have been investigated in other studies on principals' efficacious outlooks to reaffirm or challenge previous findings (Aderhold, 2005; Lehman, 2007; Lovell, 2009; Lyons & Murphy, 1994; Moak; 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith & Guarino, 2005; Smith el al., 2006; Tschannen-Moran & Gareis, 2004). Additionally, the last two principal school-level demographic variables were introduced to shed light on the relationship of a principal sense of self-efficacy with other variables. Moreover, participant responses from the demographic and perceptions of efficacy items of this case study instrument served to provide key findings in exploring the link between potentially significant variables and

levels of middle school principals' sense of efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Interviews

One-on-one, in-depth semi-structured interviews with 5 school improvement middle school principals and 5 non-school improvement middle school principals were conducted to gain a rich and deep insight into the complexities of how middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border build their efficacy beliefs (Appendix C). During the one-on-one, semi-structured interviews, the following 4 open-ended prewritten questions were asked to each of the 10 case study participants: 1). What factors influence your level of self-efficacy as a middle school principal? Why?; 2). How does the Texas A-F Accountability System, especially identification for comprehensive support and improvement, influence your efficacy beliefs as a middle school principal? Does it enhance or diminish your efficacy beliefs as a middle school principal? Why?; 3). Do you feel student achievement influences your efficacy beliefs? How?; and 4). As a middle school principal what makes your self-efficacy beliefs improve? Why? Moreover, the 4 pre-written questions asked during the one-on-one, semi-structured interviews helped to establish the intention and focus of the dialogue in order to understand the lived experiences and efficacious beliefs of middle school principals to capture the complex interactions between the participants and the environment (i.e. Texas A-F Accountability System) that influences their leadership behavior. (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015).

Procedure

Prior to collecting data, the researcher applied to the University of Texas Rio Grande Valley Institutional Review Board (IRB) for Human Subjects Protection for approval of the

mixed methods case study. Part of the IRB approval process entailed gaining the consent of the urban school district included in this study (Appendix D). Following receipt of approval from the IRB Committee (Appendix E), a list of email addresses was obtained from the urban school district directory posted on a public website. Each member of the population sample was sent an electronic mail message to inform them that they have been selected to participate in a school leader survey and included a brief description of the study (Appendix G). Included in the email invitation was a request for their participation in the study, notification that participation was voluntary, notification that all data would be treated confidentially, and would pose no risk to their privacy. At the end of the email invitation, participants were advised that by clicking on the survey hyperlink they would be directed to an online informed consent form to indicate their agreement to participate in the study and access the survey (Appendix H).

The hyperlink included in the electronic mail message provided the population sample access to an adapted version of the Principal Sense of Efficacy Scale (PSES) survey that consisted of the demographic portion of the instrument (Appendix B) and the 18 items that comprised the PSES (Appendix A). The survey was administered individually and completed anonymously using the Qualtrics Survey Platform during the summer of 2020. It took approximately 10 minutes for each respondent to complete the entire instrument. A two week window was allowed for the participants to complete the surveys. Following this time period, a follow-up electronic mail message was sent to those participants who had not yet completed the survey after the two week window. This email served as a reminder to participate in the survey. Three weeks from the initial mailing, a third and final reminder e-mail was sent. This electronic mailing also served as a reminder to participate and expressed gratitude to all those who volunteered to respond and partake in the case study. The timeline for the electronic mailings

was intended to ensure an acceptable response rate for the case study. Quantitative data was gathered from the Qualtrics Survey Platform and was entered into Statistical Package for the Social Sciences (SPSS) for the calculation of descriptive statistics and measurement of variables of interest in the case study.

After the collection of middle school principal demographic data and administration of the PSES survey (quantitative data), one-on-one, in-depth semi-structured interviews, set for approximately 30 minutes in length, were conducted via the phone with participants to unpack self-efficacy beliefs. Each of the 10 middle school principals individually interviewed were asked for their consent to participate in the interview, notified that participation was voluntary, notified that all data would be treated confidentially, and would pose no risk to their privacy (Appendix I). In addition, participants were also asked for their consent to audio record their responses during the interview (Appendix I). Following semi-structured interview protocols, 4 open-ended questions were used to encourage the elaboration of participant responses as well as to understand the relationship between perceptions of efficacy of middle schools principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border and the accountability movement as characterized by the Texas A-F Accountability System (Appendix C). At the conclusion of each of the 10 middle school participant interviews, the audio recordings were transcribed using Microsoft Office Dictate. All quantitative and qualitative data were stored on a password protected personal computer hard drive for a period of three years to ensure participant security.

Data Analysis

The analyses of data in this explanatory sequential mixed methods case study involved the use of quantitative and qualitative methodologies. The overarching intent of using both

methodologies was to evaluate the objective aspects of the construct of principal sense of efficacy beliefs via survey data and to provide a more in-depth description of the more subjective elements of middle school principals' efficacious outlooks via qualitative approaches (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015). Additionally, quantitative and qualitative analytical techniques as shown in Table 3 were employed in this explanatory sequential mixed methods case study to triangulate data and capture different dimensions of the construct of principal self-efficacy as well as enhance the validity of the study (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015).

Table 3

Description of Data Analyses in Case Study

Research Question	Data Collection	Data Analysis
1. Is there a relationship between a middle school principals' sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?	Demographic and Principal Sense of Efficacy Scale (PSES) surveys	*t*-test Pearson Correlation
2. What factors, if any, contribute to a middle school principal's sense of self efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?	Semi-structured interviews	Inductive coding

Principal Sense of Efficacy Scale

All middle school principals' responses to the PSES survey were analyzed using Statistical Package for the Social Sciences (SPSS) to calculate descriptive statistics and statistical analysis to determine the effects of specific variables. The data analysis design was guided by the recommendations of Pallant (2016) and used to test the hypothesis derived from research question one presented in the case study. Initially, a series of descriptive statistics was completed

(i.e. frequency, mean, and standard deviation) to provide an overview of the sample population and to establish normal distribution (Pallant, 2016). Descriptive statistics were also conducted to offer specific detailed analyses of each potential subgroup (Pallant, 2016). All descriptive statistics were tabled with all levels reported.

To address the first research question, the null hypothesis in the case study was tested via SPSS using a series of simple bivariate correlations to identify the presence of any statistically significant relationships between middle school principal's sense of self-efficacy and school improvement status. The independent samples *t*-tests were used in order to set statistical significance at the .100 level (Pallant, 2016). In addition, Pearson *r* correlation coefficients are also presented in a correlation matrix to investigate the strength and directionality of the linear relationships between this case study's variables (Pallant, 2016). The correlation coefficients were examined for strength, direction, and effect size across the two school groups and were reported in a table format.

Guided by the format outlined by Pallant (2016), this case study was able to provide a comprehensive quantitative research analysis to identify relationships between a middle school principals' sense of self-efficacy and school-level demographic factors related to the current accountability movement as characterized by the Texas A-F Accountability System and ESSA. Using a middle school principal as the primary unit of analysis and school-level demographic factors comparable to previous studies, this case study design was poised to offer contributions to the knowledge and measurement of the construct of principal self-efficacy (Aderhold, 2005; Lehman, 2007; Lovell, 2009; Moak, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008).

Interviews

All school leader responses to the open-ended questions included in the one-on-one, in-depth semi-structured interviews were analyzed using an inductive coding process to identify emergent themes to further understand middle school principals' perceptions of conditions that impact their efficacy beliefs (Creswell & Creswell, 2018). Member checking of the transcribed interviews was employed before analysis to ensure any errors or misconceptions were corrected (Creswell & Creswell, 2018). Initial analysis of the transcribed interview data began with open coding to allow for the development of categories as well as the examination of data for similarities and differences (Creswell & Creswell, 2018). Focused coding techniques were then utilized for a more precise disaggregation of data to concisely organize codes across units of data (Creswell & Creswell, 2018). To further the winnowing process, axial coding methods were then used to identify relationships between codes to look for related themes among the categories of interview data to comprehend the perceptions of efficacy of middle schools principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

Limitations

This explanatory sequential mixed methods case study was conducted with the following limitations:

1. The results were limited to ten middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Hence, the results of this case study may not be generalized beyond this population because of the situation-specific nature of the investigation and further studies are needed to assess the generalizability of these findings.

2. The results were limited to the self-disclosed perceptions of efficacy of the middle school principals who chose to participate and not actual leadership behaviors.

3. Although every effort was made to protect the confidentiality and anonymity of respondents to the principal efficacy survey and interviews, some respondents may have chosen to be less than candid in their responses. This lack of candor may have skewed the findings.

4. The results were based on the use of the Principal Sense of Efficacy Scale (PSES) to measure the self-disclosed perceptions of efficacy of the middle school principals who decided to participate. Tschannen-Moran and Gareis (2004) contend that the PSES is a valid and reliable instrument to measure the construct of principal self-efficacy, but other leadership studies have utilized a variation of efficacy scales to capture principals' sense of efficacy (Leithwood & Jantzi, 2008).

5. The correlational procedures that were utilized for this case study cannot determine causality or the specific constructs that are related.

Researcher Positionality

Research bias and error is a threat to any empirical study. Creswell & Creswell (2018) suggest that researchers should make clear their potential biases in order to reduce a potential threat to the validity of the study and any subjectivities that may have impacted the researcher's analysis of the data. Thus, it is important to note that the researcher in this mixed methods case study was a school leader in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. The selection of the site was based on proximity for the researcher and no undue pressure was placed on the sample population to participate in the case study. Based on recommendations by Creswell & Creswell (2018) to further ensure the quality and validity of the data gathered from the semi-structured interviews,

the researcher used triangulation, member checking, and peer review. In order to triangulate and member check the data, the researcher examined multiple sources of data and provided the participants an opportunity to review their interview responses to verify the accuracy and completeness of the captured content during the semi-structured interviews. Moreover, the researcher garnered peer review feedback from colleagues and dissertation committee members to also ensure the quality and validity of the data. Although the researcher used these techniques to mitigate bias, the interpretation of the data may nonetheless have been influenced by the researcher's positionality.

Conclusion

This chapter focused on the methodology which informs the process of inquiry that underpinned this case study. The chapter began with a review of the purpose of the study, research questions, and hypothesis. Following this overview, the chapter provided a description of the mixed methods research design, site, and participants. The instruments utilized in this case study were also discussed along with a description of the procedure and data analysis. The chapter concluded with a description of the limitations as well as researcher positionality for the case study. The following chapter will present and explain the results yielded from the data collection and statistical analyses.

CHAPTER IV

RESULTS

Bandura's (1997) triadic reciprocal causation model explains human behavior in terms of the bi-directional interaction between environment, individual behavior, and personal factors. In the context of this study, the determinants are represented by the performance standards of the Texas A-F Accountability System (environment), school leadership praxis (individual behavior), and the efficacious beliefs of middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border (personal factors). The purpose of this case study was to understand the relationship between school improvement status, especially identification for comprehensive support and improvement, and middle school principals' perceptions of efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

This chapter presents the findings of this mixed methods case study. The data from this study was sourced from a purposeful sample of middle school principals and included participant responses to the Principal Sense of Efficacy Scale (PSES) survey as well as feedback to the open-ended questions included in the one-on-one, semi-structured interviews. The chapter begins with a description of the participants' demographics, followed by the quantitative data analysis of the first research question, and then a qualitative data evaluation of the second research question. The chapter will conclude with a summary of the major findings from this research study.

Participant Demographics

Ten middle school principals that currently serve as instructional leaders in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border participated in the quantitative and qualitative portions of the case study. The demographic portion of the survey instrument divided the population sample into two categories: (1) campuses in school improvement and (2) campuses in non-school improvement. The middle school principals in this case study were assigned pseudonyms to increase the anonymity of the participants. The coding for each middle school principal included a letter and a number. For example, the code for Principal 1 is P1. Additionally, the coding for each school included in the study included a letter and a number. For instance, the code for School 1 is S1. The participants varied in gender, age, ethnicity, and education as shown in Table 4.

Table 4

Participants' Demographics: Gender, Age, Ethnicity, Education

Variable	n	Percent
Gender		
Female	5	50%
Male	5	50%
Age		
Less than 30 years of age	0	0%
30 – 34 years of age	0	0%
35 – 39 years of age	1	10%
40 – 44 years of age	3	30%
45 – 49 years of age	1	10%
50 + years of age	5	50%
Ethnicity		
African American	0	0%
Asian	0	0%
Hispanic	9	90%
White	1	10%
Other	0	0%

Table 4 continued

Variable	n	Percent
Education		
Bachelors	0	0%
Masters	6	60%
Masters + 30 hours	4	40%
Doctorate	0	0%

In order to capture a complete depiction of the case study's data sample, a descriptive analysis was performed on both categorical and continuous variables. As indicated in Table 4, the distribution of males (50%) and females (50%) was even. Half of the respondents (n = 5, 50%) were 50 years of age or older. In addition, a majority of the population sample (n = 9, 90%) identified themselves as Hispanic. The participants' education was reported as follows: 6 (60%) Masters and 4 (40%) hold a Masters degree with 30 additional graduate hours. The population sample also varied in years as an educator, years as an educator at the current school district, years as a principal, and years as a principal in the current school as shown in Table 5.

Table 5

Participants' Demographics: Years as an Educator, Years at Current School District, Years as a Principal, Years as a Principal at Current School

Variable	*n*	Min.	Max.	*M*	*SD*
Years as an Educator	10	3.00	6.00	5.10	1.04
Years at Current School District	10	1.00	6.00	3.80	1.89
Years as a Principal	10	1.00	5.00	3.70	1.10
Years as a Principal at Current School	10	1.00	4.00	3.00	0.89

Respondents had been educators for an average of 5.10 (SD = 1.04) years with a higher response rate for middle school principals (n = 5, 50%) serving as an educator for 26 years or more. Additionally, participants indicated that they had served as educators in the current school district for an average of 3.80 (SD = 3.80) years. A majority of the population sample (n = 5,

50%) indicated that they had served as a principal for a range of 6-10 years with an overall average of 3.70 (*SD* = 1.10) years. Moreover, participants had been a principal at the current school for an average of 3.00 (*SD* = 0.89) years with a higher response rate for middle school principals (*n* = 5, 50%) serving as a school leader at the current campus for a range of 3-5 years. The middle school principals also responded to a number of questions pertaining to their school demographics as shown in Table 6.

Table 6

School Demographics

Variable	*n*	Percent
Percent Economically Disadvantaged		
0-25%	0	0%
26-50%	0	0%
51-75%	1	10%
76+%	9	90%
Percent English language learner		
0-15%	1	10%
16-30%	4	40%
31-45%	3	30%
46-60%	2	20%
61-75%	0	0%
76+%	0	0%
Percent Special Education		
0-15%	2	20%
16-30%	8	80%
31-45%	0	0%
46-60%	0	0%
61-75%	0	0%
76+%	0	0%

Of note, a majority of the middle school principals (*n* = 9, 90%) indicated that 76% or more of their students were identified as economically disadvantaged. In addition, 50% of respondents indicated that their campuses had an identified English language population of 31%

or more with a higher response rate for schools (n = 4, 40%) serving a range of 16-30% of students. Moreover, a majority of middle school principals (n = 8, 80%) indicated that their campuses had an identified special education population of 16-30% of students. The next section provides a comprehensive analysis of the qualitative data sourced from the Principal Sense of Efficacy Scale (PSES) survey.

Research Question One

The initial research question asked, "Is there a relationship between a middle school principal's sense of self-efficacy, as measured by the Principal Sense of Efficacy Scale (PSES), and school improvement status within an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?" The PSES is an 18-item measure that assessed middle school principals' self-perceptions of their capabilities as they relate to three dimensions of school leadership: instructional , managerial, and moral (Tschannen-Moran & Gareis, 2004). The nine-point Likert scale used to capture middle school principals' efficacious beliefs was anchored in the following manner: 1 = None at All, 3 = Very Little, 5 = Some Degree, 7 = Quite a Bit, 9 = A Great Deal. Consequently, the higher the rating score entered by each respondent, the higher the perceived level of principal self-efficacy reported by case study participants. Moreover, Tschannen-Moran & Gareis (2004) have determined that the PSES is a reasonably valid and reliable measure to capture middle school principals' self-efficacy beliefs. In answering the first research question, descriptive statistics, independent samples t-tests, and Pearson Correlations were conducted to compare the two school groups represented in this case study: (1) campuses in school improvement (SI) and (2) campus in non-school improvement (Non-SI).

Overall Perceptions of Principal Efficacy

The descriptive statistics in Table 7 represent the scores for individual item questions from the PSES survey to compare the means of middle school principals' perceptions of self-efficacy from the two groups focused on in this case study. The results are presented graphically in Appendix J. A review of rating averages for the middle school principals' responses by school improvement status was included to note general differences of responses for campuses in school improvement and campuses in non-school improvement.

Table 7

Comparison of Means for PSES Questions by School Improvement Status

Item	*n*	Min.	Max.	*M*	*SD*
Q1. facilitate student learning…					
SI	5.00	8.00	9.00	8.80	.447
Non-SI	5.00	7.00	9.00	8.40	.894
Q2. generate enthusiasm for shared vision…					
SI	5.00	8.00	9.00	8.80	.447
Non-SI	5.00	7.00	9.00	8.60	.894
Q3. handle the time demands of the job…					
SI	5.00	8.00	9.00	8.60	.548
Non-SI	5.00	3.00	9.00	7.40	2.61
Q4. manage change in your school…					
SI	5.00	8.00	9.00	8.60	.548
Non-SI	5.00	7.00	9.00	8.40	.894
Q5. promote school spirit…					
SI	5.00	5.00	9.00	7.60	1.67
Non-SI	5.00	8.00	9.00	8.80	.447
Q6. create a positive learning environment…					
SI	5.00	7.00	9.00	8.60	.894
Non-SI	5.00	6.00	9.00	8.20	1.30

Table 7 (continued)

Item	*n*	Min.	Max.	*M*	*SD*
Q7. raise student achievement…					
SI	5.00	6.00	9.00	7.00	1.23
Non-SI	5.00	6.00	9.00	8.00	1.41
Q8. promote a positive image…					
SI	5.00	3.00	9.00	7.00	2.45
Non-SI	5.00	7.00	9.00	8.20	1.10
Q9. motivate teachers…					
SI	5.00	6.00	8.00	7.40	.894
Non-SI	5.00	6.00	9.00	8.40	1.34
Q10. promote the prevailing values…					
SI	5.00	4.00	9.00	7.40	2.07
Non-SI	5.00	5.00	9.00	7.40	1.67
Q11. maintain control of daily schedule…					
SI	5.00	5.00	9.00	7.20	1.79
Non-SI	5.00	5.00	9.00	7.20	1.48
Q12. shape policies and procedures…					
SI	5.00	5.00	9.00	7.60	1.67
Non-SI	5.00	5.00	9.00	7.20	1.64
Q13. handle discipline of students…					
SI	5.00	7.00	9.00	8.20	.837
Non-SI	5.00	5.00	9.00	7.20	1.48
Q14. promote acceptable behavior…					
SI	5.00	7.00	9.00	7.80	.837
Non-SI	5.00	7.00	9.00	8.20	1.10
Q15. handle the paperwork required of job…					
SI	5.00	8.00	9.00	8.20	.447
Non-SI	5.00	3.00	9.00	7.40	2.61
Q16. promote ethical behavior…					
SI	5.00	5.00	9.00	7.60	1.67
Non-SI	5.00	7.00	9.00	7.80	.837
Q17. cope with the stress of the job…					
SI	5.00	9.00	9.00	9.00	.0
Non-SI	5.00	3.00	9.00	6.60	2.51

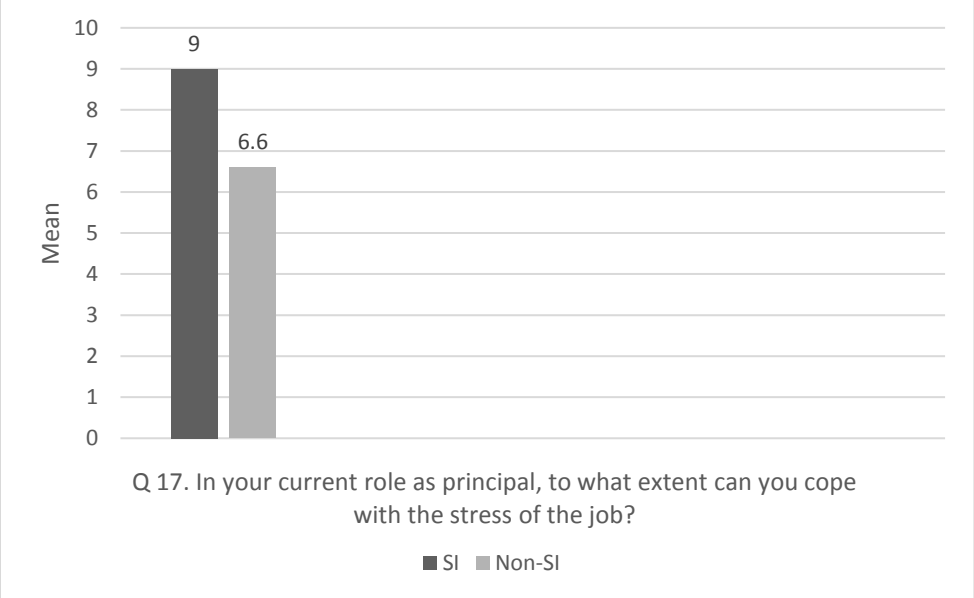
Table 7 (continued)

Item	*n*	Min.	Max.	*M*	*SD*
Q18. prioritize competing demands…					
SI	5.00	5.00	9.00	7.80	1.64
Non-SI	5.00	5.00	9.00	7.00	1.87

While the sample size of this case study was limited to ten middle school principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border and may not be generalized beyond this population, there are some potentially meaningful insights available through exploring individual item data sets. For example, question 17 asked school leaders to rate the extent that they can cope with the stress of the job. The mean score for middle school principals in school improvement was 9.00 (*SD* = .000) and the mean score for non-school improvement middle school principals was 6.60 (*SD* = 2.51) as illustrated in Figure 4.

Figure 4

Comparison of Means for PSES Question 17



From these results, it appeared as though respondents in school improvement believed that they could cope with the stress of the job better than school leaders of non-improvement schools. To determine if there was a statistically significant difference between middle school principals of school improvement and non-school improvement campuses for this item an independent samples *t*-test was calculated for each individual item question as shown in Table 8.

Table 8

Comparison of t-test for PSES Questions by School Improvement Status

	Independent Samples Test		
Item	*t*	*df*	*p*
Q1. facilitate student learning…	.894	8.00	.397
Q2. generate enthusiasm for shared vision…	.447	8.00	.667
Q3. handle the time demands of the job…	1.01	8.00	.343
Q4. manage change in your school…	.426	8.00	.681
Q5. promote school spirit…	-1.55	8.00	.160
Q6. create a positive learning environment…	.566	8.00	.587
Q7. raise student achievement…	-1.20	8.00	.266
Q8. promote a positive image…	-1.00	8.00	.347
Q9. motivate teachers…	-1.39	8.00	.203
Q10. promote the prevailing values…	.0	8.00	1.00
Q11. maintain control of daily schedule…	.0	8.00	1.00
Q12. shape policies and procedures…	.381	8.00	.713
Q13. handle discipline of students…	1.31	8.00	.226
Q14. promote acceptable behavior…	-.649	8.00	.535
Q15. handle the paperwork required of the job…	.676	8.00	.518

Table 8 (continued)

	Independent Samples Test		
Item	*t*	*df*	*p*
Q16. promote ethical behavior…	-.239	8.00	.817
Q17. cope with the stress of the job…	2.14	4.00	.099
Q18. prioritize competing demands…	.718	8.00	.493

Using an alpha level of .100, an independent samples *t*-test was conducted to evaluate the extent that principals could cope with the stress of the job differed significantly as a function of whether school leaders were of school improvement and non-school improvement campuses. The test was marginally significant, $t(4.00) = 2.14$, $p < .100$, between middle school principals of school improvement and non-school improvement campuses when equal variances were not assumed. The 95% confidence interval for the average percentage that principals could cope with the stress of the job ranged from -.717 to 5.12. An examination of the group means indicated that middle school principals in school improvement ($M = 9.00$, $SD = .0$) coped significantly (marginally) more with the stress of the job than middle school principals of non-school improvement school ($M = 6.60$, $SD = 2.51$). Pearson *r* correlation coefficients are also presented in a correlation matrix to further investigate the strength and directionality of significant linear relationships found in this case as shown in the following tables.

Table 9

Correlation Matrix of Efficacy Measurements for PSES Question 1

		Q3. handle the time demands of the job…	Q25. years served as a principal…
Q1. facilitate student learning…	Pearson Correlation	.843**	.795**
	p	.002	.006
	N	10	10

Based on the results of the correlation analysis in Table 9, Q1 (facilitate student learning) and Q3 (handle the time demands of the job) had a significant linear relationship (r = .843, p <.01). The direction of the relationship was positive, meaning those respondents that rated Q1 (facilitate student learning) high also tended to rate Q3 (handle the time demands of the job) high as well. In addition, Q1 (facilitate student learning) and Q25 (years served as a principal) are also significantly correlated (r = .795, p <.01). The direction of the relationship was also positive, meaning those respondents that rated Q1 (facilitate student learning) high also tended to have served as a principal more total years.

Table 10

Correlation Matrix of Efficacy Measurements for PSES Question 2

		Q4. manage change in your school…	Q30. Percentage of English language learners
Q2. generate enthusiasm for shared vision…	Pearson Correlation	.815**	.937**
	p	.004	.0
	N	10	10

The correlation analysis results shown in Table 10 demonstrated that Q2 (generate enthusiasm for shared vision) and Q4 (manage change in your school) are significantly correlated (r = .815, p <.01). The direction of the relationship was positive, meaning those respondents that rated Q2 (generate enthusiasm for shared vision) high also tended to rate Q4 (manage change in your school) high as well. Additionally, Q2 (generate enthusiasm for shared vision) and Q30 (percentage of English language learners) also had a significant linear relationship (r = .937, p <.01). The direction of the relationship was also positive, meaning those respondents that rated Q2 (generate enthusiasm for shared vision) high also tended to have a high percentage of students identified on campus as English language learners.

Table 11

Correlation Matrix of Efficacy Measurements for PSES Question 3

		Q6. create a positive learning environment…	Q15. handle the paperwork required of the job…	Q25. years served as a principal…
Q3. handle the time demands of the job…	Pearson Correlation	.767**	.845**	.813**
	p	.010	.002	.004
	N	10	10	10

Based on the results of the correlation analysis presented in Table 11, Q3 (handle the time demands of the job) and Q6 (create a positive learning environment) are significantly correlated ($r = .767$, $p < .01$). The direction of the relationship was positive, meaning those respondents that rated Q3 (handle the time demands of the job) high also tended to rate Q6 (create a positive learning environment) high as well. In addition, Q3 (handle the time demands of the job) and Q15 (handle the paperwork required of the job) also had a significant linear relationship ($r = .845$, $p < .01$). The relationship was positive, meaning those respondents that rated Q3 (handle the time demands of the job) high also tended to rate Q15 (handle the paperwork required of the job) high as well. Moreover, Q3 (handle the time demands of the job) and Q25 (years served as a principal) are also significantly correlated, ($r = .813$, $p < .01$), and those respondents that rated Q3 (handle the time demands of the job) high also tended to have served as a principal more years.

Table 12

Correlation Matrix of Efficacy Measurements for PSES Question 5

		Q8. promote a positive image…
Q5. promote school spirit…	Pearson Correlation	.925**
	p	.0
	n	10

The correlation analysis results reported in Table 12 demonstrated that Q5 (promote school spirit) and Q8 (promote a positive image) had a significant linear relationship (r = .925, p <.01). The direction of the relationship was positive, meaning those respondents that rated Q5 (promote school spirit) high also tended to rate Q8 (promote a positive image) high as well.

Table 13

Correlation Matrix of Efficacy Measurements for PSES Question 8

		Q10. promote the prevailing values…
Q8. promote a positive image…	Pearson Correlation	.844**
	p	.002
	n	10

Based on the results of the correlation analysis shown in Table 13, Q8 (promote a positive image) and Q10 (promote the prevailing values) are significantly correlated (r = .844, p <.01). The direction of the relationship was positive, meaning those respondents that rated Q8 (promote a positive image) high also tended to rate Q10 (promote the prevailing values) high as well.

Table 14

Correlation Matrix of Efficacy Measurements for PSES Question 15

		Q17. cope with the stress of the job…
Q15. handle the paperwork required of the job…	Pearson Correlation	.865**
	p	.001
	n	10

The correlation analysis results presented in Table 14 demonstrated that Q15 (handle the paperwork required of the job) and Q17 (cope with the stress of the job) had a significant linear relationship (r = .865, p <.01). The direction of the relationship was positive, meaning those

respondents that rated Q15 (handle the paperwork required of the job) high also tended to rate Q17 (cope with the stress of the job) high as well.

Principal Efficacy across the PSES Subscales

The collective mean self-efficacy scores across all three PSES subscales (Instructional Leadership, Management Leadership, and Moral Leadership) by school improvement status are shown in Table 15. The mean score of total principal efficacy for middle school leaders in school improvement was 143 (*SD* = 10.9) and the mean score for non-school improvement campus leaders was 140 (*SD* = 16.6) as illustrated in Figure 5. From these results, it appeared as though respondents in school improvement believed that they accomplish the tasks required of them as middle school principals better than school leaders of non-improvement schools.

Table 15

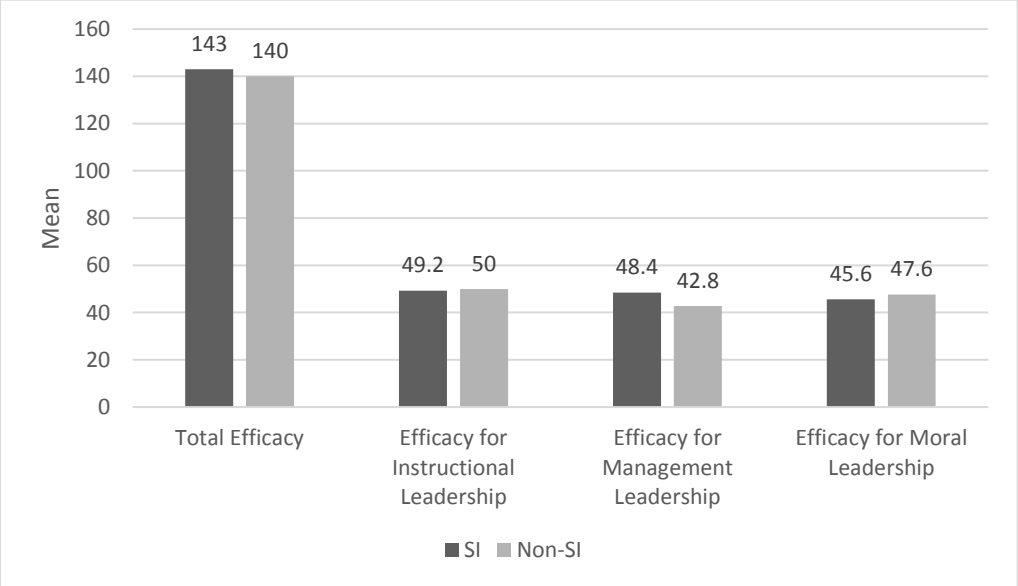
Comparison of Means for Efficacy Measurements by School Improvement Status

Construct and Subscale	*n*	Mean	*SD*	Std. Error Mean
Total Principal Efficacy				
SI	5.00	143	10.9	4.90
Non-SI	5.00	140	16.6	7.42
Efficacy for Instructional Leadership				
SI	5.00	49.2	1.30	.583
Non-SI	5.00	50.0	5.52	2.47
Efficacy for Management Leadership				
SI	5.00	48.4	3.51	1.57
Non-SI	5.00	42.8	10.2	4.54
Efficacy for Moral Leadership				
SI	5.00	45.6	8.73	3.91
Non-SI	5.00	47.6	5.13	2.29

The mean scores of principal efficacy for instructional leadership for the two school groups were similar and represented as follows in Figure 5: principals in school improvement (*M* = 49.2, *SD* = 1.30) and non-school improvement principals (*M* = 50.0, *SD* = 5.52). The mean score of principal efficacy for management leadership for principals in school improvement was 48.4 (*SD* = 3.51) and the mean score for non-school improvement principals was 42.8 (*SD* = 10.2) as displayed in Figure 5. From these results, it appeared as though respondents in school improvement believed that they can attend to the management aspects of the principalship (i.e. handle the paperwork required of the job, handle the time demands of the job, cope with the stress of the job, prioritize among competing demands of the job, maintain control of the daily schedule, and shape the operational policies and procedures that are necessary to manage a school) better than school leaders of non-improvement schools.

Figure 5

Comparison of Means for Efficacy Measurements by School Improvement Status



The mean score of principal efficacy for moral leadership for principals in school improvement was 45.6 (*SD* = 8.73) and the mean score for non-school improvement campus leaders was 47.6 (*SD* = 5.13) as depicted in Figure 5. From these results, it appeared as though middle school principals of non-school improvement campuses believed that they can attend to the moral dimensions of the principalship (i.e. promote acceptable behavior among students, effectively handle the discipline of students, promote spirit among a large majority of the student population, promote ethical behavior among school personnel, promote the prevailing values of the community, and promote a positive image of the school with the media) better than principals of school improvement campuses. To determine if there was a statistically significant difference between the two school groups represented in this case study, independent samples *t*-tests were calculated for efficacy measurements as shown in Table 16.

Table 16

Comparison of t-test for Efficacy Measurements by School Improvement Status

	Independent Samples Test		
Item	*t*	*df*	*p*
Total Efficacy	.315	8.00	.761
Efficacy for Instructional Leadership	-.315	4.45	.767
Efficacy for Management Leadership	1.17	4.94	.297
Efficacy for Moral Leadership	-.442	8.00	.671

To further investigate self-efficacy measurements across all three PSES subscales (Instructional Leadership, Management Leadership, and Moral Leadership) by school improvement status, independent samples *t*-tests were conducted at an alpha level of .100. No statistically significant results, $t(8.00) = .315$, $p = .761$, were found for total principal efficacy between middle school principals of school improvement and non-school improvement

campuses. Similarly, no statistically significant results, $t(4.45) = -.315$, $p = .767$, were found for principal efficacy for instructional leadership across the two school groups. No statistically significant results, $t(4.94) = 1.17$, $p = .297$, were found for principal efficacy for management leadership across the two subgroups. Equally, no statistically significant results, $t(8.00) = -.442$, $p = .671$, were found for principal efficacy for moral leadership between middle school principals of school improvement and non-school improvement campuses.

Research Question Two

The second research question queried, "What factors, if any, contribute to a middle school principal's sense of self efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border?" A qualitative research approach was employed to allow for a deeper, in-depth examination of principal's perceptions in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. As seen in Table 17, semi-structured interviews with 5 school improvement middle school principals and 5 non-school improvement middle school principals were conducted individually via the telephone with participants at a time and place within the urban school district to unpack self-efficacy beliefs.

Table 17

Semi-Structured Interviews

School	Principal	Interview Date	Interview Length	Comprehensive Support and Improvement Identification
S1	P1	July 17, 2020	43 minutes	
S2	P2	July 20, 2020	27 minutes	Targeted Support
S3	P3	July 16, 2020	28 minutes	
S4	P4	July 20, 2020	20 minutes	Targeted Support
S5	P5	July 16, 2020	26 minutes	

Table 17 (continued)

Semi-Structured Interviews

School	Principal	Interview Date	Interview Length	Comprehensive Support and Improvement Identification
S6	P6	July 20, 2020	21 minutes	Targeted Support
S7	P7	July 23, 2020	17 minutes	Targeted Support
S8	P8	July 20, 2020	18 minutes	Targeted Support
S9	P9	July 17, 2020	21 minutes	
S10	P10	July 17, 2020	35 minutes	

Additionally, an inductive coding process was used to identify emergent themes to present a thick description of middle school principals' perceptions of the complex conditions that impact their efficacious outlooks (Creswell & Creswell, 2018). The themes that emanated were then considered in relation to the review and synthesis of literature pertaining to the construct of self-efficacy. As shown in Table 18, two themes and six sub-themes emerged.

Table 18

Summary of Themes, Sub-themes, and Codes

Theme/Sub-theme	Codes
Sources of Principal Efficacy	
Enactive Mastery Experience	Past Success; Prior Experience; Job-Embedded Professional Development; Self-Instructed Performance
Vicarious Experience	Internship; Modeling; Observing other Successful Principals Perform Tasks
Emotional Arousal	Manage Feelings; Accomplishments; Positivity; Faith in God; Attitude/Strong Sense of Self
Verbal Persuasion	Feedback from Teachers; Feedback from Peers; Feedback from Supervisor

Table 18 (continued)

Summary of Themes, Sub-themes, and Codes

Theme/Sub-theme	Codes
Levels of Principal Efficacy	
Enhance	State Test Scores; Increase in Student Achievement; Growth; Feedback from Teachers; Feedback from Peers; Short Term Wins/Goal Completion; Success when Faced with Challenges; Prior Experience with Accountability; Prior Knowledge of Accountability; Shared Beliefs with Staff; Competence/Skill/Ability; Support from Supervisor
Diminish	Stress; Lack of Growth; Low Scores; Not Having Control Over Accountability; Negative Experiences; Worry; Undue Pressure over Letter Grade; Frustration

Sources of Principal Efficacy

All ten middle school principals provided feedback about factors that influenced their self-efficacy beliefs. Bandura's (1977; 1997) sources of efficacy were used as a framework to describe the factors that contributed to building the middle school principals' efficacious outlooks. Despite the uniqueness and differences of all ten participants, middle school principal self-efficacy beliefs in this case study were shaped by four experiences: enactive mastery experiences, vicarious experiences, emotional arousal, and verbal persuasion. Similar to findings made by Azah (2014), Holleb (2016), and Pearce (2020), the middle school principals' sense of efficacy were influenced in various contexts and through multiple types of experiences in the academic setting.

Enactive Mastery Experiences

In this case study, all ten principals (100%) shared that their past experience and performance in a number of academic contexts had an enduring effect on their perceptions of efficacy. This is a key finding from the thematic analysis because studies have affirmed that enactive mastery

experiences are the most influential and compelling source of efficacy (Azah, 2014; Bandura, 1997; Pearce, 2020). To varying degrees principals expressed that their past experiences and success as educators influenced their level of self-efficacy as a middle school principal. For instance, Principal P9 (personal communication, July 17, 2020) shared

> I've had quite a bit of experience since I've been at all three grades levels-elementary, middle, and high school. I can bring all of my experiences to figure things out and feel really good that I can accomplish my goals and make a decision that's going to improve the school. Especially right now with what's going on with accountability I feel my experience has helped get to a point that I see growth in me, the teachers, and students.

Similarly, Principal P3 (personal communication, July 16, 2020) stated, "I've worn many hats in various teaching and leadership components during my twenty years in all three grade levels. The amount of experience is the number one factor that has help me be fully prepared to make decisions." Principal P1 (personal communication, July 17, 2020) expressed, "Certainly, experience and my past success. If I did it in the past, then I can make it happen in the future. Success is a very powerful tool that motivates me to do it again and break the barriers." Principal P10 (personal communication, July 17, 2020) added, "Experience as a teacher, coach, administrator and also professional development in all areas was very big. I had to be trained and what I learned through professional development I adapted it with my experience and made it my own." The iterative progression of shaping efficacious outlooks through enactive mastery experiences, especially successful performance accomplishments, is critical because it helped to "influence the level of efficacy in a positive way" as articulated by Principal P4 (personal communication, July 20, 2020) and other middle school principals in this case study.

Vicarious Experiences

The qualitative data for this case study also indicated vicarious experiences as the second most expressed source of principals' sense of efficacy. Six of the ten (60%) middle school principals declared that observing a competent leader successfully complete similar tasks helped to build their efficacy beliefs. For example, Principal P2 (personal communication, July 20, 2020) stated, "I was sent to another campus to see their data wall and system. As a targeted school it helped me focus more on instruction and improve my leadership and the school because I was able to help teachers more." Similarly, Principal P6 (personal communication, July 20, 2020) shared, "Witnessing other people experience success, networking with colleagues, and learning in a collaborative environment has helped me grow as a professional and build my confidence that I can do it too." Principal P7 (personal communication, July 23, 2020) added, "What makes me a better leader is learning things from other successful principals because I don't know everything and observing them accomplish a goal and learning from them helps me improve and believe that it's possible for me." Moreover, Principal P8 (personal communication, July 20, 2020) expressed, "Collaboration with other principals improves my beliefs because we're not an island by ourselves. It helps me believe that we can do this and reach out to other fellow principals to come up with ideas and solutions." As evidenced by the feedback shared during the one-on-one, in-depth semi-structured interviews, many of the middle school principals perceived their efficacy beliefs were influenced by these vicarious opportunities to share experiences and observe competent colleagues achieve tasks that they were expected to complete in their respective schools.

Emotional Arousal

Another significant finding from the winnowing process indicated emotional arousal as another source of principal efficacy. Five of the ten (50%) middle school principals shared that an awareness of their emotions and a strong sense of purpose contributed to their efficacy beliefs as a school leader. For instance, Principal P5 (personal communication, July 16, 2020) stated

> I firmly believe my own self beliefs are critical. Everyone can succeed, but it depends on what you make them feel and believe. If you make the teachers or kids feel good or kick them in the teeth, they're going to perform based on that. If I believe I can succeed on a certain task I know it will get done. Same with them and that's why I lead by example. If I'm not afraid to run after a goal, my teachers and kids won't either.

Similarly, Principal P6 (personal communication, July 20, 2020) expressed, "Having a strong sense of self is important for me to accomplish things. Also I pay attention to my thoughts and emotions. I try to manage them to keep my eyes on the prize and eventually reach my goal." Principal P1 (personal communication, July 17, 2020) articulated, "My strong belief in God and the purpose it gives me helps me believe I can influence outcomes and keep working towards the goals I've set for the school, teachers, and students." Principal P10 (personal communication, July 17, 2020) added, "Definitely my never give up attitude and that desire to achieve goals drives me to be a better leader. That belief in myself also helps drive the school, teachers, and students." Overall, emotional cues as a source of efficacy beliefs influenced half of the middle school principals in this case study by raising their confidence to accomplish goals and enact leadership practices to improve their schools.

Verbal Persuasion

A thematic analysis of the qualitative data revealed that verbal persuasion in the form of feedback from a valued member of the organization incrementally influenced principal efficacy beliefs in this case study. Specifically, four of the ten (40%) middle school principals professed that feedback from teachers, peers, and district-level leadership influenced their efficacy beliefs. For example, Principal P10 (personal communication, July 17, 2020) shared, "I definitely value feedback from all, but I especially value feedback from teachers because they're the ones on the front line and together we can build the school and make changes to positively impact children." Similarly, Principal P1 (personal communication, July 17, 2020) expressed, "I have learned that part of my definition of success is based on the feedback from my teachers. Good or bad it keeps me motivated to improve student outcomes" Principal P6 (personal communication, July 20, 2020) stated, "I try to build a team of peers that can give me constructive affirmations and suggestions so that we can learn from each other because the accountability system can be tough to understand". Principal P2 (personal communication, July 20, 2020) added, "I have a supportive assistant superintendent that gives me feedback, encouragement, and the confidence that I can try new things to reach our goals; especially when we're a targeted campus." As reported, the middle school principals in this case study perceived that verbal persuasion, specifically feedback from a trusted source, contributed to their sense of efficacy to lead their schools.

Levels of Principal Efficacy

To further comprehend the perceptions of efficacy of middle schools principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border the qualitative data was analyzed with particular attention to the following:

enhance self-efficacy and diminish self-efficacy beliefs. These two sub-themes were indicative of middle school principals' efficacy levels. To further understand the complexities of elements that leverage levels of principal efficacy in the context of this case study, focus will initially shift to factors that enhanced the efficacious outlooks of the ten participants.

Enhance Levels of Principal Efficacy. All ten middle school principals provided feedback about elements that influenced their level of self-efficacy beliefs. An increase in student achievement, state test scores, and student growth were recurring factors that middle school principals in this case study expressed positively influenced their efficacious outlooks. Specifically, six of the ten (60%) middle school principals professed that improvements in student achievement, state test scores, and student growth enhanced their efficacious outlooks as middle school principals. For example, Principal P1 (personal communication, July 17, 2020) shared

> My students' success impacts the way I run my campus. When I first got to the school I remember feeling so sad because I didn't see any banners in the gym. So I made it my vision to really boost the kids' sense of success to enhance my own. When I see my kids winning on the field or their scores improving, it helps me to continue to break barriers. Their success and my success is like a drug and it keeps me motivated to improve the school. I don't see not having the "A" in accountability as a failure, but rather as a challenge to keep working towards our goals.

Similarly, Principal P2 (personal communication, July 20, 2020) stated, "When I see the student growth and the scores improve it makes we want to continue to be a better administrator and the best possible principal for my school." Principal P6 (personal communication, July 20, 2020) expressed, "Student achievement, really increases, motivates me. It encourages me, the teachers,

and the kids too. When we see the gains it sets an expectation that we can reach our goals and not be a targeted school anymore."

Principal P5 (personal communication, July 16, 2020) reported, "Student achievement absolutely impacts my self-efficacy beliefs. When School 5 got the seven stars it gave me pride and it helped me to continue to build that culture of being top dog and continuing to work towards our goals." Principal P10 (personal communication, July 17, 2020) articulated

> Oh most definitely student achievement impacts by efficacy beliefs. This is my sixth year as a principal and I can say that my first year is very different from my sixth year. Small goals and the small wins that we had with student growth and scores continues to build me up and build the teachers and kids up too. That's part of why my self-efficacy has improved. It's not so much working towards the A, but the tiny goals that we have met along the way have motivated me and the school to keep at it.

Principal P9 (personal communication, July 17, 2020) added, "Scores, especially gains, helps boost my efficacy beliefs and keeps me motivated. It also builds the kids beliefs too because they feel what you feel as a leader. They follow your lead and that's important for accountability targets." The expression of improvements in student achievement, state test scores, and student growth by these six principals is a key finding from the thematic analysis because studies have affirmed that success, especially repeated success, enhances an individual's self-efficacy beliefs and strengthens self-motivated persistence when faced with challenges (Azah, 2014; Bandura, 1997; Pearce, 2020).

Diminish Levels of Principal Efficacy

To further understand how the relationship between the Texas A-F Accountability and the self-efficacy beliefs of middle schools principals in an urban school district located at the

southeastern-most point of the Rio Grande Valley along the Texas-Mexico border focus will shift to factors that diminished efficacious outlooks. Specifically, four of the ten (40%) middle school principals professed that stress, frustration, worry, and lack of control as it relates to the Texas A-F Accountability system diminished their efficacy beliefs as middle school principals. For example, Principal P3 (personal communication, July 16, 2020) shared

> You know we have to realize that student performance is a very individualized ideology. It's not just black or white. Just because someone scores an "A" doesn't mean they're a great leader. Sometimes you get a gifted group of students and without putting in a little effort you'll meet the targets. But then you get a crop of students with a lot of needs and we don't meet the set targets in the all the domains, but there is growth from the start of the year to the end. Yet we get labeled as a success or failure and it's hard not to punish yourself when you see that letter. It's a stressor and you wonder if you're making the best decisions to move your school forward.

Similarly, Principal P7 (personal communication, July 23, 2020) expressed, "When you see the letter you received it can be a slap in the face. Despite everything you know you did right and how hard the teachers worked you still fall short. It's hard to swallow and it's frustrating." Principal P4 (personal communication, July 20, 2020) stated

> Seeing the targets sometimes makes me feel like I've never going to get there and I think dear God how am I going to get the job done and not be a targeted school anymore? I try not to care about accountability, not worry or let it bring me down because I know we're improving and the data shows we're getting closer, but it's tough some days.

Principal P8 (personal communication, July 20, 2020) added

> Sometimes I feel like I have no control over how the State reports my kids' scores. The set targets don't really take into account our at-risk populations and how much they and my teachers worked overall. That part is hard for me and it make me wonder if I'm going in the right direction.

Collectively, the statements of stress, frustration, worry, and lack of control by these middle school principals is a key finding from the thematic analysis because Bandura (1997) affirmed that effects of fear, stress, and anxiety can lead to diminishing levels of self-efficacy and debilitate performance.

Summary of Findings

The chapter began with a description of the demographic data for the population sample. A qualitative analysis of the middle school principals' responses to the Principal Sense of Efficacy Scale (PSES) survey followed along with significant results. The chapter also reported on the themes that emerged from the qualitative analysis of middle school principals' feedback to the open-ended questions included in the one-on-one, in-depth semi-structured interviews. The major findings from this case study include:

1. Using an alpha level of .100, the independent samples *t*-test revealed a marginally significant, $t(4.00) = 2.14$, $p < .100$, difference between middle school principals of school improvement and non-school improvement campuses when equal variances were not assumed for item 17 (cope with the stress of the job) on the PSES. An examination of the group means indicated that middle school principals in school improvement ($M = 9.00$, $SD = .0$) coped significantly (marginally) more with the stress of the job than middle school principals of non-school improvement school ($M = 6.60$, $SD = 2.51$).

2. There was a statistically significant correlation between Q1 (facilitate student learning) and Q3 (handle the time demands of the job), $r = .843$, $p < .01$, on the PSES. In addition, there was also a statistically significant correlation between Q1 (facilitate student learning) and Q25 (years served as a principal), $r = .795$, $p < .01$, on the PSES.

3. There was a statistically significant correlation between Q2 (generate enthusiasm for a shared vision) and Q4 (manage change in your school), $r = .815$, $p < .01$, on the PSES. In addition, there was also a statistically significant correlation between Q2 (generate enthusiasm for a shared vision) and Q30 (percentage of English language learners), $r = .937$, $p < .01$, on the PSES.

4. There was a statistically significant correlation between Q3 (handle the time demands of the job) and Q6 (create a positive learning environment), $r = .767$, $p < .01$, on the PSES. In addition, there was also a statistically significant correlation between Q3 (handle the time demands of the job) and Q15 (handle the paperwork required of the job), $r = .845$, $p < .01$, on the PSES. Additionally, there was a statistically significant correlation between Q3 (handle the time demands of the job) and Q25 (years served as a principal), $r = .813$, $p < .01$, on the PSES.

5. There was a statistically significant correlation between Q5 (promote school spirit) and Q6 (promote a positive image), $r = .925$, $p < .01$, on the PSES.

6. There was a statistically significant correlation between Q8 (promote a positive image) and Q10 (promote the prevailing values), $r = .844$, $p < .01$, on the PSES.

7. There was a statistically significant correlation between Q15 (handle the paperwork required of the job) and Q17 (cope with the stress of the job), $r = .865$, $p < .01$, on the PSES.

8. No statistically significant results, $t(8.00) = .315$, $p = .761$, were found for total principal efficacy between middle school principals of school improvement and non-school improvement campuses.

9. No statistically significant results, $t(4.45) = -.315$, $p = .767$, were found for principal efficacy for instructional leadership between middle school principals of school improvement and non-school improvement campuses.

10. No statistically significant results, $t(4.94) = 1.17$, $p = .297$, were found for principal efficacy for management leadership between middle school principals of school improvement and non-school improvement campuses.

11. No statistically significant results, $t(8.00) = -.442$, $p = .671$, were found for principal efficacy for moral leadership between middle school principals of school improvement and non-school improvement campuses.

12. In describing how their self-efficacy beliefs were shaped, all participants shared that their efficacious outlooks were influenced by enactive mastery experiences, vicarious experiences, emotional arousal, and verbal persuasion. All ten (100%) middle school principals expressed that enactive mastery experiences in the form of past experience and performance were the most influential source of efficacy. Six of the ten (60%) middle school principals declared vicarious experiences, such as observing a competent leader complete a task, as the second most stated source of principals' self-efficacy beliefs. Five of the ten (50%) middle school principals indicated emotional arousal as another source of principal efficacy. Four of the ten (40%) middle school principals articulated that verbal persuasion from teachers, peers, and district-level leadership incrementally shaped their efficacy beliefs.

13. In describing factors that enhanced their level of self-efficacy beliefs, six of the ten (60%) middle school principals professed that an increase in student achievement, state test scores, and student growth positively leveraged their efficacious outlooks.

14. In describing factors that contributed most to diminishing their efficacy beliefs, four of the ten (40%) middle school principals expressed that stress, frustration, worry, and lack of control, as it relates to the Texas A-F Accountability system, negatively leveraged principals' sense of efficacy.

The following chapter will discuss the implication of the findings within the context of the theoretical framework and school improvement. The final chapter will also consider case study limitations, implications for practice, and recommendations for future research.

CHAPTER V

INTERPRETATIONS AND RECOMMENDATIONS

Central to the Texas A-F Accountability System and ESSA is the emphasis placed on students' academic performance on high-stakes assessment instruments and the achievement gaps between student populations in reading/language arts and mathematics (TEA, 2020). Additionally, the national landscape of public school education has increasingly become characterized by the standards and numbers that continue to shape how educators at all school levels experience and construct educational reality (Taubman, 2009). Consequently, there is a renewed focus on education-improvement activities, especially the leveraging of school leadership to drive student achievement outcomes. Accordingly, this case study seeks to comprehend the relationship between the accountability movement as characterized by the Texas A-F Accountability System and ESSA on a middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

This case study employed an explanatory sequential mixed methods design to investigate the relationship between the perceptions of efficacy of middle schools principals in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border and the heightened accountability movement in Texas. This research approach allowed for the collection and analysis of quantitative and qualitative data in two consecutive phases within one study to investigate the research questions in depth (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015). The rationale for this integrated approach is supported

by the need to comprehensively examine the construct of principal self-efficacy in order to advance the knowledge and measurement of school leaders' sense of efficacy within the context of the current accountability climate in the region and statewide. Moreover, quantitative and qualitative research approaches were utilized in this explanatory sequential mixed methods case study to triangulate data and capture different dimensions of the construct of principal self-efficacy as well as enhance the validity of the study (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015).

This chapter is presented in four sections. The chapter begins with the presentation and interpretation of findings of the current case study within the context of the theoretical framework and school improvement. Following this discussion, the chapter will provide an overview of the limitations of the case study. The implications of principal's sense of self-efficacy and how the current findings can be used to guide school leaders in enacting leadership practices to support education-improvement activities will follow. The chapter will conclude with recommendations for future research.

Research Question One

The quantitative findings of this case study contribute to the scarce volume of empirical research that examines middle school principals' perceptions of their self-efficacy within the context of the current accountability climate in South Texas. As previously discussed, literature on principal's sense of efficacy is replete with studies that indicate efficacious beliefs are related to school leaders' success because it impacts effort and persistence on a particular task in a specified context (Aderhold, 2005; Azah, 2014; Dwyer, 2017; Federici & Skaalvik, 2012; Holleb, 2016; Leithwood & Jantzi, 2008; Leithwood, Strauss, & Anderson, 2007; Lehman, 2007;

Lovell, 2009; McCullers & Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004).

Overall Perceptions of Principal Efficacy

Using an alpha level of .100, the independent samples *t*-test revealed a marginally significant, $t(4.00) = 2.14$, $p < .100$, difference between middle school principals of school improvement and non-school improvement campuses when equal variances were not assumed for item 17 (cope with the stress of the job) on the PSES. Additionally, an examination of the group means indicated that middle school principals in school improvement ($M = 9.00$, $SD = .0$) coped significantly (marginally) more with the stress of the job than middle school principals of non-school improvement school ($M = 6.60$, $SD = 2.51$). Hence, middle school principals of school improvement campuses in this case study perceived that they can cope with the rigors of the principalship better than school leaders of non-improvement campuses.

As previously discussed within the review of literature, Bandura's (1997) triadic reciprocal causation model emphasizes the mutual influences of environment, individual behavior, and personal factors. In the context of this case study, middle school principals leading school improvement campuses may have perceived their efficacious outlooks were stronger as it relates to coping with the stress of the principalship because the conditions of the environment (i.e. Texas A-F Accountability System) have required them to be more tenacious in accomplishing their objectives, malleable to change, and more likely to adjust actions to meet contextual circumstances (Bandura, 1997). In addition, the perceptions of efficacy for principals tasked to lead schools currently identified for targeted support may have been stronger because they have benefited from capacity builders that are part of the Effective School Framework; a requirement of the school improvement process under the Texas A-F Accountability System

(Bandura, 1997; ESF, 2020). However, it is important to note that these same conditions could also impede principals in other contexts to engage in leadership behaviors that leverage school improvement efforts because when faced with adverse situations over sustained periods of time, a condition that is likely when leading campuses in school improvement, there is a potential for their efficacy beliefs to diminish (Bandura, 1997; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008). Towards those ends, the campus principals in this case study had only been under the auspices of school improvement efforts for one academic year and moving forward their efficacious outlooks as it relates to coping with the stress of the principalship may change the longer they remain within the context of major school reform (Bandura, 1997; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008). As concluded by McCullers and Bozeman (2010) and Santamaria (2008), the perceived efficacious appraisals of middle school principals leading school improvement campuses could potentially shift in a negative direction and may hinder their leadership praxis to move their schools in a direction of standards-based instruction (Bandura, 1997).

There were also statistically significant correlation between Q1 (facilitate student learning) and Q3 (handle the time demands of the job), $r = .843$, $p < .01$, on the PSES. According to Tschannen-Moran & Gareis (2004), item 1 (facilitate student learning) is aligned to the instructional leadership dimension of the principalship and item 3 (handle the time demands of the job) is aligned to the managerial aspect of the principalship. The direction of the relationship was positive, meaning those respondents that rated Q1 (facilitate student learning) high also tended to rate Q3 (handle the time demands of the job) high as well. In addition, there was also a statistically significant correlation between Q1 (facilitate student learning) and Q25 (years served as a principal), $r = .795$, $p < .01$, on the PSES. The direction of the relationship was also positive,

meaning those respondents that rated Q1 (facilitate student learning) high also tended to have served as a principal more total years. According to Bandura (1997), mastery experiences are the most powerful and authentic source of efficacy expectations and serve to enhance overall efficacious outlooks. Based on this perspective, school leaders that have held the position of principal for an extended period of time have had the opportunity to benefit from the iterative process of molding principal's efficacy beliefs through enactive mastery experiences and may explain why participants in this case study perceived that they were more capable of facilitating student learning (Bandura, 1997; Pearce, 2020; Santamaria, 2008).

There was a statistically significant correlation between Q2 (generate enthusiasm for a shared vision) and Q4 (manage change in your school), $r = .815$, $p < .01$, on the PSES. As per Tschannen-Moran & Gareis (2004), item 2 (generate enthusiasm for a shared vision) and item 4 (manage change in your school) are aligned to the instructional leadership dimension of the principalship. The direction of the relationship was positive, meaning those respondents that rated Q2 (generate enthusiasm for shared vision) high also tended to rate Q4 (manage change in your school) high as well. According to Marzano et al. (2005) and Waters and Cameron (2007), fostering shared beliefs and vision as well as having a willingness to act as a change agent are identified as two of the twenty-one leadership characteristics that strong instructional leaders embrace to improve teaching and learning practices in the school environment. Based on this perspective, it may explain why participants in this case study perceived their efficacy beliefs to follow the same instructional leadership trend (Marzano et al., 2005; Waters & Cameron, 2007). In addition, there was also a statistically significant correlation between Q2 (generate enthusiasm for a shared vision) and Q30 (percentage of English language learners), $r = .937$, $p < .01$, on the PSES. The direction of the relationship was also positive, meaning those respondents that rated

Q2 (generate enthusiasm for shared vision) high also tended to have a high percentage of students identified on campus as English language learners.

The quantitative findings also show that there was a statistically significant correlation between Q3 (handle the time demands of the job) and Q6 (create a positive learning environment), $r = .767$, $p < .01$, on the PSES. According to Tschannen-Moran & Gareis (2004), item 3 (handle the time demands of the job) is aligned to the managerial leadership dimension of the principalship and item 6 (create a positive learning environment) is aligned to the instructional leadership aspect of the principalship. The direction of the relationship was positive, meaning those respondents that rated Q3 (handle the time demands of the job) high also tended to rate Q6 (create a positive learning environment) high as well. In addition, there was also a statistically significant correlation between Q3 (handle the time demands of the job) and Q15 (handle the paperwork required of the job), $r = .845$, $p < .01$, on the PSES. Both items are also aligned to the managerial dimension of the principalship as per Tschannen-Moran & Gareis (2004) and the positive direction of the relationship indicates that those respondents that rated Q3 (handle the time demands of the job) high also tended to rate Q15 (handle the paperwork required of the job) high as well. Additionally, there was a statistically significant correlation between Q3 (handle the time demands of the job) and Q25 (years served as a principal), $r = .813$, $p < .01$, on the PSES. Once again, Bandura (1997) asserts that mastery experiences serve to enhance overall efficacious outlooks. School leaders that have held the position of principal for an extended period of time may have had the opportunity to gain an advantage from the iterative process of molding principal's efficacy beliefs through enactive mastery experiences and may explain why participants in this case study perceived that they were more capable of handling the time demands of the job (Bandura, 1997; Pearce, 2020; Santamaria, 2008).

There was a statistically significant correlation between Q5 (promote school spirit) and Q6 (promote a positive image), $r = .925$, $p < .01$, on the PSES. As per Tschannen-Moran & Gareis (2004), item 5 (promote school spirit) is aligned to the moral leadership dimension of the principalship and item 6 (create a positive learning environment) is aligned to the instructional leadership aspect of the principalship. The direction of the relationship was positive, meaning those respondents that rated Q5 (promote school spirit) high also tended to rate Q6 (create a positive learning environment) high as well. Once again, Marzano et al. (2005) and Waters and Cameron (2007) asserted that promoting cohesion among staff in the school community as well as systematically and fairly celebrating accomplishments of the learning environment are also identified as two of the twenty-one leadership characteristics of effective principals. Based on this perspective, it may explain why participants in this case study perceived their efficacy beliefs to follow the trend across two dimensions of the principalship (Marzano et al., 2005; Waters & Cameron, 2007).

The quantitative findings also revealed a statistically significant correlation between Q8 (promote a positive image) and Q10 (promote the prevailing values), $r = .844$, $p < .01$, on the PSES. According to Tschannen-Moran & Gareis (2004), both item 8 (promote a positive image) and item 10 (promote the prevailing values) are aligned to the moral leadership dimension of the principalship. The direction of the relationship was positive, meaning those respondents that rated Q8 (promote a positive image) high also tended to rate Q10 (promote the prevailing values) high as well. According to Sergiovanni (1992), moral leadership practices that help principals develop a sense of community by focusing on shared values and the more positive human dimensions of schools leads to a shift in the culture of the learning environment. Based on this perspective, it may explain why participants in this case study perceived their efficacy beliefs to

follow the same moral leadership trend to better support education improvement activities (Sergiovanni, 1992).

There was a statistically significant correlation between Q15 (handle the paperwork required of the job) and Q17 (cope with the stress of the job), $r = .865$, $p < .01$, on the PSES. As per Tschannen-Moran & Gareis (2004), both item 15 (handle the paperwork of the job) and item 17 (cope with the stress of the job) are aligned to the managerial leadership dimension of the principalship. The direction of the relationship was also positive, meaning those respondents that rated Q15 (handle the paperwork required of the job) high also tended to rate Q17 (cope with the stress of the job) high as well and may explain why participants in this case study perceived their efficacy beliefs to follow the same managerial leadership trend.

Principal Efficacy across the PSES Subscales

For this population sample, the null hypothesis is supported by the data and no statistically significant results, $t(8.00) = .315$, $p = .761$, were found for composite principal efficacy between middle school principals of school improvement and non-school improvement campuses. In regard to principal efficacy for instructional leadership, no statistically significant results, $t(4.45) = -.315$, $p = .767$, were found across the two school groups. No statistically significant results, $t(4.94) = 1.17$, $p = .297$, were found for principal efficacy for management leadership between middle school principals of school improvement and non-school improvement campuses. Equally, no statistically significant results, $t(8.00) = -.442$, $p = .671$, were found for principal efficacy for moral leadership across the two subgroups.

Unlike the findings in this case study, the scholarship previously discussed within the review of literature supports the premise that the context of standards and accountability in our nation's public schools is replete with conditions that could potentially negatively influence the

efficacious appraisals of principals to successfully lead education improvement and support improved student achievement (Aderhold, 2005; Lehman, 2007; Moak, 2010; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008). In addition, the unintended emotional cues of fear, stress, and anxiety as it relates to standards and accountability may also lead to inadequate performance and undermine perceptions of self-efficacy (Bandura, 1997; McCullers and Bozeman, 2010; Pajares, 1996; Santamaria, 2008). In the context of this case study, the middle school principals had only been identified for comprehensive support and improvement strategies under the Texas A-F Accountability System for one academic year and may not have fully experienced the adverse conditions associated with the hegemonic discourse of standards and accountability, as cited by McCullers and Bozeman (2010) and Santamaria (2008), to result in lower perceived efficacy beliefs. Towards those ends, those school leaders who sustain their efforts in the subjectively threatening environment of high-stakes assessments will strengthen their efficacy levels, but those that yield to the stress due to the duration of the challenging circumstance will perpetuate their self-debilitating efficacy expectations (Aderhold, 2005; Bandura, 1977; 1997; Lehman, 2007; Moak, 2010; McCullers and Bozeman, 2010; Nye, 2008; Santamaria, 2008). Thus, in order to bolster principals' efficacy expectations in the current accountability climate it is critical to provide school leaders the skills and incentives to execute courses of action that support their efforts to persist when faced with stressful conditions (Aderhold, 2005; Lehman, 2007; Moak, 2010; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008).

Research Question Two

The qualitative findings of this case study also confirm and align with many of the tenets within the self-efficacy component of the social cognitive theory (Bandura, 1977; 1997) and

Azah's (2014) research as it relates to principal efficacy. Bandura (1977; 1997) asserts that expectations of personal efficacy are shaped by four experiences: enactive mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal. In describing the factors that influence their self-efficacy beliefs, all respondents in this case study shared that their efficacious outlooks were influenced by the four sources of efficacy articulated by Bandura (1977; 1997).

Sources of Principal Efficacy

All ten (100%) middle school principals expressed that enactive mastery experiences in the form of past experience and performance were the most influential source of efficacy. The enactive mastery experiences articulated by the sample population mirrored those posited by Bandura (1977; 1997), Azah (2014), Holleb (2016), and Pearce (2020). Examples include when Principal P9 (personal communication, July 17, 2020) shared

> I've had quite a bit of experience since I've been at all three grades levels-elementary, middle, and high school. I can bring all of my experiences to figure things out and feel really good that I can accomplish my goals and make a decision that's going to improve the school. Especially right now with what's going on with accountability I feel my experience has helped get to a point that I see growth in me, the teachers, and students.

Similarly, Principal P1 (personal communication, July 17, 2020) expressed, "Certainly, experience and my past success. If I did it in the past, then I can make it happen in the future. Success is a very powerful tool that motivates me to do it again and break the barriers." Principal P10 (personal communication, July 17, 2020) also added, "Experience as a teacher, coach, administrator and also professional development in all areas was very big. I had to be trained and what I learned through professional development I adapted it with my experience and made it my own."

This is a key finding from the thematic analysis because it affirms that enactive mastery experiences are the most influential and compelling source of efficacy for school leaders in this case study because it provided them the most tangible and authentic evidence of their personal efficacy beliefs (Azah, 2014; Bandura, 1997; Holleb, 2016; Pearce, 2020). Towards those ends, the iterative process of molding principal's efficacy beliefs through enactive mastery experiences, especially successful performance accomplishments, is critical to support the development of robust school leader efficacy expectations (Azah, 2014; Bandura, 1997; Holleb, 2016; Pearce, 2020). More importantly, successful performance accomplishments under the current heightened accountability climate provides the conditions for increased perceptions of principals' efficacious outlooks overall and supports the transfer of those efficacy beliefs to other dimensions of the principalship (Bandura, 1977; 1997).

Six of the ten (60%) middle school principals declared vicarious experiences, such as observing a competent leader complete a task, as the second most stated source of principals' self-efficacy beliefs. According to Bandura (1977; 1997) this source of efficacy is less dependable and influential in building a person's efficacious outlook, but does increase an individual's perceptions of self-efficacy by appraising their abilities to successfully master a task in relation to others that are similar to oneself. Examples include when Principal P2 (personal communication, July 20, 2020) stated, "I was sent to another campus to see their data wall and system. As a targeted school it helped me focus more on instruction and improve my leadership and the school because I was able to help teachers more." Similarly, Principal P6 (personal communication, July 20, 2020) shared, "Witnessing other people experience success, networking with colleagues, and learning in a collaborative environment has helped me grow as a professional and build my confidence that I can do it too." Moreover, Principal P8 (personal

communication, July 20, 2020) expressed, “Collaboration with other principals improves my beliefs because we’re not an island by ourselves. It helps me believe that we can do this and reach out to other fellow principals to come up with ideas and solutions.”

The observation of skilled colleagues achieving tasks that they were expected to complete in their respective schools influenced middle school principals’ efficacy beliefs in this case study because it elicited expectations that they too could successfully accomplish future tasks under similar circumstances (Azah, 2014; Bandura, 1997; Pearce, 2020). In addition, the vicarious experiences articulated by the sample population influenced their perceived efficacy beliefs because these opportunities to share school improvement strategies during their community of practice and witness accomplished peers achieve performance targets set under the Texas A-F Accountability System helped them to envision improved educational outcomes for their students as well (Azah, 2014; Bandura, 1997; Dwyer, 2017; Holleb, 2016; Pearce, 2020; Wenger, 1998; 2006). Moreover, the social dimension of the vicarious learning experiences expressed by the middle school principals as they participated in their community of practice facilitated the articulation of a shared message and the co-construction of leadership praxis which consequently enabled them to positively leverage their perceived efficacious outlooks (Bandura, 1977; Bouchamma & Michaud, 2011; Kearney, 2005; Wenger, 1998; 2006).

Efficacious appraisals are also influenced by the perception and interpretation of emotional cues. Bandura (1977; 1997) notes that positive thoughts and emotions encourages the development of stronger efficacy beliefs. Whereas, physiological cues in the form of fear, stress, and anxiety leads to avoidance behavior because these negative thoughts undermine perceptions of self-efficacy and will lead to inadequate performance (Bandura, 1977; 1997). Five of the ten (50%) middle school principals in this case study indicated emotional arousal as another source

of principal efficacy. Examples include when Principal P5 (personal communication, July 16, 2020) stated

> I firmly believe my own self beliefs are critical. Everyone can succeed, but it depends on what you make them feel and believe. If you make the teachers or kids feel good or kick them in the teeth, they're going to perform based on that. If I believe I can succeed on a certain task I know it will get done. Same with them and that's why I lead by example. If I'm not afraid to run after a goal, my teachers and kids won't either.

Similarly, Principal P6 (personal communication, July 20, 2020) expressed, "Having a strong sense of self is important for me to accomplish things. Also I pay attention to my thoughts and emotions. I try to manage them to keep my eyes on the prize and eventually reach my goal." Principal P10 (personal communication, July 17, 2020) added, "Definitely my never give up attitude and that desire to achieve goals drives me to be a better leader. That belief in myself also helps drive the school, teachers, and students." Overall, middle school principals in this case study described that an awareness of their emotions and a strong sense of purpose contributed to their efficacy beliefs as a school leader because it enhanced the presumption that they could successfully navigate the challenging dimensions of the principalship (Azah, 2014; Bandura, 1997; Holleb, 2016; Pearce, 2020).

Four of the ten (40%) middle school principals in this case study articulated that verbal persuasion from teachers, peers, and district-level leadership incrementally shaped their efficacy beliefs. Verbal persuasion alludes to leading a person to believe that they can successfully master a task through the use of suggestion, exhortation, or self-instruction (Bandura, 1977). Examples include when Principal P10 (personal communication, July 17, 2020) shared, "I definitely value feedback from all, but I especially value feedback from teachers because they're the ones on the

front line and together we can build the school and make changes to positively impact children." Principal P6 (personal communication, July 20, 2020) stated, "I try to build a team of peers that can give me constructive affirmations and suggestions so that we can learn from each other because the accountability system can be tough to understand". Principal P2 (personal communication, July 20, 2020) added, "I have a supportive assistant superintendent that gives me feedback, encouragement, and the confidence that I can try new things to reach our goals; especially when we're a targeted campus." Similar to Bandura's (1997) findings, Azah (2014) states that the credibility of the source of verbal persuasion, in this context teachers, peers, and district-level leadership, is significant to determining the influence on perceptions of principals' self-efficacy. In addition, by approaching their learning as a social practice during their participation in their community of practice the verbal persuasion experienced by the sample population in this case study allowed them to share effective strategies and solutions as they worked collectively with other colleagues to solve actual problems that they were expected to address in their respective campuses (Bandura, 1977; Bouchamma & Michaud, 2011; Kearney, 2005; Wenger, 1998; 2006). Moreover, verbal persuasion in this case study was found to be a subsidiary source to shape middle school principal efficacious outlooks and was not considered to be as influential in building principals' efficacy beliefs as enactive mastery experiences (Azah, 2014; Bandura, 1997; Dwyer, 2017; Holleb, 2016; Pearce, 2020).

Levels of Principal Efficacy

In describing factors that influenced their level of self-efficacy beliefs, six of the ten (60%) middle school principals professed that an increase in student achievement, state test scores, and student growth positively influenced their efficacious outlooks. Similar to previous studies, the current case study confirmed the relationship between repeated success and enhancements in

self-efficacy beliefs as well as fortifying self-motivated persistence when faced with challenges (Azah, 2014; Bandura, 1997; Pearce, 2020). Examples include when Principal P1 (personal communication, July 17, 2020) shared

> My students' success impacts the way I run my campus. When I first got to the school I remember feeling so sad because I didn't see any banners in the gym. So I made it my vision to really boost the kids' sense of success to enhance my own. When I see my kids winning on the field or their scores improving, it helps me to continue to break barriers. Their success and my success is like a drug and it keeps me motivated to improve the school. I don't see not having the "A" in accountability as a failure, but rather as a challenge to keep working towards our goals.

Principal P5 (personal communication, July 16, 2020) reported, "Student achievement absolutely impacts my self-efficacy beliefs. When School 5 got the seven stars it gave me pride and it helped me to continue to build that culture of being top dog and continuing to work towards our goals." Principal P10 also (personal communication, July 17, 2020) articulated

> Oh most definitely student achievement impacts by efficacy beliefs. This is my sixth year as a principal and I can say that my first year is very different from my sixth year. Small goals and the small wins that we had with student growth and scores continues to build me up and build the teachers and kids up too. That's part of why my self-efficacy has improved. It's not so much working towards the A, but the tiny goals that we have met along the way have motivated me and the school to keep at it.

Principal P9 (personal communication, July 17, 2020) added, "Scores, especially gains, helps boost my efficacy beliefs and keeps me motivated. It also builds the kids beliefs too because they

feel what you feel as a leader. They follow your lead and that's important for accountability targets."

As noted previously in the review of literature, the efficacious outlooks of individuals can enhance one's motivation and beliefs to engage in strategic problem solving when faced with formidable tasks (Bandura, 1993; Holleb, 2016). More importantly, Bandura (1993) asserted that a person's level of self-efficacy influences their goal setting and attainment. In the context of this case study, it is critical that the educational community, especially at the school district level, foster the conditions that will bolster principals' efficacy levels in order to encourage their commitment towards and perseverance of meeting the ambitious targets required under the Texas A-F Accountability System and ESSA (Azah, 2014; Bandura, 1997; Dwyer, 2017; Holleb, 2016; Pearce, 2020). Moreover, understanding the factors that promote high levels of principal efficacy beliefs will shed light on antecedents of strong efficacy expectations and leadership behaviors that will support education-improvement activities (Azah, 2014; Bandura, 1997; Dwyer, 2017; Holleb, 2016; Pearce, 2020).

Previous research and findings from the current case study also point towards factors that undoubtedly subscribe to weaker efficacious outlooks in school leaders. In describing factors that contributed most to hindering their efficacy beliefs, four of the ten (40%) middle school principals expressed that stress, frustration, worry, and lack of control about their perceived beliefs to meet the targets of the Texas A-F Accountability system negatively influenced principals' sense of efficacy. Examples include when Principal P3 (personal communication, July 16, 2020) shared

> You know we have to realize that student performance is a very individualized ideology. It's not just black or white. Just because someone scores an "A" doesn't mean they're a

> great leader. Sometimes you get a gifted group of students and without putting in a little effort you'll meet the targets. But then you get a crop of students with a lot of needs and we don't meet the set targets in the all the domains, but there is growth from the start of the year to the end. Yet we get labeled as a success or failure and it's hard not to punish yourself when you see that letter. It's a stressor and you wonder if you're making the best decisions to move your school forward.

Similarly, Principal P7 (personal communication, July 23, 2020) expressed, "When you see the letter you received it can be a slap in the face. Despite everything you know you did right and how hard the teachers worked you still fall short. It's hard to swallow and it's frustrating." Principal P4 (personal communication, July 20, 2020) stated

> Seeing the targets sometimes makes me feel like I've never going to get there and I think dear God how am I going to get the job done and not be a targeted school anymore? I try not to care about accountability, not worry or let it bring me down because I know we're improving and the data shows we're getting closer, but it's tough some days.

Principal P8 (personal communication, July 20, 2020) added

> Sometimes I feel like I have no control over how the State reports my kids' scores. The set targets don't really take into account our at-risk populations and how much they and my teachers worked overall. That part is hard for me and it make me wonder if I'm going in the right direction.

This is a key finding from the thematic analysis because Bandura (1997) affirms that effects of fear, stress, and anxiety can lead to diminishing levels of self-efficacy and debilitate performance. Additionally, low efficacy expectations reinforce one's commitment to the avoidance of adversarial circumstances and negate adaptable behaviors needed to face

threatening situations (Bandura; 1977, 1993). Towards those ends, principals with low efficacy beliefs are more likely to succumb to the hegemonic discourse of standards and accountability and retain their self-debilitating efficacy expectations thereby limiting their ability to employ leadership practices that will improve instruction and maximize student performance (Azah, 2014; Bandura, 1977; 1997; Holleb, 2016; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008). Thus, the educational community, especially at the school district level, needs to engage school leaders in the iterative process of molding principal's efficacy beliefs through enactive mastery experiences to support school improvement efforts and nurture strong perceptions of efficacy beliefs to empower them to improve student achievement outcomes as well as navigate the challenges that are inherent in the Texas A-F Accountability System (Azah, 2014; Bandura, 1977; 1997; Dwyer, 2017; Holleb, 2016; Pearce, 2020).

It is important to note that the one of the factors, stress, which was articulated by middle school principals in this case study to negatively leverage efficacious outlooks is contrary to the results of the independent samples *t*-test. Results of the independent samples *t*-test revealed a marginally significant, $t(4.00) = 2.14$, $p < .100$, difference between middle school principals of school improvement and non-school improvement campuses when equal variances were not assumed for item 17 (cope with the stress of the job) on the PSES. These divergent results are noteworthy because while the quantitative results demonstrated that middle school principals in school improvement could cope with the stress of the job marginally better than their non-school improvement peers, the qualitative results indicated a different position. Three of the four middle school principals that expressed stress, frustration, worry, and lack of control as it relates to the Texas A-F Accountability system were amongst the school improvement group in this case study and were perceived to experience diminished efficacy beliefs as a result of stress. The potential

for the divergence in quantitative and qualitative results and may be rooted in that each of the research questions in this case study were attempting to capture objective and subjective dimensions of the construct of principal self-efficacy to better comprehend this complex human behavioral phenomenon (Creswell & Creswell, 2018; Ponce & Pagan-Maldonado, 2015).

Findings from the current case study yielded marginally significant results and correlations to support that a relationship does exist between principal efficacy and school improvement status in various dimensions of the principalship. The current study also provided evidence that confirms expectations of principal efficacy are shaped by the four types of experiences outlined by Bandura's (1977) social cognitive theory. Additionally, the results of this study support previous scholarship that chronicles the influence of factors that strengthen and impede levels of principals' efficacious outlooks. Moreover, the intentions of this case study were not to extend or negate the provisions of Bandura's (1977) social cognitive theory, but contribute research-based evidence that examined the complex construct of principal self-efficacy and provide insight into the leadership behaviors of principals that facilitate the effective implementation of school improvement strategies under the heightened accountability movement in the region and statewide.

Limitations

There were various limitations that influenced this mixed methods case study. The findings are limited to the ten middle school principals that are current school leaders in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Hence, the results of this case study may not be generalized beyond this population, geographic region, rural or suburban school districts because of the situation-specific nature of the investigation and further studies may be needed to assess the generalizability of

these findings. The results are also limited to the self-disclosed perceptions of efficacy of the middle school principals who chose to participate and not actual leadership behaviors. Additionally, although every effort was made to protect the confidentiality and anonymity of respondents to the principal efficacy survey and interviews, some respondents may have chosen to be less than candid in their responses. This subjectivity and lack of candor may have skewed the findings.

Some of the case study findings were based on the use of the Principal Sense of Efficacy Scale (PSES) to measure the self-disclosed perceptions of efficacy of the population sample. While Tschannen-Moran and Gareis (2004) contend that the PSES is a valid and reliable instrument to measure the construct of principal self-efficacy, other leadership studies have utilized a variation of efficacy scales to capture principals' sense of efficacy (Leithwood & Jantzi, 2008). Moreover, the correlational procedures that were utilized for this case study cannot determine causality or the specific constructs that are related. Lastly, it is important to note that the researcher for this case study was a school leader in the urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Although the researcher used triangulation and peer review to mitigate bias, the interpretation of the data may nonetheless have been influenced by the researcher's positionality.

Implications for Practice

The findings of this case study confirm the work of previous research and strengthens the importance of a principal's sense of efficacy as it relates to leveraging education-improvement strategies. In addition, a deeper understanding of the construct of principal self-efficacy is critical to inform school leaders in similar contexts how to navigate their roles as instructional leaders to elicit improved student achievement. At the school level, it is important to keep in mind the

value of the efficacious outlooks of principals when leading under the hegemonic discourse of standards and accountability. Individuals' with high self-efficacy beliefs, as posited by Bandura (1997), set challenging goals, remain task-focused, attribute failure to insufficient effort, and when goals are accomplished their efficacious beliefs are reinforced. Whereas, inefficacious people shy away from difficult tasks, behave ineffectually, are less likely to persist in perceived adverse environments, and dwell on their deficiencies (Bandura, 1997). Further diminishing their efficacious beliefs to produce desired outcomes (Bandura, 1997). Hence, school leaders practicing under the auspices of contemporary state and federal education policies need to understand how their efficacy beliefs are shaped to embed scaffolds within their leadership praxis to maintain or boost their levels of principal efficacy in order to keep pace with the challenging demands of school reform policies (Azah, 2014; Bandura, 1977; 1997; Dwyer, 2017; Holleb, 2016; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008). Integral to the scaffolded learning of school leaders and the strengthening of their perceived efficacy expectations is creating conditions that support a system of continuous leadership improvement to aid principals in coping with the formidable requirements of the accountability requirements as well as increase the total pattern of enactive mastery experiences to frame positive efficacious outlooks (Azah, 2014; Bandura, 1977; 1997; Dwyer, 2017; Holleb, 2016; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008).

At the school district level, strengthening a principal's sense of efficacy is a critical element of a campus environment that supports high-quality teaching and student learning. Studies affirm that as the key agents who are central to the transformation of teaching and schooling practices, principals with high efficacy beliefs are more likely to meet challenging student expectations and strive to engage in education-improvement activities that will advance

learner outcomes ((Azah, 2014; Bandura, 1977; 1997; Dwyer, 2017; Holleb, 2016; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Smith et al., 2006). Towards those ends, facilitating the opportunity for perspective and/or first year principals to participate in a yearlong principal in training residency program to benefit from the iterative process of molding principal's efficacy beliefs through authentic enactive mastery experiences, vicarious experiences, verbal persuasion, and emotional cues will support the development of strong efficacious outlooks to meet the spectrum of reform efforts that define the principalship (Azah, 2014; Bandura, 1977; 1997; Bouchamma & Michaud, 2011; Dwyer, 2017; Holleb, 2016; Kearney, 2005; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Wenger, 1998; 2006). Similarly, to better support current principals with low efficacy levels and counteract their self-debilitating efficacy expectations, school district leaders should provide them job-embedded, ongoing, and sustained coaching opportunities as well as accessibility to communities of practice to also provide them enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological cues in their authentic, real-world learning community (Azah, 2014; Bandura, 1977; 1997; Bouchamma & Michaud, 2011; Dwyer, 2017; Holleb, 2016; Kearney, 2005; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Wenger, 1998; 2006). More importantly, providing principals whose efficacy perceptions are weaker the skills and incentives to bolster their efficacy beliefs in the unpredictable nature of their current school environment will help promote the effects of behavioral accomplishments and encourage them to preserve in situations that would otherwise be intimidating (Azah, 2014; Bandura, 1977; 1997; Dwyer, 2017; Holleb, 2016; McCullers and Bozeman, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008).

Recommendations for Future Research

This case study also offers recommendations to further add to the scarce volume of empirical research that examines the complex nuisances of the construct of principal self-efficacy. To advance the efforts of the current case study, future researchers should look to examine a larger pool of participants. Due to the limitations of this study it was not possible to gather a larger pool of respondents, but including middle school principals from other school districts in the region and/or statewide would allow for researchers to evaluate differences between a more diverse groups of middle school principals. Additionally, a larger pool of middle school principals would also offer insight into the legitimacy of the themes and relationships presented in the current case study. A larger pool of middle school principals could also help to investigate the divergence of result in this study about how the relationship between perceptions of efficacy and coping with the stress associated with the principalship differ. Future research could also examine the efficacy levels of principals at different grade spans (i.e. elementary, middle, and high school) within the same urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border to identify variances in sources of self-efficacy.

In an attempt to bridge the gap in studies that examine principal's sense of efficacy, a multi-year qualitative study should be considered to evaluate if efficacy levels change as a new principal progresses from year to year. Additionally, comparing principal efficacy, teacher efficacy, and collective teacher efficacy beliefs within one school environment would aid in the development of a comprehensive understanding of efficacy expectations within a learning community as well as add to existing scholarship. Researchers in the educational and leadership community should also compare the efficacy beliefs of principals at public schools, charter

schools, and private schools to evaluate how variances in the environment influence efficacy expectations. Additional research should be conducted to investigate how school choice effects the efficacy expectations of principals at public schools, charter schools, and private schools. Principal efficacy studies should also investigate how the different dimensions of the principalship as articulated by Tschannen-Moran & Gareis (2004) impact principals' sense of efficacy. For example, how do social relationships within the learning community impact principal efficacy for moral leadership? Do school leaders that focus more on the managerial leadership dimensions of the principalship experience lower levels of principal efficacy as a result of the difficulties of meeting unprecedented legislative mandates? What school-level and district-level factors enhance principal efficacy for instructional leadership? Moreover, other empirical studies could also investigate the construct of principal self-efficacy and how leadership practices, rather than standards and accountability, played a guiding force in determining perceptions of principals' self-efficacy.

Future researchers that hope to explore the construct of principal self-efficacy should also evaluate how the inherent difficulties of the school reform process will be intensified by the unpredictable demands of the COVID-19 pandemic. As per the Texas A-F Accountability System, all districts and campuses were identified "Not Rated: Declared State of Disaster" for the 2020 school year (TEA, 2020). As a context-related construct that can alter based on the environment in which an individual operates, how will the change to the Texas A-F Accountability System impact principal self-efficacy beliefs with a non-rated year? For those principals leading schools identified for comprehensive support and improvement, how will a lapse in school ratings effect their efficacy beliefs? Additionally, how will a lapse in the accounting of student achievement and changes in the Texas A-F Accountability System as

result of the COVID-19 pandemic influence the levels of principal self-efficacy beliefs? On a broader scale, how will school closures as a result of the extraordinary public health and safety circumstances impact the efficacy beliefs of teachers and students?

Conclusion

The intent of this mixed methods case study was to comprehend the relationship between the accountability movement as characterized by the Texas A-F Accountability System and middle school principals' sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. Developing a more in depth understanding of the construct of principal self-efficacy is critical to inform school leaders on how to alter leadership behaviors and practices to leverage education-improvement strategies geared towards maximizing student performance (Aderhold, 2005; Azah, 2014; Calik et al., 2012; Dwyer, 2017; Herman et al., 2017; Lehman, 2007; Leithwood & Jantzi, 2008; Leithwood, Strauss, & Anderson, 2007; Lovell, 2009; McCullers & Bozeman, 2010; Moak, 2010; Nye, 2008; Pearce, 2020; Santamaria, 2008; Tschannen-Moran & Gareis, 2004, 2007; Versland & Erickson, 2017). Until educational scholars and practitioners in the field gain a deeper insight into leaders' efficacious outlooks, endeavors to support principals to effectively manage efficacy expectations as a means to confront the leadership and academic responsibilities of their positions under the heightened provisions of standards and accountability will continue to be uninformed.

Improvements in the efficacy expectations of principals is not the panacea for all of our school reform efforts. It is an example of a school leadership initiative and an indicator of school effectiveness that directly confronts the issue (Azah, 2014; Bandura, 1977; 1997; DuFour & Marzano, 2011; Dwyer, 2017; Herman et al., 2017; Holleb, 2016; McCullers and Bozeman,

2010; Nye, 2008; Pearce, 2020; Santamaria, 2008). The complex political, ethical, legal, economic, health, and societal environments of public education under the Texas A-F Accountability System and ESSA are urging schools to challenge the status quo, and not doing so will leave the learning communities of our nation at a disadvantage (DuFour & Marzano, 2011; Herman et al., 2017; Jazzar & Algozzine, 2007; Taubman, 2009; Tschannen-Moran, 2007; Pearce, 2020). We as educators need to embrace these leadership-based reform efforts as opportunities to drive school outcomes for students to the next level. Thus, in order to further cultivate the leadership capacity of principals, the educational and leadership research community must continue to conduct investigations to understand the construct of principal efficacy in order to fundamentally transform instructional and leadership praxis nationwide.

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Appendix A

Appendix A

Principal Sense of Efficacy Scale (PSES) Survey

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for principals in their school activities.

Directions: Please indicate your opinion about each of the questions below by marking one of the nine responses in the columns on the right side. The scale of responses ranges from "None at all" (1) to "A Great Deal" (9), with "Some Degree" (5) representing the mid-point between these low and high extremes. You may choose any of the nine possible responses, since each represents a degree on the continuum. Your answers are confidential.

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

"In your current role as principal, to what extent can you…"

1. facilitate student learning in your school? (INS)
2. generate enthusiasm for a shared vision for the school? (INS)
3. handle the time demands of the job? (MAN)
4. manage change in your school? (INS)
5. promote school spirit among a large majority of the student population? (MOR)
6. create a positive learning environment in your school? (INS)
7. raise student achievement on standardized tests? (INS)
8. promote a positive image of your school with the media? (MOR)
9. motivate teachers? (INS)
10. promote the prevailing values of the community in your school? (MOR)
11. maintain control of your own daily schedule? (MAN)
12. shape the operational policies and procedures that are necessary to manage your school? (MAN)
13. handle effectively the discipline of students in your school? (MOR)
14. promote acceptable behavior among students? (MOR)
15. handle the paperwork required of the job? (MAN)
16. promote ethical behavior among school personnel? (MOR)
17. cope with the stress of the job? (MAN)
18. prioritize among competing demands of the job? (MAN)

MAN – Efficacy for Management Leadership
INS – Efficacy for Instructional Leadership
MOR – Efficacy for Moral Leadership

Appendix B

Appendix B

Middle School Principal Demographic Survey

1. What is your gender?
   - ○ Male
   - ○ Female

2. What is your age?
   - ○ less than 30 years of age
   - ○ 30 – 34 years of age
   - ○ 35 – 39 years of age
   - ○ 40 – 44 years of age
   - ○ 45 – 49 years of age
   - ○ 50 + years of age

3. What is your ethnicity?
   - ○ Hispanic
   - ○ Asian
   - ○ African American
   - ○ White
   - ○ Other

4. What is your highest degree earned?
   - ○ Bachelors
   - ○ Masters
   - ○ Master + 30 hours
   - ○ Doctorate

5. How many total years have you served as an educator? (including this academic year)
   - ○ 1 – 5 years
   - ○ 6 – 10 years
   - ○ 11 – 15 years
   - ○ 16 – 20 years
   - ○ 21 – 25 years
   - ○ 26 + years

6. How many total years have you served as an educator in current school district? (including this academic year):
   - ○ 1 – 5 years
   - ○ 6 – 10 years
   - ○ 11 – 15 years
   - ○ 16 – 20 years
   - ○ 21 – 25 years
   - ○ 26 + years

7. How many total years have you served as a principal (including this academic year)
   - ○ 1 year
   - ○ 2 years
   - ○ 3 – 5 years
   - ○ 6 – 10 years
   - ○ 11 + years

8. How many total years have you served as principal in the current school (including this academic year)
   - ○ 1 year
   - ○ 2 years
   - ○ 3 – 5 years
   - ○ 6 – 10 years
   - ○ 11 + years

9. What is your school enrollment?
   - ○ 0 – 499
   - ○ 500 – 599
   - ○ 600 – 699
   - ○ 700 – 799
   - ○ 800 – 899
   - ○ 900 – 999
   - ○ 1000 +

10. What is the percentage of students on your campus identified as economically disadvantaged?
   - ○ 0 – 25%
   - ○ 26 – 50%
   - ○ 51 – 75%
   - ○ 76% +

11. What is the percentage of students on your campus identified as English language learners?
    - ○ 0 – 15%
    - ○ 16 – 30%
    - ○ 31 – 45%
    - ○ 46 – 60%
    - ○ 61 – 75%
    - ○ 76% +

12. What is the percentage of students on your campus identified as special education?
    - ○ 0 – 15%
    - ○ 16 – 30%
    - ○ 31 – 45%
    - ○ 46 – 60%
    - ○ 61 – 75%
    - ○ 76% +

13. Is your campus identified for Comprehensive Support and Improvement under the Texas A-F Accountability System?
    - ○ Is currently identified for comprehensive, targeted, and additional targeted support
    - ○ Is not currently identified for comprehensive, targeted, and additional targeted support

14. What type of Comprehensive Support and Improvement is your campus currently identified for under the Texas A-F Accountability System?
    - ○ comprehensive support
    - ○ targeted support
    - ○ additional targeted support

Appendix C

Appendix C

Semi-Structured Interview Protocol

1. What factors influence your level of self-efficacy as a middle school principal? Why?

2. How does the Texas A-F Accountability System, especially identification for comprehensive support and improvement, influence your efficacy beliefs as a middle school principal? Does it enhance or diminish your efficacy beliefs as a middle school principal? Why?

3. Do you feel student achievement influences your efficacy beliefs? How?

4. As a middle school principal what makes your self-efficacy beliefs improve? Why?

Appendix D

Appendix D

Site Approval

May 26, 2020

Re: Application for Research Study

Please be advised that your application for a Research Study has been reviewed and has been approved. The research ID number assigned to your request is 2020-05-26.

Your request titled "Middle School Leaders' Perceptions of Self-Efficacy in an Urban School District along the Texas-Mexico Border will begin in the June 22 of 2020 and conclude the December 31 of 2020. Ten principals at the Middle School level will be asked to participate, please ensure that all participants have agreed to be part of the study. If any of this changes please let us know.

Good luck with your endeavor and thank you for your interest in the School District and its students.

Should you have any questions or require further assistance, please do not hesitate to contact me at

Sincerely,

Assessment, Research & Evaluation

Appendix E

Appendix E

IRB Approval

Date: July 17, 2020

PI: Rachel Ayala

Dept: College of Education and P-16 Integration

Title: "Middle School Leaders' Perceptions of Self-Efficacy"

Re: IRB Exempt Determination for Protocol Number IRB-20-253

Dear Ms. Ayala,

A University of Texas Rio Grande Valley IRB reviewer had determined that this project meets the below criteria for Exemption under DHHS 45 CFR 46.104(d). The determination is effective as of July 17, 2020 within the exempt category of:

Category 2(i) - (2) 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) if at least one of the following criteria is met: (i) 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

This project received limited IRB review by a designated committee member of the Institutional Review Board for Human Subjects Research.

Research that is determined to be Exempt from IRB review is not exempt from ensuring protection of human subjects. The Principal Investigator (PI) is responsible for the following through the conduct of the research study:

1. Assuring that all investigators and co-principal investigators are trained in the ethical principles, relevant federal regulations, and institutional policies governing human subjects research.
2. Disclosing to the subjects that the activities involve research and that participation is voluntary during the informed consent process.
3. Providing subjects with pertinent information (e.g. risks and benefits, contact information for investigators, and IRB/ORC) and ensuring that human subjects will voluntarily consent to participate in the research when appropriate (e.g. surveys, interviews).

4. Assuring the subjects will be selected equitably, so that the risks and benefits of the research are justly distributed.
5. Assuring that the privacy of subjects and confidentiality of the research data will be maintained appropriately to ensure minimal risk to subjects.

Exempt research is subject to the ethical principles articulated in The Belmont Report, found at the Office of Human Research Protections (OHRP) Website: www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Unanticipated Problems: Any unanticipated problems or complaints must be reported to the IRB/ORC promptly. Further information concerning unanticipated problems can be found in the IRB procedures manual.

Continuing Review: Exempt research is not subject to annual review by the IRB.

Modifications: Any change to your protocol requires a Modification Request for review and approval prior to implementation. The IRB may review the exempt status at that time and request an application for approval as non-exempt research.

Closure: Please notify the IRB when your study is complete through submission of a final report. Upon notification, we will close our files pertaining to your study.

If you have any questions please contact the Office of Research Compliance by phone at (956) 882-7743 or via email at irb@utrgv.edu.

Sincerely,

Nadia Garza de Ramirez

Nadia Garza de Ramirez
Sr. Research Compliance Specialist
Office of Research Compliance

Appendix F

Appendix F

Permission Notification from PSES Survey Author

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

June 9, 2020

Rachel,

You have my permission to use the Principals' Sense of Efficacy Scale, which I developed with Chris Gareis, in your research. The best citation to use is:

> Tschannen-Moran, M. & Gareis, C. (2004). Principals' sense of efficacy: Assessing a promising construct. *Journal of Educational Administration*, 42, 573-585.

You can find a copy of these measures and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch . I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for these measures as well as other articles I have written on this and related topics.

All the best,

Megan Tschannen-Moran
William & Mary School of Education

Appendix G

Appendix G

Electronic Mail Message

Hello,

My name is Rachel R. Ayala, I am a doctoral candidate from the College of Education and P-16 Integration at the University of Texas Rio Grande Valley (UTRGV). I would like to invite you to participate in a school leader survey that is being conducted as part of a doctoral dissertation study focused on principal self-efficacy.

The purpose of the case study is to comprehend the impact of the accountability movement in Texas on a middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. This case study will provide vital information that will inform the educational community about the efficacious beliefs of middle school principals and their ability to engage in those leadership behaviors that improve instructional praxis and maximize student performance.

This research study has been reviewed and approved by the Institutional Review Board (IRB) for the Protection of Human Subjects at the University of Texas Rio Grande Valley.

In order to participate you must be 18 years or older. Participation in this research is completely voluntary, you may choose not to participate without penalty.

As a participant, you will be asked to complete an online survey which should take about 10 minutes to complete. All data will be treated as confidential and the study will pose no risk to your privacy. The data collected from the study is for educational purposes and will be reported in the aggregate and not attributed directly to one person.

If you would like to participate in this research study, please click on the survey link below and read the consent page carefully. If you would like to complete the survey, click on "I agree". If not, simply exit the web browser or click on "I do not want to participate".

Survey Link:
https://utrgv.co1.qualtrics.com/jfe/preview/SV_00bPxLVlVUL9ipD?Q_SurveyVersionID=current&Q_CHL=preview

If you have questions related to the research, please contact me by email at rachel.ayala01@utrgv.edu

Thank you for your cooperation!

Rachel R. Ayala
Doctoral Candidate
The University of Texas Rio Grande Valley

Appendix H

Appendix H

Informed Consent Agreement

This survey is being conducted by Rachel R. Ayala, a doctoral candidate at The University of Texas Rio Grande Valley.

The purpose of this study is to comprehend the impact of the accountability movement in Texas on a middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border. This case study will provide vital information that will inform the educational community about the efficacious beliefs of middle school principals and their ability to engage in those leadership behaviors that improve instructional praxis and maximize student performance.

This survey should take about 10 minutes to complete.

Participation in this research is completely voluntary. If there are any questions which you are uncomfortable with answering, feel free to skip that question and leave the answer blank. In addition, please be aware that you are entitled to withdraw from the study and terminate your participation at any time without question or comment. You must be at least 18 years old to participate. If you are not 18 or older, please do not complete the survey.

All survey responses received will be treated confidentially and stored on a secure server. However, given that the surveys can be completed from any computer (e.g. personal, work, and school) there is no guarantee of the security of the computer on which you choose to enter your responses. As a participant in this study, please be aware that certain technologies exist that can be used to monitor or record data and/or websites that are visited.

Any individually identifiable responses will be securely stored and will only be available to those directly involved in this study. De-identified data may be shared with other researchers in the future, but will not contain information about any specific individual identity.
This research has been reviewed and approved by the University of Texas Rio Grande Valley Institutional Review Board (IRB) for Human Subjects Protection. If you have any questions about your rights as a participant, or if you feel that your rights as a participant were not adequately met by the researcher, please contact the IRB at (956) 665-3598 or irb@utrgv.edu.

By selecting "I agree", you are consenting to the conditions described above.

Appendix I

Appendix I

Telephone Message and Informed Consent Agreement

This research is being conducted by Rachel R. Ayala, a doctoral candidate from the University of Texas Rio Grande Valley. The research study aims to investigate the impact of the accountability movement in Texas on a middle school principal's sense of self-efficacy in an urban school district located at the southeastern-most point of the Rio Grande Valley along the Texas-Mexico border.

The interview should take about 30 minutes to complete.

If you would prefer not to participate in this study, simply say no. Your responses are anonymous; we would not include any identifying information in this interview. We ask that you try to answer all questions. However, if there are any questions that you would prefer to skip, simply express your preference. You must be at least 18 years old to participate. If you are not 18 or older, please inform the researcher and do not complete the interview.

I would like to ask for your consent to audio record your responses during this interview. Your confidentiality will be protected with the use of a pseudonym. The recorded material will only be used for research purposes and for the presentation of this research. All data collected, including the recorded material will be stored in a secured location.

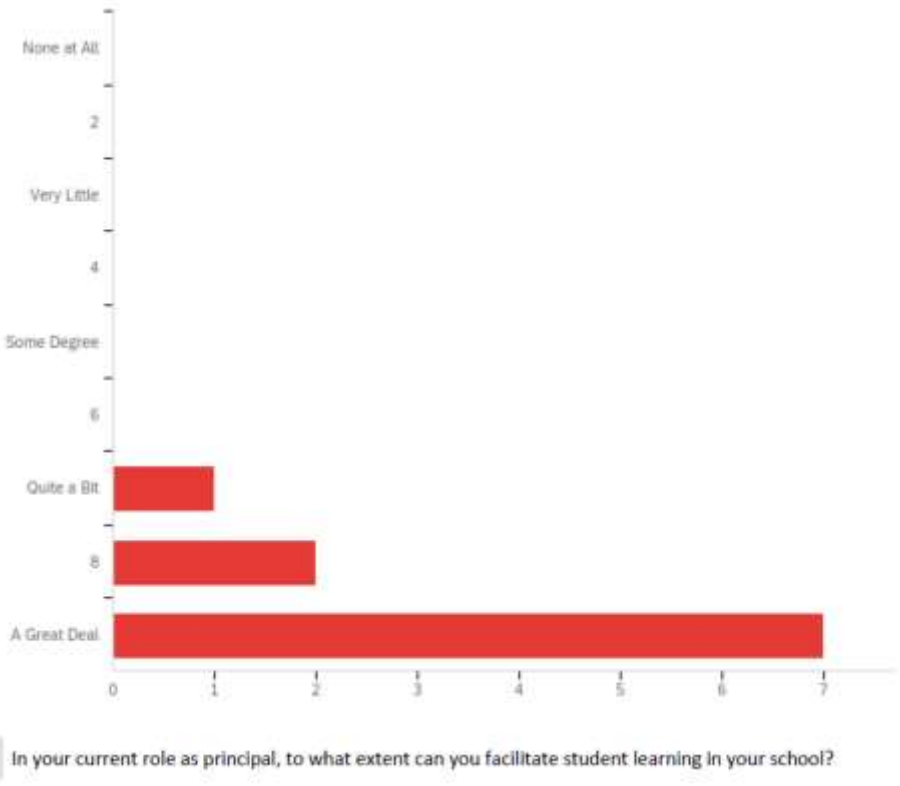
Researcher contact information: Name: Rachel R. Ayala
Title: Doctoral Candidate
Dept: College of Education and P-16 Interaction
The University of Texas Rio Grande Valley
Email: rachel.ayala01@utrgv.edu

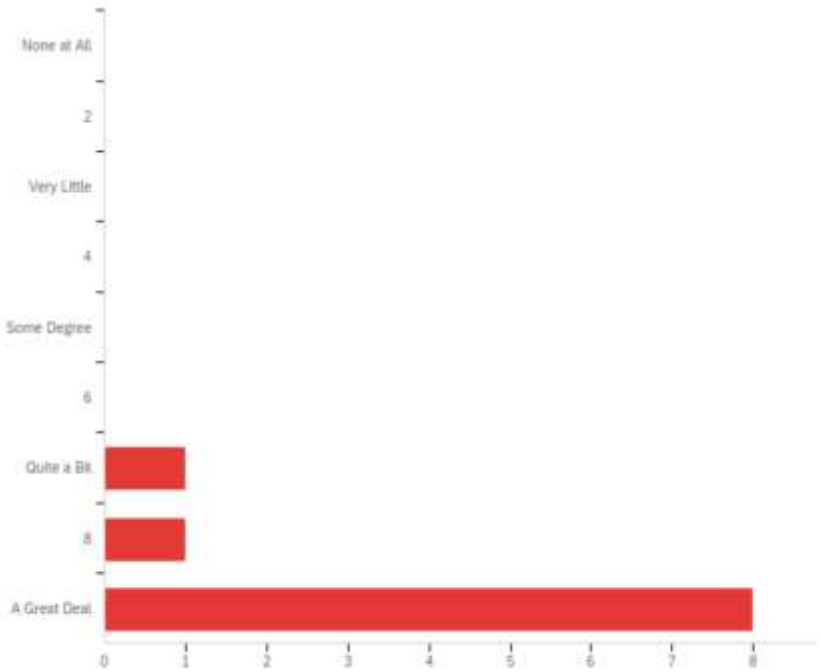
This research has been determined to be exempt by the Institutional Review Board (IRB) for the Protection of Human Subjects. If you have any questions about your rights as a participant, or if you feel that your rights have been violated, please contact the IRB at (956) 665-2093 or irb@utrgv.edu.

Appendix J

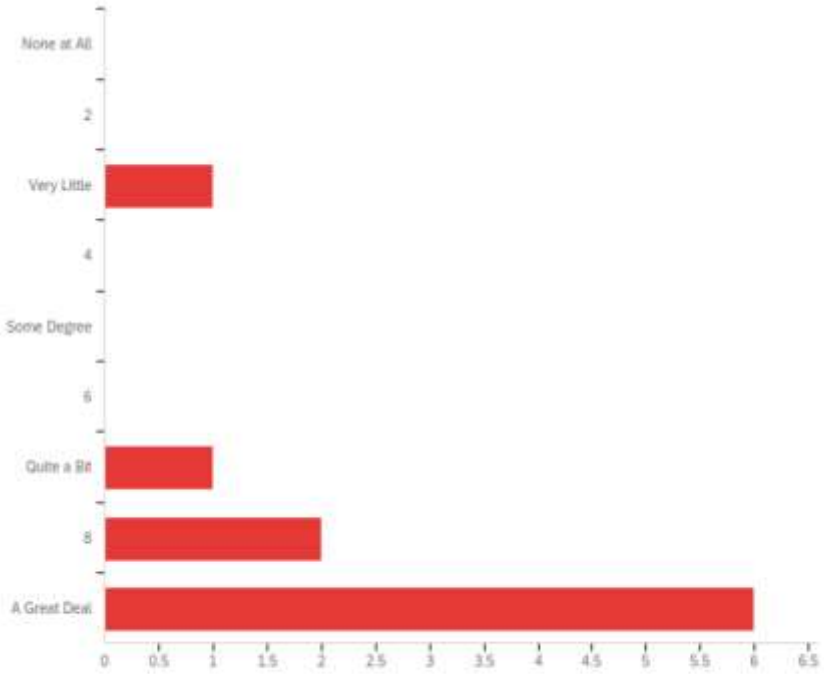
Appendix J

Principal Sense of Efficacy Scale (PSES) Survey Results

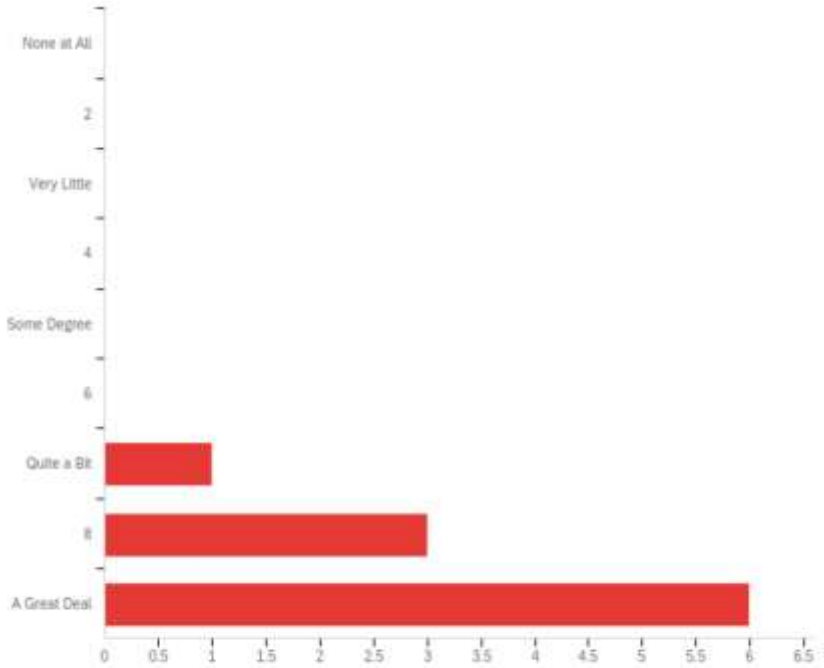




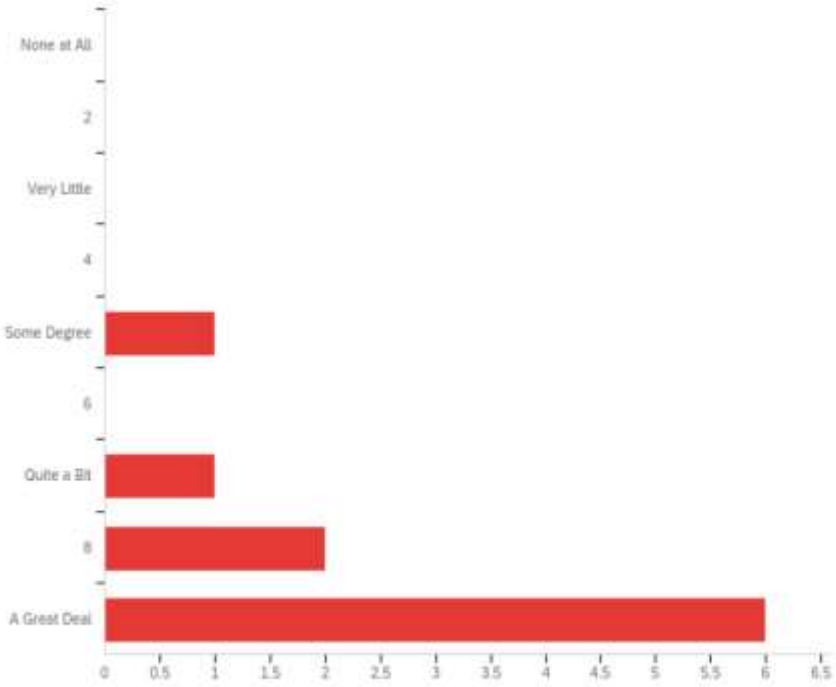
Q2 | In your current role as principal, to what extent can you generate enthusiasm for a shared vision for the school?



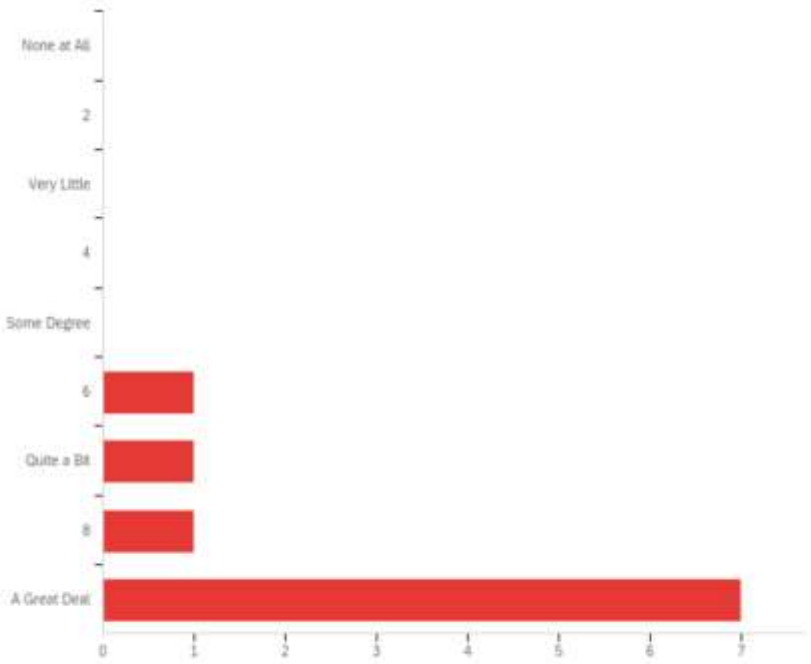
Q3 | In your current role as principal, to what extent can you handle the time demands of the job?



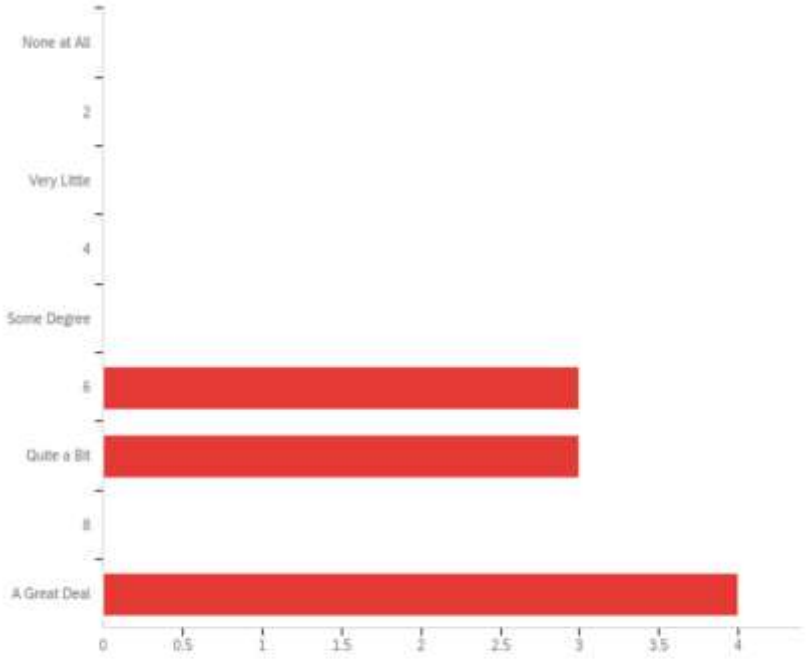
Q4 | In your current role as principal, to what extent can you manage change in your school?



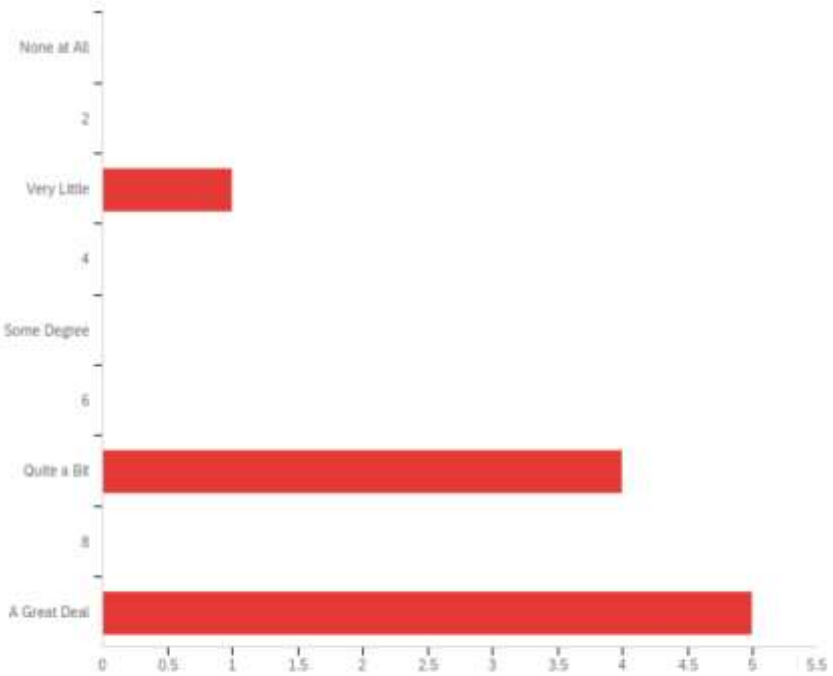
Q5 | In your current role as principal, to what extent can you promote school spirit among a large majority of the student population?



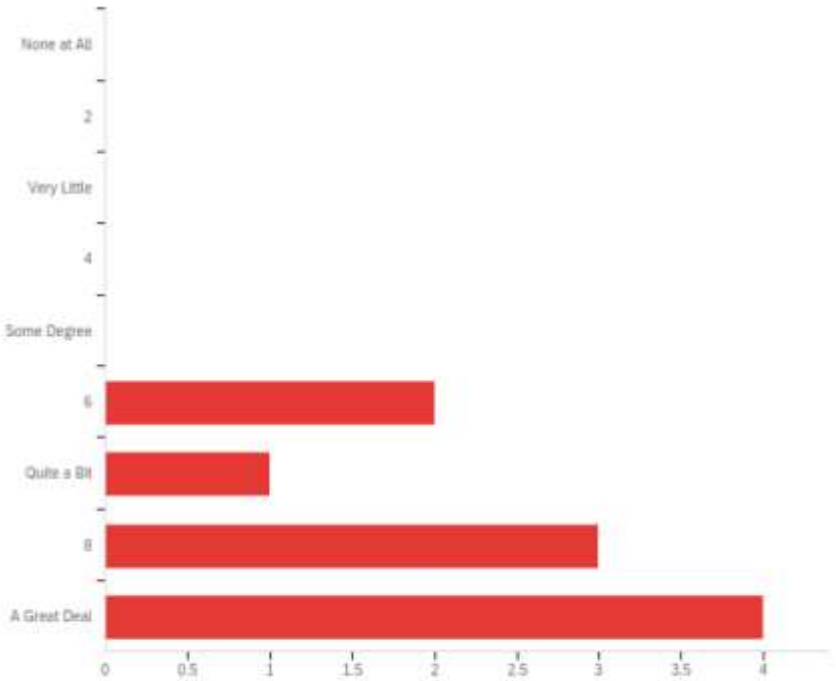
Q6 | In your current role as principal, to what extent can you create a positive learning environment in your school?



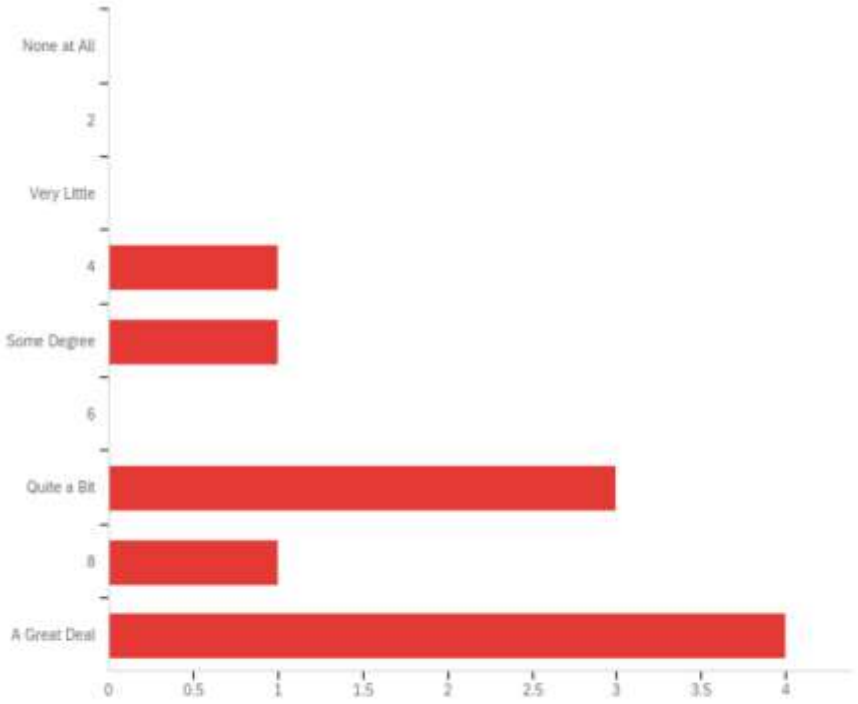
Q7 | In your current role as principal, to what extent can you raise student achievement on standardized test?



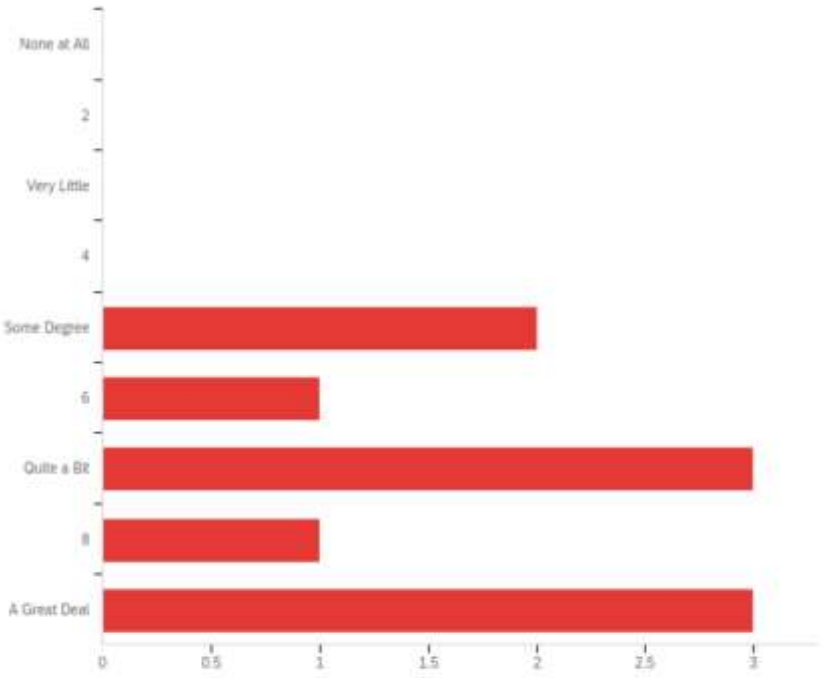
Q8 | In your current role as principal, to what extent can you promote a positive image of your school with the media?



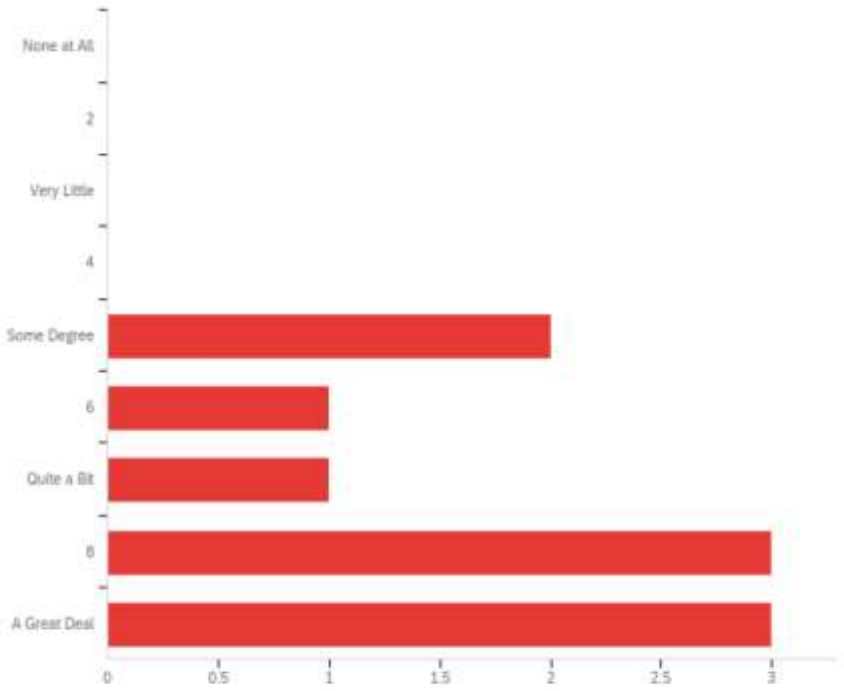
Q9 | In your current role as principal, to what extent can you motivate teachers?



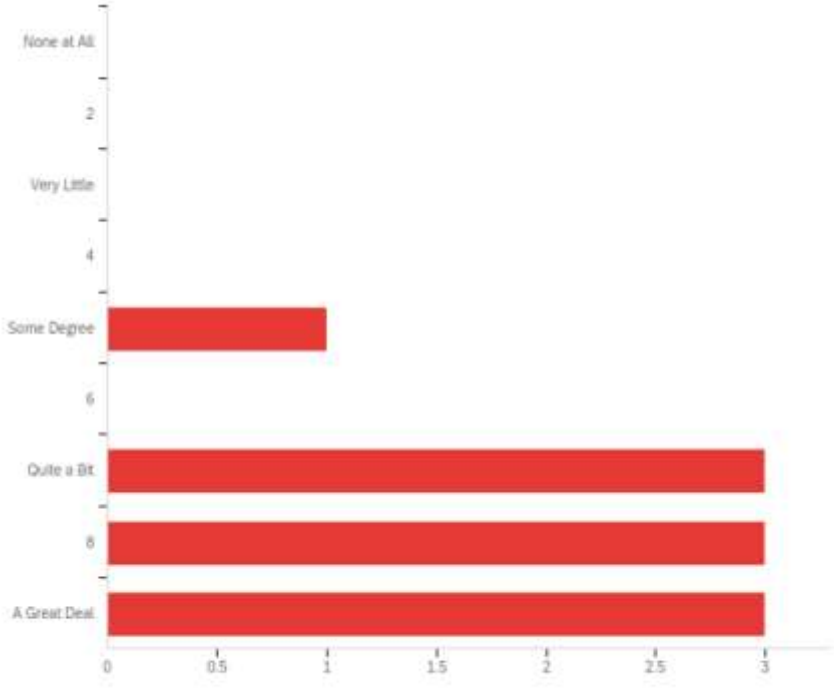
Q10 | In your current role as principal, to what extent can you promote the prevailing values of the community in your school?



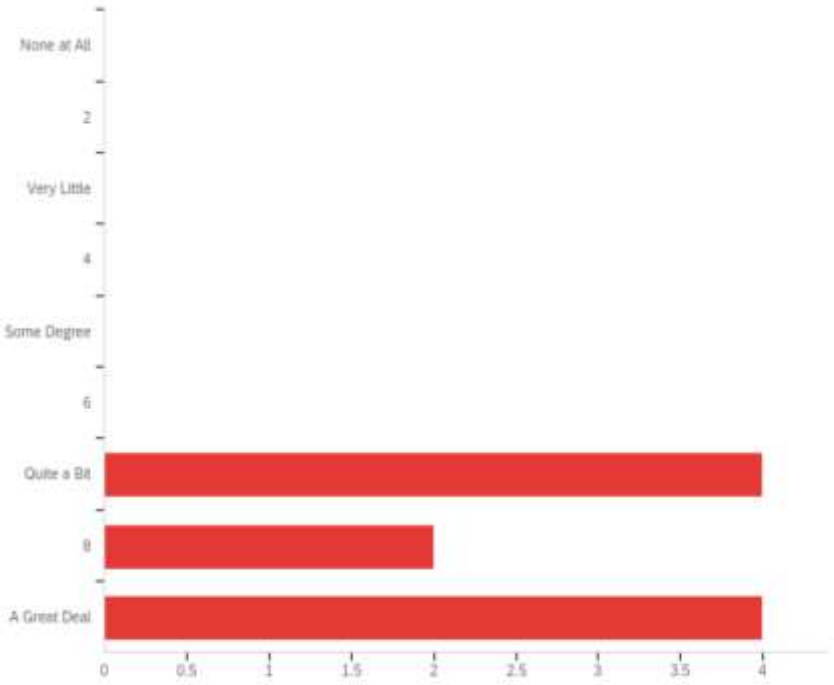
Q11 | In your current role as principal, to what extent can you maintain control of your own daily schedule?



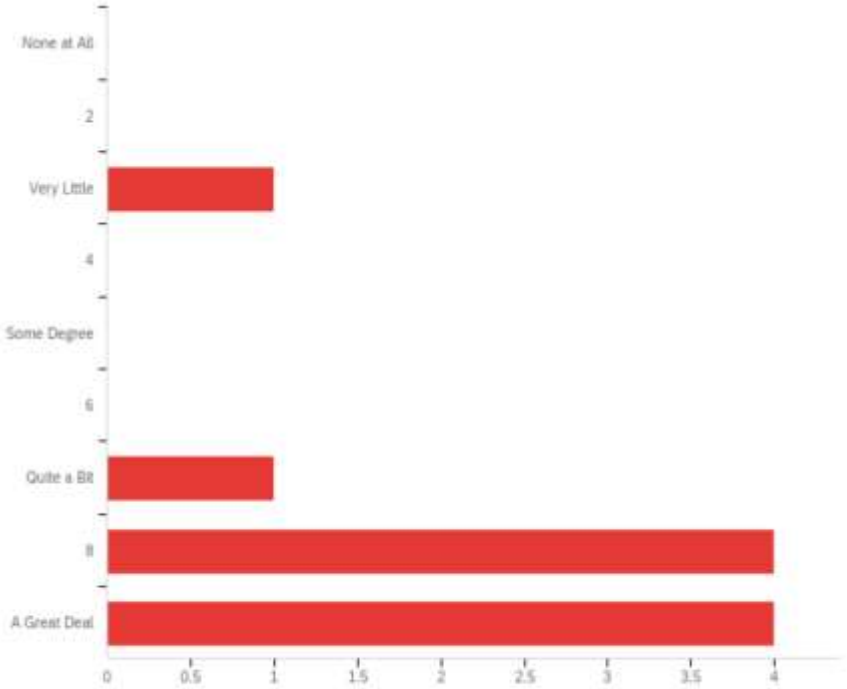
Q12 In your current role as principal, to what extent can you shape the operational policies and procedures that are necessary to manage your school?



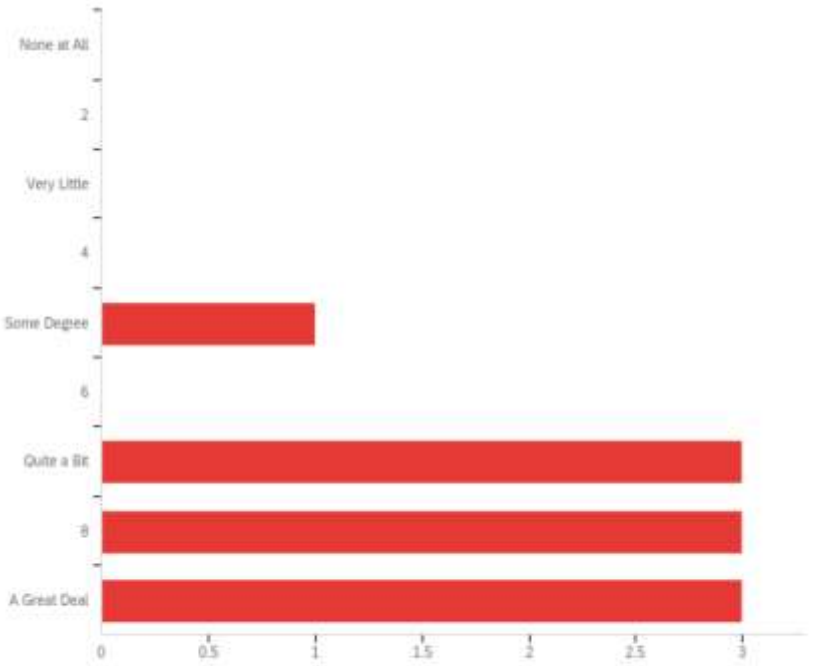
Q13 In your current role as principal, to what extent can you handle effectively the discipline of students in your school?



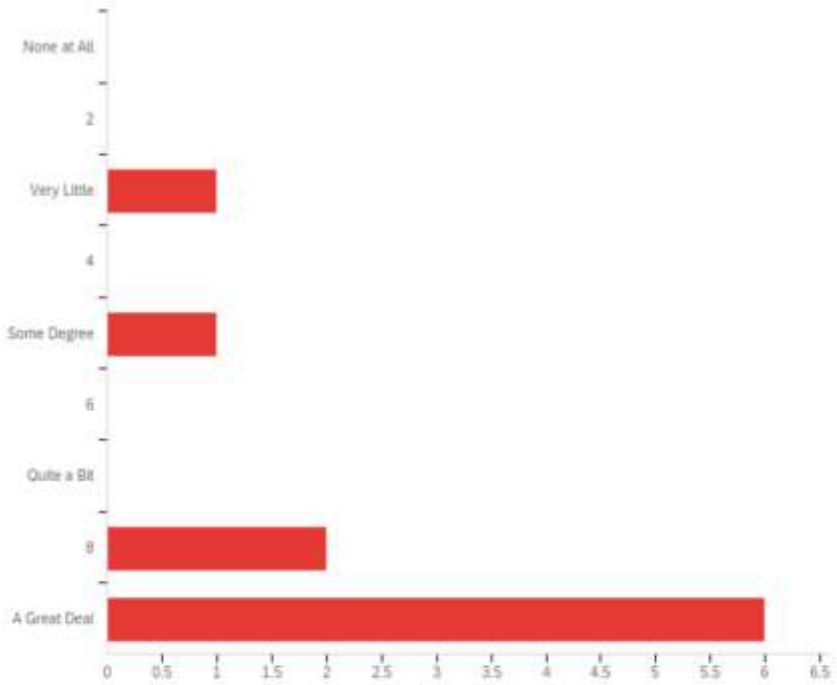
Q14 | In your current role as principal, to what extent can you promote acceptable behavior among students?



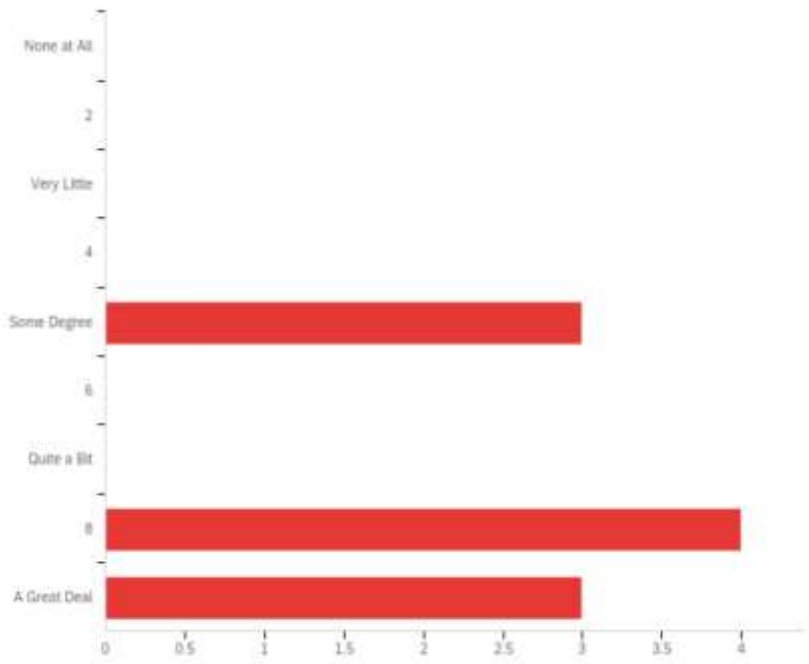
Q15 | In your current role as principal, to what extent can you handle the paperwork required of the job?



Q16 | In your current role as principal, to what extent can you promote ethical behavior among school personnel?



Q17 | In your current role as principal, to what extent can you cope with the stress of the job?



Q18 | In your current role as principal, to what extent can you prioritize among competing demands on the job?

BIOGRAPHICAL SKETCH

Rachel Renee Ayala was born in Brownsville, Texas on June 5, 1978, and she is the daughter of Alberto and Raquel Ayala. She currently resides in Brownsville, Texas and her personal email is rrayala001@gmail.com. Upon graduating from South Texas ISD for Health Professions in Mercedes, Texas in 1996 she enrolled at the University of Texas Pan American. She earned her Bachelor of Science degree in 2000 with a major in Biology and minors in Chemistry and English. While working as a science teacher at Gladys Porter High School in Brownsville, Texas she decided to pursue a graduate degree. She earned her Master of Education degree in Educational Leadership and principal certification in 2009 from the University of Texas at Brownsville. While working as a high school dean of instruction at Gladys Porter High School in Brownsville, Texas, she earned her superintendent certification from the University of Texas at Brownsville in 2010. She completed the requirements for her Doctor of Education degree from the University of Texas Rio Grande Valley in December 2020.