

THE DIFFERENCE IN DISTRICT LEADER SELF-EFFICACY BETWEEN SINGLE-
FRAME AND MULTIFRAME LEADERSHIP OF THE SUPERINTENDENT

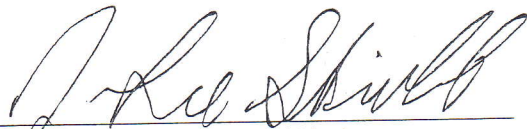
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2019

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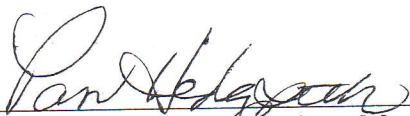
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THE DIFFERENCE IN DISTRICT LEADER SELF-EFFICACY BETWEEN
SINGLE-FRAME AND MULTIFRAME LEADERSHIP OF THE SUPERINTENDENT

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Presented to
The Faculty of the Graduate Education Department
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Doctor of Education

By

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Every accomplishment starts with the decision to try. -John F. Kennedy

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ABSTRACT

When district leaders lead with a multiframe approach in times of change, a more comprehensive approach is taken to view the organization through a structural, political, symbolic, and human resource lens. In addition, when district leaders hold high levels of self-efficacy, the belief that a difference can be made increases. Therefore, ensuring superintendent leadership that positively influences self-efficacy of the followers is critical to the achievement of effective change. There has been little research conducted to understand the single- or multi framing of a superintendent in times of change on the difference of self-efficacy of the district leaders reporting directly to the superintendent. This causal comparative study utilized inferential and descriptive statistics to understand the difference of self-efficacy of district leaders reporting directly to single- and multiframe superintendents in times of change across the state of Missouri. Results from this study showed no statistically significant difference occurred in self-efficacy of district leaders reporting directly to a single- or multiframe superintendent in times of change.

CHAPTER ONE

INTRODUCTION

Twenty-first century educational systems are challenged by the fast-paced world dominated by the demand for change from both internal and external factors (Cobanoglu & Yurek, 2018; Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston, Ferris, & Finkelstein, 2017). A shrinking planet, expanded global economy, increased political pressures, conflicted interests, inadequate funding, and increased accountabilities force organizations to think differently in efforts to foster improvements to high-quality teaching and learning (Bolman & Deal, 2008; Elmore, 2004; Main, 2017; Thompson, 2016; Weston et al., 2017). With the clock ticking, leadership at the helm of school districts is challenged to lead nimbly with rapid responses to avoid slow organizational evolution (Bolman & Deal, 2008; Main, 2017; Owens & Valesky, 2007). With educators knowing the dangers of Senge's Laws of the Fifth Discipline that faster can be slower and the cure can be worse than the disease, intentionality and precision are critical to change efforts (Bolman & Deal, 2008; Senge, 2006). This can be accomplished through using four leadership frames that provide multiple perspectives and help to provide direction, resulting in a positive impact on change for system success (Bolman & Deal, 2008; Rice & Harris, 2003).

To achieve this accomplishment system wide, superintendents must lead change, the process of making, becoming, or causing something to be different (Rodd, 2015). Change exists for the goals of improvement, enhancement, and advancement and can be felt at four levels: the micro level of the individual, the meso level of departments, the macro level of the system, and the mega level that exists beyond the system to other

systems within and beyond the localized community (Rodd, 2015; Weston et al., 2017). With such magnitude of impact, change requires a process. The process of change is far from scripted; rather it is messy and full of surprises (Heath & Heath, 2010; Kotter, 2007). While challenging at best, reducing errors by broadening perspective can be the difference between failure and success of a change initiative. This reality confirms the notion that robust leadership with a deep understanding of varying perspective is important to achieving successful and sustainable change (Hargreaves & Shirley, 2009; Kotter, 2007).

It is this robust leadership that is a necessity in creating a climate that influences the followers in a system to turn challenges faced into celebrations of movement toward goal acquisition (Kouzes & Posner, 1995; Novak, 2012). With change at the micro, meso, macro, and mega levels being complex, superintendents must be strategic in activating others to make extraordinary gains, as change is not a lone individual's goal (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978; Kouzes & Posner, 1995). Activating people on the journey is important through the relationship between the leader and the followers (Kean & Haycock-Stuart, 2011; Kouzes & Posner, 2017). This investment pays dividends when genuinely created. Followers desire leaders who listen, who are honest, who are visible, who are approachable, who develop trust, who communicate, and most of all, leaders who nurture a shared vision for improvement (Aitken & Aitken, 2008; Ashbaugh, 2013; Kean & Haycock-Stuart, 2011; Kouzes & Posner, 1995, 2017). The marks of great character, paired with clarity in shared vision, creates cohesion that propels an organization forward to achieve goals in the face of change (Aitken & Aitken, 2008; Ashbaugh, 2013; Phillips & Baron, 2013).

A shared vision is the outcome of a process that develops a unified message. This message inspires the system, enabling people of the organization to act. While it may not be feasible to activate every member of an organization in change, the shared vision is critical to influencing an organization as it inspires and influences commitment (Kotter & Whitehead, 2010; Senge, 2006). The shared vision moves organizational change toward achievement of change by tapping into the purpose and identity of the organization at all levels (DeWitt, 2017; Kouzes & Posner, 1995; Senge, 2006). With a shared vision, the future has clarity, which fosters long-term commitment (Bolman & Deal, 2008; Kotter & Whitehead, 2010; Senge, 2006). Shared visions are most successful when built upon the personal visions of the organization. Top-down approaches are less favorable than those created by the people for the people of the organization. Achievement of commitment to the belief a difference can be made comes when vision is built with consensus within the organization (Bolman & Deal, 2008; DeWitt, 2017; Kotter, 2007; McKibben, Umstead, & Borders; 2017; Senge, 2006).

Knowing the demands placed on educational leaders of all district sizes to inspire a shared vision and enable followers to act, it is essential that a superintendent's leadership during change holds a high degree of craftsmanship (Costa, Garmston, & Zimmerman, 2014; Kouzes & Posner, 1995). Craftsmanship is rooted in Costa and Garmston's (2016) theoretical states of mind and is defined as the human drive to hone, refine, and constantly work for improvement by striving for precision, elegance, refinement and fidelity. High craftsmanship is marked by a clear vision and goal, progress monitoring, and goal achievement, which increases dopamine, the brain's reward system (Costa & Garmston, 2016; Costa et al., 2014). In the moment,

craftsmanship may feel invisible, yet the outcome of high craftsmanship is expanded decision making, creating visibility in this state of mind. Those with high craftsmanship strive for excellence and achieve goals set forth. The characteristics of craftsmanship cause it to be an essential state of mind in the success of superintendent leadership during change (Costa & Garmston, 2016; Lunsford, 1995).

While a leader's craftsmanship during a change initiative is of importance, the self-efficacy of the followers reporting to the superintendent is also important. The concept of self-efficacy comes from the work of Bandura (1997), which was later related to social cognitive theory. Self-efficacy is the belief in oneself to organize, achieve, and execute in situations (Bandura, 1977; Costa & Garmston, 2016; Wilson, 2014). While efficacy is a changeable concept, varying based on condition, it has a substantial impact on achievement and is crucial for managing school reform (Cobanoglu & Yurek, 2018; Wilson, 2014). Self-efficacy influences outcomes through self-enhancing or self-debilitating thought, with the latter resulting in avoidance of task for fear of failure and self-enhancing beliefs resulting in believing one can make a difference (Cobanoglu & Yurek, 2018; McCollum & Kajs, 2009). Enhancing self-efficacy beliefs results in improved performance and goal achievement (McCormick, Tanguma, & Lopez-Forment, 2002).

In addition to craftsmanship and efficacy in the face of change, the leadership orientation of school leaders is important. Bolman and Deal (2008) provided the theoretical framework of leadership orientation through the four frames for organizational change. The four frames are lenses through which to view change in a complex environment (Bolman & Deal, 2008; Phillips & Baron, 2013). The symbolic, political,

structural, and human resource frames provide the differing approaches and strategies for leading change. Each frame is significant in capturing a piece of the reality of the organization, and the collection of frames is more comprehensive than a single-frame approach to support coherent, focused, powerful change (Bolman & Deal, 2008; Phillips & Baron, 2013). Leaders that focus on change through multiple frames increase aptitude for clear judgment and effectiveness in the face of school reform (Bolman & Deal, 2008).

With school reform at the heart of superintendents' work in this era of education, the difference between perceived leadership orientation and the level of the followers' self-efficacy is of interest in this study. This first chapter explores the problem and purpose statement followed by the research questions that were used to guide this study. The hypothesis in the null is shared for each of the research questions. Elements of the theoretical framework are explored followed by the limitations, delimitations, assumptions, and controls of the study. Finally, this chapter defines key terms for this study.

Problem Statement

The demands on public education in recent years have increased expectation on educational leaders to be visionaries, leaders of learning standards, evaluators, experts in discipline and instruction, managers of resources, implementers of modern learning tools, partners of accountability, and specialists of all layers of education, therefore necessitating change in how systems function (Cobanoglu & Yurek, 2018; Main 2017; Thompson, 2016). With demanded change comes the challenge of top leadership to tap internal and external resources to help reshape culture with the goal of improving teaching and learning opportunities for all students (Elmore, 2004; Reeves, 2009; Weston

et al., 2017). Included in the internal resources are leaders serving the district in positions reporting to the superintendent, often considered followers (Kouzes & Posner, 1995; Novak, 2012). To reshape the leadership culture for the greatest impact, behavioral modifications of followers must occur at the highest level: purpose and identify (Dilts, 2014). Followers who do more than change environment discover a deeper meaning for change that increases readiness and commitment (Dilts, 2014). The result influences and sustains cultural change across the system, transforming practice (Bass & Bass, 2008; Bass & Riggio, 2006; Heath & Heath, 2010; Nowack, 2017; Reeves, 2009).

In addition to the commitment to the change is the understanding of individual and organizational readiness. Without a high level of readiness for change, the organizational capacity to engage in substantial change may be limited (Reeves, 2009). As a result, the followers' capacity for change may fluctuate, creating varied influence across the system. Readiness for change is related to a followers' self-efficacy, the belief in oneself to organize, achieve, and execute in situations (Bandura, 1977; Costa & Garmston, 2016; Wilson, 2014). This belief in ability to contribute at a deep level is important as leaders and followers at the district level have direct and indirect impact on instructional practice and learning, and congruency in behavior and action is important to maximize influence across the system (Azah, 2014; Reeves, 2009). Leader self-efficacy influences the ability to enable others to act, model the way, motivate, and focus on the goal in change in a congruent manner (Kouzes & Posner, 1995; McCormick et al., 2002). Congruency in leaders inspires and motivates the systems to subscribe to the shared vision by tapping into the identity and purpose for the betterment of students (Dilts, 2014; Reeves, 2009; Weston et al., 2017).

Educational leaders face the demands of high-stakes school reform and the need to activate followers to achieve goals of change (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978). The intensity of these demands, the use of the frames of leadership, and noticed follower turnover in change influenced this study. The intrigue surrounding superintendents' craftsmanship of leadership orientation in relation to the self-efficacy of the followers is of interest for all districts as change continues to be a demand. Outcomes of this study could inform leaders of the four frames of leadership orientation to consider during change initiatives to enhance a new culture effectively. This study holds importance not only to education, but also to any organization challenged by reform as findings may identify considerations for managing the transition, strengthening efficacy of followers, and employing single- or multiframe leadership orientations. With public education in a constant state of flux, this study is especially important in aiding reform efforts that maximize moving the system forward. Regardless of the size of a system, there are followers in relationship to the superintendent; therefore, any exposed difference between the district leader self-efficacy and the perception of the leadership orientation of the superintendent in change may provide context for how to prioritize time, effort, and resources as a multiframe leader to successfully influence change that will positively impact a system.

Purpose of Study

The purpose of this study was to identify the difference in district leader self-efficacy between single-framed and multiframe leadership orientation of the superintendent during change. The district leader is also known as a follower and is one directly reporting to the superintendent. The independent variable in the study was the

perceived leadership orientation of the superintendent during change. The dependent variable in the study was the perceived self-efficacy of the district leaders, also known as followers. The leadership orientation reveals a single- or multiframed leader with four frames of leadership in mind: symbolic, political, structural, and human resource. While each frame is powerful on its own, the collection of the four frames results in a more comprehensive outcome often experiencing more success than a single-frame approach (Bolman & Deal, 2008; Rice & Harris, 2003). The self-efficacy of the followers, also described as district leaders, includes the leader's perception of his/her ability to make a difference by leading others effectively, performing specific behaviors aligned to goals, and persisting in the face of difficulty, obstacles, and disappointment (Bandura, 1997; Ford, 2012; McCormick et al., 2002; Schwarzer & Jerusalem, 2013). Higher self-efficacy results in an increased readiness for change as followers search for identity, competence, learning, mastery, and control during change (Costa et al., 2014). It is this difference of perceived self-efficacy and the single-framed or multiframed leadership orientation through the symbolic, political, structural, and human resource frames that is of interest to inform future leaders of school reform (Bolman & Deal, 2008; Kotter & Cohen, 2002).

Research Questions and Null Hypotheses

This quantitative research study addressed the differences found in the self-efficacy of the district follower between the single- and multiframed leadership orientation of the superintendent during organizational change. In the first four research questions, the independent variable was the perceived leadership orientation of the superintendent during change. The dependent variable is the perceived self-efficacy of district leaders, also known as followers. The single-framed and multiframed leadership

orientation are revealed in four frames: symbolic, political, structural, and human resource. While each frame is powerful on its own, it is the collection of the frames that contributes to a comprehensive outcome of success in change (Bolman & Deal, 2008; Rice & Harris, 2003). The fifth research question is a contextual question with demographics in mind in regard to the efficacy of those that report directly to the superintendent.

Research Questions

The following research questions guided this study:

1. What are the differences in self-efficacy of a district leader working under the direction of a single-framed or multiframed superintendent leading change?
2. What are the differences in self-efficacy of a district leader working under the direction of each of the four types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame)?
3. What are the differences in self-efficacy of a district leader working under the direction of each of the four dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame)?
4. What are the differences in self-efficacy of a district leader working under the direction of a comprehensive multiframed leader and dominant multiframed superintendent leading change?
5. What are the differences in self-efficacy of a district leader working in a district that falls in the categories of the following size: very small, small, medium, and large?

Null Hypotheses

In attempt to answer the research questions set forth in this study, the following null (H_0) hypotheses were investigated:

1. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived single-framed or multiframed superintendent leading change.
2. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame).
3. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame).
4. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived comprehensive multiframed leader and dominant multiframed superintendent leading change.
5. H_0 : There will be no statically significant difference of self-efficacy of district leaders among very small, small, medium, and large districts?

Significance of Study

In the age of school reform, effective superintendent leadership requires influence of followers, knowledge of the efficacy of the followers, and an understanding of personal leadership orientations through the four frames of Bolman and Deal's (2008)

work to move change as there is an increase in the role of the superintendent taking on more challenges in political pressures, conflicting interests, financial strains, and accountability (Perez, 2018). The purpose of this study focused on identifying the difference in self-efficacy of district leaders between the varied leadership orientation of single-framed and multiframed superintendents in change. Knowing that self-efficacy is an essential ingredient to how educators learn, lead, and teach, and to how persistent individuals are to goal achievement, exposing a difference between self-efficacy and the leadership orientation may influence change initiatives moving forward (DeWitt, 2015; McCormick et al., 2002). The findings may impact decision making through the four frames of leadership to increase efficacy, efficiency, and effectivity within the organization. Researchers noted that people who lead through a multiframed leadership orientation with followers holding high self-efficacy are often more committed to school reform that resulted in goal attainment (Costa et al., 2014; DeWitt, 2015; McCormick et al., 2002). When commitment to a shared vision is high, systems can move toward new practices to enhance high-quality teaching and learning that meets student needs (Aitken & Aitken, 2008; DeWitt, 2015; Elmore, 2004; McCormick et al., 2002). Significant findings might be helpful in increasing consciousness of leadership orientation and enhancing efficacy in self and others throughout an organization in the face of school reform.

Theoretical Framework

This study focused on two theories related to leadership and human need. Bolman and Deal's (2008) leadership orientation through multiframe and Bandura's (1977) self-efficacy theory connected to social cognitive theory drove this study. With

the demands of change on education, and the nature of the work involving people, understanding behaviors system wide is important to execute change that impacts school reform. As a result, many researchers have developed frameworks by which to manage and lead organizational change, but for the purpose of this study these two were selected.

Bolman and Deal's Leadership Orientation Model. Bolman and Deal's (2008) theoretical framework is based on four vital frames used as preconditioned lenses and filters through which to view efforts of change in a complex environment (Bolman & Deal, 1991; Phillips & Baron, 2013). The frames provide a view of the organization while also bring the organization into focus. Frames filter out some things while allowing others to pass through easily. Frames help to determine order and prioritize what to do to move a system (Bolman & Deal, 2008). Heading into change requires reframing, the ability to consider situations through multiple lenses to increase the opportunity for multiple solutions to surface, resulting in more options for the leader (Bolman & Deal, 2008; M. K. Lawson, 2014; Rice & Harris, 2003).

Bolman and Deal's (2008) framework for organizational change includes looking at the organization through four frames: the symbolic frame, the political frame, the structural frame, and the human resource frame. This four-frame model allows for a deep understanding of the organization through multi-framing to anticipate the opportunities and barriers to change (Bolman & Deal, 2008; Phillips & Baron, 2013). By looking flexibly at the many perspectives that may exist about change, a wide-angled view is exposed aiding in motivating action. This comprehensive view of the organization provides a coherent and powerful view to gain clarity, balance, options, and strategies to impact transformation (Bolman & Deal, 2008; M. K. Lawson, 2014). While one frame

provides critical insight into an organization, the synergy from the compilation of frames is what creates an extensive view of needed steps to move an organization forward, creating improved judgment and effectiveness (Bolman & Deal, 2008; M. K. Lawson, 2014). Leaders who utilize a single-frame result in lower leadership effectiveness and typically lead through the frame connected to the primary leadership style of the individual (Phillips & Baron, 2013; Sotiriadou & de Bosscher, 2013; Wheelan, 2010). Expanding to a multiframe view is more likely to increase success as a manager and leader (Bolman & Deal, 2008; Rice & Harris, 2003; Uzarski & Broome, 2019; Willert, 2012).

Bandura's Social Cognitive Theory and Self-Efficacy. The theoretical framework for self-efficacy comes from Bandura's (1997) work of social cognitive theory and the belief that personal efficacy is an energy that is highly motivational to the actions of an individual. Key to this theory is belief that human agency determines the way in which people hold control over their own lives (Bandura, 1997; Goddard, Hoy, & Hoy, 2004). The belief in oneself to organize, achieve, and execute in situations influences the outcome via self-enhancing or self-debilitating thinking (Bandura, 2001). Self-debilitating thinking leads to decreased motivation and avoidance of what is believed to be possible failure (Cobanoglu & Yurek, 2018; McCollum & Kajs, 2009). Self-enhancing thinking, on the other hand, has substantial impact on achievement, which then impacts self-efficacy, creating a mutually reciprocal relationship (Killian, 2015; McCormick et al., 2002). One's behavior is highly influenced by the self-belief held by the individual and is developed through six sources (Bandura, 1997; M. K. Lawson, 2014). High self-efficacy contributes to high self-managing, self-monitoring, and self-

modifying behaviors, which in turn contribute to flexibility, critical thinking, and creative work needed during times of change (Costa & Garmston, 2016; Macaluso, 2018; McCormick et al., 2002).

Bandura's (1997) six sources that feed efficacy are emotional arousal, physiological arousal, verbal persuasion, imaginable experiences, precarious experiences, and mastery experiences (M. K. Lawson, 2014). It is in these sources that one's self-efficacy expands, resulting in an individual who is unlikely to place blame on others, by looking within for control; more likely to recover from setbacks; more likely to persist in the face of difficulty and obstacles; and more likely to achieve goals (M. K. Lawson, 2014; McCormick et al., 2002). It is this self-efficacy that has an impact on how educators learn, lead, and educate with an effective size of .63, greater than the hinge point of John Hattie's effect size of .40, in which one year of gain is made for one year of investment (Hattie, 2011; Killen, 2015). Consistent findings show a correlation between self-efficacy and work-related performance as efficacy is an important mediator of stress resulting in motivation for job related productivity (Costa & Garmston, 2016; Dimmock & Hattie, 1996; Killian, 2015).

Definition of Key Terms

It is important to clearly define terms in any study. A list of key terms and definitions is provided to ensure a deep understanding of the context of this study. For the purpose of this study the following terms will be defined as follows:

Comprehensive Framing. The four Bolman and Deal (2008) leadership orientation frames are found to be of equivalent or nearly equivalent value as a result of

the Leadership Orientations Instrumentation-Other as the leader uses all four modes in a comprehensive manner to reframe the organization.

Change. The process of making, becoming, or causing something to be different (Rodd, 2015).

District Leader/Follower. Individuals holding leadership roles in a public school district that work under the direction of the superintendent, lead district departments, and are often part of the central office and contribute to leadership functions in areas over which they have the greatest influence (Elmore, 2000; Leithwood, Louis, Anderson, & Wahlstrom, 2004). These individuals may or may not lead district schools.

Dominant (Preferred) Frame. Of the four Bolman and Deal (2008) leadership orientation frames, the frame that is considered the strongest in result of the Leadership Orientations Instrumentation-Other survey.

Efficacy. The natural human quest for continuous learning, self-empowerment, mastery, and control by engaging in cause and effect thinking, spending energy on tasks, setting challenging goals, persevering in the face of barriers and the occasional failure, and forecasting future performances accurately (Costa & Garmston, 2016).

Four Frames of Leadership. Bolman and Deal (2008) used four frames to frame and reframed the organization during change. The four frames include symbolic, political, structural, and human resource. These frames synthesize leadership research and practice to help leaders arrive at accurate perspectives for what is happening in an organization and provide greater options for leadership. The frames provide useful tools for interpreting, assessing, and designing approaches to a situation or problem.

Large district. Public school district in the state of Missouri serving more than 10,000 students.

Medium district. Public school district in the state of Missouri serving more than 2,000 student and 10,000 students or less.

Multiframe. The application of more than one frame of Bolman and Deal's (2008) four frames to gain appreciation and understanding of an organization. The use of multiple lenses aids in diagnosing what an organization is facing.

Readiness for Change. Ready for learning, ready for change, ready for resistance, and ready for frustration are the categories used to note change readiness of a system or individual and should be considered when executing change. Considering change readiness increases capacity for change, an organization ready for change can experience an expedited change process (Reeves, 2009; Schein, 2010).

Reframing. The process of breaking the perspective held in one of Bolman and Deal's (2008) four frames.

Single-Frame. The application of a single-frame of Bolman and Deal's (2008) four frames, often the leader's preferred frame, when understanding an organization in the face of change.

Small district. Public school district in the state of Missouri serving more than 500 students but 2,000 or less.

Very small. Public school district in the state of Missouri serving 500 or less students.

Limitations, Delimitations, and Assumptions

Limitations. The limitations of this study were qualified by the location of the researcher and the designs selected by the researcher and are listed as follows:

- Districts in this study had varying demographics of leaders, educators, students, and size.
- Bias may have shown through self-reported data as it may be difficult for individuals to accurately assess multiframe leadership and self-efficacy.
- Bias may have shown through perceptual data as it may be difficult for leaders to report on the leadership orientation of others.
- The study used a cross-sectional survey design causing district leaders to be surveyed at a single point in time. Perceptions may have varied depending on the time of the school year or tenure of a superintendent.
- Perceptions may have varied depending on the nature of the most recent change event that was experienced.
- Those surveyed may have responded with what they considered to be the “right” answer instead of offering their own perceptions.
- While the instrumentations used had high reliability and validity, opportunity for skewed results existed as self-reporting on behavior stems from individual perceptions that may not have been others’ realities.
- The number of actual responses of district leaders across the state who responded to the online survey was a smaller percentage of those who could have responded.

- Those that completed the surveys may have had different interpretations of questions.
- Those that completed the survey were provided operational definitions and clarifications regarding interpretations of leadership and change.
- The number of superintendents who disseminated the online survey to a minimum of one district leader that reported to the superintendent was a smaller percentage of those who could have disseminated the survey.

Delimitations. The delimitations that may exist in this body of research study included the following:

- Data collection was limited to district leaders reporting directly to superintendents in public school districts in the state of Missouri.
- Private and charter school systems with superintendent-district leader reporting structures were excluded.

Assumptions. This study assumed the following:

- Participating district leaders answered all survey questions honestly in alignment to perception.
- Participating district leaders accurately assessed leadership orientation through the four possible frames from Bolman and Deal (2008).
- District leaders reporting directly to superintendents in Missouri public school districts listed on the Missouri Department of Elementary and Secondary Education Web site were current and accurate.
- District leaders defined change according to the definition provided by the researcher.

- District leaders responded to the survey by evaluating the superintendent orientation of leadership in light of the most recent change experienced by the superintendent.
- District leader perception was assumed to be accurate in regards to leader orientation in change.
- All public school districts in the state of Missouri had experienced some level of change that the district leader could consider while answering the surveys.

Design Controls

This quantitative study was correlational. Correlation research was used to identify the difference between two variables. Many times a correlational study involves the use of surveys.

Survey research can be used to gather information about a group's beliefs, attitudes, behaviors, and demographic compositions. Survey data are collected by asking members of a population a set of questions, which can be administered in a questionnaire that is mailed or e-mailed or in an interview over the phone or in person. (Gay, Mills, & Airaisan, 2009, p. 176)

Response rates of the survey used in this study were not guaranteed. The researcher in this study used electronic responses in attempt to increase response rates. After sending initial communication inviting participation with survey links, the researcher followed up with all participants 2 weeks after initial contact. Participants were provided the opportunity to submit their name separately from the surveys upon completion to be entered in a drawing for \$25 Amazon gift cards. In addition, participants were invited to e-mail the researcher directly if interested in the sharing of the findings of this study

found in chapter five. The research used two available instruments, already tested for validity and reliability, to measure the perception of the superintendent's leadership orientation and the perceived self-efficacy of the district leader reporting to the superintendent.

The first portion of the survey administered was the Bolman and Deal's (1990) Leadership Orientation Inventory-Other (LOI-Other). It was distributed electronically via e-mail to district leaders who report directly to the superintendent from the nine Regional Professional Development Centers (RPDC) across the state of Missouri. If participants needed superintendent permission, the researcher contacted the superintendent directly for approval. The second portion of the survey administered was the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995). The General Self-Efficacy Scale (GSE) was administered to the same group of district-level administrators in the state of Missouri that reported directly to the superintendent. Data were collected from all returned surveys. Both the validity and reliability are discussed further in Chapter Three.

Included in this study as a design control was the protection of all participants involved. Included in the e-mail with the surveys was an explanation of purpose of the study, its significance, and commitment to share results with participants upon request. Participants were invited to e-mail the researcher directly if interested in the sharing of the findings of this study found in Chapter Five. Confidentiality and anonymity were addressed with both guaranteed. The option to submit a name upon completion separate from the surveys to be entered into a drawing for \$25 Amazon gift cards did not negate confidentiality. Protecting anonymity and confidentiality was a factor to increased

response rates and truthfulness in the surveys and it was guaranteed as the two surveys were matched numerically without identifying information of the district leaders reporting to the superintendent that took the survey (Gay et al., 2009).

Summary

External and internal factors necessitate organizational change in schools (Main, 2017; Thompson, 2016). Therefore, district leadership is tasked with successful implementation of change to ensure improvement in teaching and learning for the betterment of students (Bolman & Deal, 2008; Main, 2017; Thompson, 2016; Weston et al., 2017). Shifting an organization is a challenge, requiring intentional efforts to support the endeavor (Heath & Heath, 2010). In this chapter, the researcher introduced the need for organizational change in the educational system and explored the rationale for the study to identify differences in self-efficacy between a single-framed and multiframed superintendent in times of change. Self-efficacy is connected to district success and there is a lack of evidence for correlation of leadership frames and school district success (Amos, 2018). With efficacy being a critical element to the success of leaders, any difference identified may help to build understanding how leading with consideration for Bolman and Deal's (2008) frames move leaders forward through self-efficacy beliefs (DeWitt, 2017; McCormick et al., 2002; Pujol, 2013; Wilson, 2014). The intent of this study was to examine the difference in self-efficacy of district leaders under the direction of a superintendent of single- or multiframe leadership. Both self-efficacy and the leadership orientation through Bolman and Deal's four frames are theoretical frameworks found in this causal comparative study. With a need for change pushing school systems to consider new practices continuously, it is important to understand how the

superintendent's leadership orientation can influence efficacy of the reporting leaders as self-efficacy is essential to organizational success (Abusham, 2010; Azah, 2014; Bandura, 1997; Ford, 2012; Murphy & Johnson, 2016; Nowack, 2017; Pujol, 2013).

Chapter One provided an overview of the study and exposed a rationale for researching the leadership orientations relative to self-efficacy. Included in this chapter were the research questions, the hypotheses, key definitions, limitations, and design controls. Chapter Two includes a thorough literature review of themes related to organizational change, leadership orientation through the four frames of Bolman and Deal, and Bandura's theory of efficacy. The exploration of organizational change includes the current demands on education and the considerations needed to move a system. Craftsmanship of a leader through the leadership orientation is detailed to support the value on high craftsmanship in multiframe leadership. Finally, the review of the impact of self-efficacy to move change is explored. Chapter Three provides the research questions guiding the study, the methodology, the role of the researcher, and instrumentation used in this study. Discussions of the reliability and validity paired with ethical considerations are also included. Chapter Four will include the presentation of data collected during the study, review of data organization, and the reporting and analysis of the findings of the study. Chapter Five will then include a summary of the findings, a conclusion, implications for practice, and the recommendations for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Educational systems of the 21st century are challenged by the fast-paced world dominated by the demand for change from both internal and external factors (Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston et al., 2017). A shrinking planet, expanded global economy, increased political pressures, conflicted interests and demands for programming, inadequate funding, limited resources, and increased accountabilities force organizations to think differently in efforts to foster improvements to high-quality teaching and learning (Bolman & Deal, 2008; Elmore, 2004; Main, 2017; Thompson, 2016; Uzarski & Broome, 2019; Weston et al., 2017). With the clock ticking, leadership at the helm of school districts is challenged to lead nimbly and with rapid responses to avoid slow organizational evolution (Bolman & Deal, 2008; Main, 2017; Owens & Valesky, 2007). While this is no small feat, it can be accomplished through four frames that provide a view of multiple perspectives to gain direction in moving change forward (Bolman & Deal, 2008; Uzarski & Broome, 2019).

To achieve this accomplishment system wide, superintendents must lead change, the process of making, becoming, or causing something to be different (Rodd, 2015). The process of change is far from scripted; rather it is messy and full of surprises (Heath & Heath, 2010; Kotter, 2007). While challenging at best, reducing errors in the process can be the difference between failure and success of a change initiative. This reality confirms the critical need for robust leadership to achieve successful and sustainable change (Hargreaves & Shirley, 2009; Kotter, 2007; Uzarski & Broome, 2019). Partnered with strong leadership are district followers and other individuals in the organization to

accomplish goals that move a system forward (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978; Fullan & Quinn, 2016; H. A. Lawson, Durand, Wilcox, Gregory, Schiller, & Zuckerman, 2017; Novak, 2012). No superintendent can execute change independently. The process of change requires activating the people of the organization to develop a unified purpose and message that permeate the system (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978; Fullan & Quinn, 2016). While all may not be fully aligned through the change process, all do need the shared vision to move the change, therefore enlisting people is crucial (Bass & Bass, 2008; DeWitt, 2017; Kotter, 2007; Senge, 2006; Uzarski & Broome, 2019). This purpose is rooted in the shared vision, and when a shared vision has high commitment, systems can move toward new practices to meet student need (Aitken & Aitken, 2008; DeWitt, 2015; McCormick et al., 2002; Uzarski & Broome, 2019).

Moving toward new practice requires a belief that one can make a difference, which is found in individual and collective efficacy beliefs (Bandura, 1997; Hattie, 2011; Uzarski & Broome, 2019). The idea of collective efficacy surfaces within an organization to make an impact with commitment (Donohoo, 2017; H. A. Lawson et al., 2017). Collective efficacy is the perception of a group that collective efforts will have a positive impact on the customer base, that the group holds a belief that they can make a difference regardless of the challenges presented (Bandura, 1997; Donohoo, 2017; Goddard et al., 2004; Madimetsa, Challens, & Mgadla, 2018). The research on collective efficacy supports the importance of activating individuals within the organization to move an initiative, to make an impact. The effect size of collective efficacy is found to be 1.57 when a .40 effect size is the hinge point for more than one year of learning for

one year's input (Donohoo, 2017; Hattie, 2011). While collective efficacy has been found to be impactful, researchers acknowledge that it is reliant upon self-efficacy, which is a key theoretical framework in this study (Bandura, 1997; Goddard, Hoy, & Hoy, 2000). While collective efficacy is about a group of individuals who believe a difference can be made and it is within the groups control, self-efficacy is the efficacy an individual holds in a given situation (Costa & Garmston, 2016; Donohoo, 2017). Self-efficacy aids in impacting performance of the customer as the individual holds the belief that a difference can be made and is within the individual's control (Bandura, 1997; Madimetsa et al., 2018). To ensure a difference for student learning in the system and contribution to collective efficacy, self-efficacy is essential to elevate within the individual that the necessary skills and abilities exist to produce results for all, especially during change (Goddard et al., 2000; H. A. Lawson et al., 2017; Madimetsa et al., 2018).

In exploration of leadership and efficacy through change, the literature review of this study consists of three major topics: organizational change, Bolman and Deal's (2008) multiframed leadership orientation, and the importance of the role of self-efficacy as a factor in organizational change. The first section of the review of literature focuses on organizational change: benefits, barriers, role of the superintendent and district leader, and readiness needed in change. The next section explores Bolman and Deal's multiframed leadership orientation during change, which is identified as a theoretical framework in this study. The final section of the literature review focuses on the theoretical framework of self-efficacy and its role within district leadership during organizational change for the greatest outcome.

The first section introduces the concept of organizational change in education in a variety of system sizes and the importance of understanding the benefits and barriers. The literature review examines the role of the change leader in influencing the people of the organization. Finally, change readiness is explored, highlighting the need for high readiness in relationship to the success of the change initiative. When exploring readiness for change, Schein's (2010) managed culture change model, which expands upon Lewin's (1947) three-stage model of change, is highlighted.

Next, the literature review focuses on a key theoretical framework focused on the concepts of single-framed and multiframed leadership from Bolman and Deal (2008) that includes four frames. Single-framed leadership is viewing the organization through one of the four frames provided by Bolman and Deal. The multiframed approach provides an orientation for the leader to reframe with the outcome of improvement to the organization (Bolman & Deal, 2008). The benefits and liabilities of single versus multiframed leadership in this framework are explained. The four frames introduced by Bolman and Deal include the structural, political, symbolic, and human resource frames.

Finally, the concept of self-efficacy, a second key theoretical framework in this study, is defined along with its relationship to success in organizational change. Efficacy comes from the work of Bandura (1977) and is related to the social cognitive theory. Self-efficacy within individuals of the organization is explored during change initiatives as efficacy is a topic related to success in education.

Organizational Change in Education

Knowing that current educational systems are challenged by the fast-paced world dominated by the demand for change from both internal and external factors,

superintendents must respond accordingly (Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston et al., 2017). These factors include shifts in learning standards, educator evaluations, integration of modern learning tools, accountability, and funding, therefore necessitating change (Main, 2017; Thompson, 2016). Thanks to expanded global reach, increased political pressures, conflicted interests, inadequate funding, and increased accountabilities, change initiatives are required to drive improvements toward high-quality teaching and learning (Bolman & Deal, 2008; Elmore, 2004; Main, 2017; Thompson, 2016; Uzarski & Broome, 2019; Weston et al., 2017). The need for change is inevitable for systems of all sizes as it is time to make good on the promise of education that is responsive to the needs of all (Fullan & Quinn, 2016).

District size difference and system achievement is a complex issue (Hayes, 2018; Mann, Maxwell, & Holland, 2013). Nationally, less than 2% of districts have more than 25,000 students, yet 33% of the nation's students fall into these districts (National Center for Education Statistics, 2002). More than 33% of the nation's districts have less than 600 students, representing less than 3% of the public school enrollment (National Center for Education Statistics, 2002). The state of Missouri hosts the same discrepancy in district size as districts vary from serving 65 to 28,270 students representing the range of very small to large public school districts (Missouri Department of Elementary and Secondary Education, 2019). Benefits and liabilities surface in a variety of ways within achievement, expenditure, cohesiveness, and community between four sizes: very small, small, medium, and large (Duncombe & Yinger, 2010; Cooley & Floyd, 2013; Hayes, 2018; Kennedy & Tolbert, 2012; Mann et al, 2013).

In times of organizational change, it is important to be mindful of the size of the school district (Hayes, 2018; Kennedy & Tolbert, 2012). Very small and small districts benefit from increased outcomes, communication, loyalties, and community connection (Duncombe & Yinger, 2010; Mann et al., 2013; Shrader, 2018). Medium and large school districts have proven to be more cost effective (Hayes, 2018; Mann et al., 2013; Shrader, 2018). As a school district size grows, the relationship between school district size and student achievement becomes important (Hayes, 2018; Kennedy & Tolbert, 2012). As organizations of all sizes face change, many benefits and liabilities surface within the system based upon district size requiring leadership to be mindful in the attempt to influence sustained change (Hargraeves & Shirley, 2009; Kean & Haycock-Stuart, 2011).

Benefits of Organizational Change in Education. Excitement and possibility are unleashed in a movement of change that helps to avoid stagnation, boredom, jaded perspectives, demotivation, and apathy (Bolman & Deal, 2008; Rodd, 2015). It is crystal clear direction that can elevate efficacy and motivate the organization through change with a common message and purpose often found in a shared vision (Bandura, 1997; Bolman & Deal, 2008; Heath & Heath, 2010; Senge, 2006). A well-designed change initiative that is organic and intentional can fit the specific need of the organization and provide a small number of actionable items that make a tremendous difference (Bolman & Deal, 2008; Borgerding, 2012; Fullan, 2011; Thompson, 2016; Senge, 2006). In fact, it is these small changes that provide success through efficacy-building mastery experiences that can snowball into the big changes that are desired by the system while

building a vibrant climate and culture (Dinger, 2018; Heath & Heath, 2010; M. K. Lawson, 2014; Senge, 2006).

With uncertain and turbulent times, change is needed to inspire people to do things differently to result in desired organizational change (Bass & Bass, 2008; Dinger, 2018; Kouzes & Posner, 2017). The goal of educational change is persevering toward a better future with the benefit of school reform (Bird, Dunaway, Hancock, & Wang, 2013; Dinger, 2018; Elmore, 2004; Kouzes & Posner, 2017). Teaching and learning stands to benefit from intentional organization change (Elmore, 2004; Weston et al., 2017). When executed in an adaptive manner, shifts of identity across the system occur, helping to sustain change (Costa & Garmston, 2016; Rodd, 2015; Waters, Marzano, & McNulty, 2019). When the heart and head of the organization is tapped, movement toward a new identity is noticeable and effective (Cohan, 2008; Dilts, 2014; Heath & Heath, 2010; Kotter, 2014). Benefits include access to individual and collective achievement, spurred collaboration, boosted productivity, increased ethics and compliance, and a positive climate and culture (Cohan, 2008; Dinger, 2018). Each of which contributes to vicarious experiences that influence self-efficacy (M. K. Lawson, 2014). In the end, benefits of change include new thinking and knowledge that meet the need of the rallying cry for the betterment of the organization (Dinger, 2018; Drago-Severson, 2009; Elmore, 2004; Heath & Heath, 2010; Waters et al., 2019).

Barriers of Organizational Change in Education. While change is a natural part of being, there are barriers that can impede achievement of a desired identity for the organization (Dilts, 2014; Dinger, 2018; Senge, 2006). One great barrier comes in the form of change feeling like a threat to those in the organization, often due to

misalignment within the organization around the purpose for change (Dinger, 2018; Kotter, 2007; Main, 2017; Rodd, 2015). The absence of clarity or confusion around purpose disrupts success by creating unnecessary barriers, creating strain on the human resource and structural frame of the organization (Bolman & Deal, 2008; Connell, 2010; Heath & Heath, 2010; Reeves, 2009). While some within an organization may be exhilarated by change and fully align to a new identity, others find frustration and disillusionment in change efforts (Bolman & Deal, 2008; Dinger, 2018; Kotter, 2007). This tension can be detrimental to the progress of the system, causing unintentional setbacks related to the symbolic, political, structural, and human resource frame (Bolman & Deal, 2008; Kotter, 2014; Kotter & Whitehead, 2010; Main, 2017; Reeves, 2009). Setbacks are not a result of the bureaucracy or the thirst for power but a result of absence of clarity for a change that leads to drowning under the weight of an initiative with low readiness or absence of initiative understanding (Bolman & Deal, 2008; Heath & Heath, 2010; Main, 2017; Reeves, 2009).

Another barrier of change is the absence of messaging that clearly defines what can be let go of and what won't change (Heath & Heath, 2010; Kotter, 2007; Main, 2017; Reeves, 2009; Schein, 2010). This clarity provides what can be let go of and what won't change provides opportunity to focus on necessary practices and let go of others to make room for new practices and new symbolism while also eliminating ambiguity (Bolman & Deal, 2008; Reeves, 2009). Experiencing loss or abandoning practice creates heightened emotion, and if not well supported, this emotion can be a catalyst of resistance (Kotter, 2014; Reeves, 2009; Yukl, 2010). Resistance provides behavioral and attitudinal connections to mental models, or schema, which might need to be released, creating

waves within the organization (Ford, 2012; Kegan & Lahey, 2009; Senge, 2006). These oppositions can destruct change initiatives and spread like wildfire through negative ties within the political frame while impacting the self-efficacy of individuals (Bandura, 1997; Bolman & Deal, 2008; Daly, Moolenaar, Liou, Tuytens, & des Fresno, 2015; Reeves, 2009).

Implementation dips and delays also create barriers to change (DeWitt, 2017; Fullan, 2011; Senge, 2006). In every change, the learning curve can be bumpy and cause wavering commitment (DeWitt, 2017; Fullan, 2011). This learning curve contributes to a dip that should not derail a change attempt but has potential to shake ground.

Anticipating and understanding the contributing factors in the dip or delay reduces setbacks and encourages activation of necessary support and empathy for those experiencing change (DeWitt, 2017; Senge, 2006). Using Bolman and Deal's (2008) four frames to view potential roadblocks strengthens leadership decisions along the way. Anticipating challenges along the way allows for quick recovery by leadership to stay the course (DeWitt, 2017; Fullan, 2011).

A final barrier to change comes through paralysis that results from ambiguity or initiative fatigue (Reeves, 2009; Heath & Heath, 2010; Reeves, 2009). Uncertainty surfaces in the absence of clarity, which then activates survival anxiety and can impact self-efficacy (Azah, 2014; Connell, 2010; Garmston, 2012; Heath & Heath, 2010; Reeves, 2009). This anxiety hinders the ability to grow, learn, and collaborate for improvement (Connell, 2010). With this hindrance come cynicism, toxicity, counter productivity, and exhaustion (Heath & Heath, 2010; Reeves, 2009). Each contributes to a

barrier for progression and should be monitored (Bolman & Deal, 2008; Heath & Heath, 2010; Kotter, 2014).

All these oppositions may be avoidable as they result from ambiguity, not disagreement over the motive for improvement to practice. By anticipating areas that provoke resistance to change, district leaders initiating change stand to move systemic change through clarity, all while influencing the hearts and minds of the organization (Bass & Riggio, 2006; Bolman & Deal, 2008; Cohan, 2008; Heath & Heath, 2010; Kotter, 2007, 2014). This can be done by viewing the organization through four frames: symbolic, political, structural, and human resource (Bolman & Deal, 2008). The combination of barriers can be the difference between a successful change initiative and one that fails as the restraining or balancing forces outweigh driving or reinforcing forces (Owens & Valesky, 2007; Senge, 2006). Driving and reinforcing forces over restraining and balancing forces move the system forward toward the vision. Acknowledgement of the challenges along the journey can reduce the stalling forces and elevate momentum (Owens & Valesky, 2007; Reeves, 2009; Thompson, 2016). Great leaders of change recognize the realities in the gaps between the existing and desired state of the system, and develop a great understanding of potential roadblocks through reframing (Bolman & Deal, 2008). This understanding can shrink the problems associated with stagnation and boost movement toward reform while providing more options for how to navigate the change (Bass & Riggio, 2006; Bolman & Deal, 2008; Borgerding, 2012; Fullan, 2011; Kotter & Rathgeber, 2016).

Readiness for Change. Barriers to change can be understood through the lens of readiness (Main, 2017; Schein, 2010). Frequently, the barriers associated with failed

change are connected to the readiness of the individual and the organization (Kotter, 2014; Main, 2017). Readiness for change was referenced by Reeves (2009) and includes a matrix of organizational change capacity relative to leadership change capacity. There are four readiness levels noted: ready for learning, ready for change, ready for resistance, and ready for frustration. These categories can be applied to the system or individuals within the human resource frame and should be considered in order to expedite the change process (Bolman & Deal, 2008; Reeves, 2009; Schein, 2010).

Diagnosing the level of change readiness allows a leader to layer adequate attention at each level. Honoring different entry points of individuals is a pathway to working within uncertain environments, unpredictable demands, and inherited staffs. The complexities of individuals require flexibility and persistence through the face of change on part of the leader (Costa & Garmston, 2016; Fullan, 2011). To meet unique readiness levels, congruency in behavior and messaging helps elevate communication to meet varied levels of readiness and capture the heart and mind of the organization (Bass & Riggio, 2006; Burns, 1978; Fullan, 2011; Kotter, 2007, 2014). Maintaining a high level of planning, creating a sense of urgency, focusing on support, and creating clear metrics of success provide opportunity for all at varying levels of readiness to understand the need for change and work toward a new vision within a system (Reeves, 2009).

While the superintendent may lead change, it is the partnership with the followers that helps to meet the readiness levels across the system calling for transformational leadership (Bass & Riggio, 2006; Bass & Bass, 2008; Burns, 1978). The collaborative efforts allow multiple perspectives to surface to help meet varied readiness levels so the leader is able to elevate the followers about what is important and valued to sustain

change (Bass & Bass, 2008). This open communication and collaboration among stakeholders contribute to a coalition working toward the same goal creating experiences that impact self-efficacy (Bass & Riggio, 2006; Burns, 1978; DeWitt, 2017; Fullan, 2011; M.K. Lawson, 2014). With a sense of purpose, clear direction, strong values toward the goal, and a passion for the human spirit, district leaders are able to develop social capital in relationships across the system and readiness levels that influence positive transformations (Bass & Riggio, 2006; Bass & Bass, 2008; Bolman & Deal, 2008; Burns, 1978; Daly et al., 2015). Within the human resource and structural frame of Bolman and Deal (2008), distributing leadership to meet the complexities of all individuals in the system broadens influence, strengthening clarity, cohesiveness, and sustainable implementation (Borgerding, 2011; Donohoo & Katz, 2017; Elmore, 2004; Fullan & Quinn, 2016; Hargreaves & Shirley, 2009). This distributed leadership succeeds on a culture of expectation for all leaders to support change through five principles: committing to improve instructional practice and performance; learning that is continuous that includes the sharing of ideas; modeling of behaviors and knowledge expected by those across the system; accepting of diverse perspectives and expertise of all; and an understanding of the circumstances facing all to ensure adequate resourcing of the individuals within the system (Elmore, 2004). With this common ground, school change can be focused on high-quality instruction in every classroom as readiness for change is understood and scaffolded accordingly (Elmore, 2004; Fullan, 2011; Kotter, 2007, 2014).

Distributing leadership, regardless of system size, does require organizations to be primed for the shifts that may occur within the varied readiness levels as the understanding around needed change strengthens (Borgerding, 2012; Heath & Heath,

2010; Main, 2017). Identifying the discrepancy between the existing state of the organization and the desired state can be difficult if embellishments to the data or inflated perceptions exist about the overall success of the organization (Schein, 2010; Thompson, 2016; Yukl, 2010). It is these incongruences that can shift readiness, creating challenges to the current state of self-efficacy (Ford, 2012; Owens & Valesky, 2007). As disconfirmation occurs, the organization finds uncertainty and disillusionment about the prioritized practices connected to the new vision (Schein, 2010; Thompson, 2016). This disconfirmation can delay change due to frustration, resistance, or opposition to improve (Reeves, 2009).

To best meet the varied readiness levels, a leader has options for moving a system through change to ensure high impact on student outcomes. Two models for consideration include Schein's (2010) model of change and Kotter's (2007) perspective on organizational change. Understanding the stages of change in these models provides clarity to the leader. While change is a natural part of being, it is expected that individuals and organizations seek a state of equilibrium, which often encourages maintaining the status quo (Katz & Kahn, 1978; Main, 2017). Maintaining the status quo is a tension to desired change as it does not allow something to be different, changed, or new (Drago-Severson, 2009; Ford, 2012; Owens & Valesky, 2007). This presents a challenge in moving systems to a new level as the human tendency is to strive for clarity, which contrasts to the ambiguity that comes with change (Bolman & Deal, 2008; Gladwell, 2002). Pair this human tendency with the findings that top-down change can create compliance rather than commitment, competition in place of collaboration, and a false sense of urgency, all of which magnify the challenges (Bolman & Deal, 2008; Costa &

Garmston, 2016; Kotter, 2014). Therefore, high craftsmanship in honoring stages of readiness in change helps to influence a system away from resistance and low levels of readiness toward movement for improved practices of high-quality teaching and learning rooted in high levels of self-efficacy (Borgerding, 2012; Elmore, 2004; Ford, 2012; Gladwell, 2002).

Schein's Model of Change. The first model of change noted comes from Edward Schein. According to Schein (2010), change is a model that elaborates on Lewin's (1947) work including unfreezing, moving, and refreezing. This process is important as humans would prefer to keep doing what has always been done in an effort to stay in a comfort zone; the fear of the unknown trumps an initiative causing stagnation. Therefore, moving through the three phases allows opportunity for readiness for change to shift, resulting in new patterns (Owens & Valesky, 2007; Schein, 2010). In unfreezing, individuals and the organization become motivated to change. The status quo is challenged by highlighting gaps between the existing state of a system and the desired state, noting disconfirmation. This comparison may cast doubt about previous effective practices, creating a sense of survival anxiety or low self-efficacy (Bandura, 1997). Learning anxiety surfaces, too, as people question their habits and are at a loss of self and culture, making way for new behaviors and attitudes. The loss of authority and control, personal identity, and group belonging that surfaces during change may derail forward progress toward goals as individual efficacy beliefs decrease (Bandura, 1997). Clear support can combat this sense of anxiety and stifle wavering commitment in the unfreezing stage (Schein, 2010).

During the next stage, considering Schein's (2010) steps for navigating the movement of an organization helps to adequately support the formation of new behaviors.

New culture basically springs from three sources: (1) the beliefs, values, and assumptions of founders of organizations; (2) the learning experiences of group members as their organization evolves; and (3) new beliefs, values, and assumptions brought in by new members and new leaders. (Schein, 2010, p. 219)

The beliefs, values, assumptions, and experiences of those creating a new culture happen during the change phase in which visioning is casted with adequate support that allows for collaboration, practice, coaching, modeling, and support (Batras, Duff, & Smith, 2016; Schein, 2010). Within this journey, clear communication, a clear vision, and a strong set of values established by leadership through the structural frame increase support for the initiative (Bolman & Deal, 2008; Fullan, 2011; Owens & Valesky, 2007).

Once the system is moving toward new behaviors, the third phase of Schein's (2010) process is activated. This phase is the process of refreezing. Refreezing is the point at which those involved reach comfort with new behaviors that shift toward habit. In this phase, recognition and celebration of small wins confirm the desired behaviors and lessen opportunity for relapse while influencing self-efficacy (Ford, 2012; Schein, 2010). In addition, organizational norms, practices, and policies are established that are aligned to the continuous change (Lewin, 1947). It is this refreezing that allows the change to be part of the culture of the organization as a result of shared experiences and successes resulting in increased self- and organizational efficacy (Bandura, 1997; Batras et al., 2016).

Kotter and Organizational Change. In addition to Schein's (2010) model for change is one provided by Kotter (2007) that indicates change takes time; it is not an overnight process. During change, an organization can achieve a smoother journey by following eight cyclical steps to arrive at the end goal of the initiative. (a) Create urgency: drive people out of the comfort zone of status quo by highlighting the need for change. Roughly 75% of management needs to see that the status quo is unacceptable before moving change forward. Leadership must isolate and communicate the need to drive this urgency through messaging (Bolman & Deal, 2008; Elmore, 2004; Kotter, 2007). (b) Create a guiding coalition: creating a coalition of teamwork united around the sense of urgency is needed to overcome opposition within the organization to change that surfaces along the way. This investment in human capital expedites the journey (Bolman & Deal, 2008). (c) Create a vision: who is it that the organization wants to become? The vision is the aspiration of the system and should be framed in a quick elevator speech with common language and understanding (Azah, 2014; Kotter, 2007; Senge, 2006). (d) Communicate: credible, candid two-way communication helps to capture the heart and minds of those in the organization, while the absence of communication creates incongruent perceptions that undermine the long-term goal (Connell, 2010; Kotter, 2007; Novak, 2012). (e) Remove obstacles: clear the path by removing the big obstacles, resulting in a smoother journey toward success (Heath & Heath, 2010, Kotter, 2007). (f) Celebrate short-term wins: know the clear measures of success and find evidence of success along the way. Celebrate the success with recognition and reward (Elmore, 2004; Kotter, 2007). (g) Don't declare an early victory: until change has permeated deeply in a culture, stay the course. Declaring victory too early in a time of change can derail the

progress of change (Kotter, 2007; Senge, 2006). (h) Anchor change: the organization has reached the position of being redefined to the point of “this is the way we do things around here” and culture has been redefined (Kotter, 2007). The progression through these eight steps moves an initiative from a level of abstraction to reality (Kotter, 2007).

A deep understanding of the varied levels in models of change increases consciousness and flexibility of various perspectives, elevating opportunity to move change with least resistance (Costa & Garmston, 2016; Kotter, 2007; Schein, 2010). With multiple perspectives on models of change, the common theme surfaces that successful change is done in partnership with the members of the organization working toward a shared vision (Kotter, 2007; Kotter & Whitehead, 2010; Senge, 2006; Uzarski & Broome, 2019). Lifting the leaders within the system to believe they can make a difference during reform is transformational (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978; Ford, 2012; Horton, 2013; Macaluso, 2018; Pujol, 2013). This lift enhances self-efficacy beliefs (Bandura, 1997; Daly et al., 2015).

Role of Leader in Change. A common theme in the exploration of Schein (2010) and Kotter’s (2007) work is the need for leadership. With benefits, barriers, and models of change in mind, the leader is crucial to mobilizing organizational change (Hargreaves & Shirley, 2009; Kean & Haycock-Stuart, 2011; Kouzes & Posner, 2017). Hargreaves and Shirley (2009) highlighted the importance of a change leader in *The Fourth Way*: “change without leadership has no chance of being sustainable” (p. 95). Sustainability is the ultimate goal of a change initiative to achieve long-lasting results in teaching and learning (Costa & Garmston, 2016; Kotter, 2007; Weston et al., 2017). The organizational leader is instrumental in creating a sustainable culture that encourages

innovation over resistance so powerful ideas can become practical and implementable while keeping focus on the driver for change (Donohoo & Katz, 2017; Novak, 2012; Schein, 2010; Uzarski & Broome, 2019). Bolman and Deal (2008) present four frames in which a leader can frame organizational change that focuses efforts toward change that are intentional (Dinger, 2018; Phillips & Baron, 2013).

Change surfaces in two ways, technical and adaptive, which are similar to first- and second-order change (Costa & Garmston, 2016; Owens & Valesky, 2007; Waters et al., 2019). Technical change, also known as first-order change, includes predictable outcomes that often stem from the top of an organization activating familiarity while requiring the change of technical skills (Costa & Garmston, 2016; Owens & Valesky, 2007; Waters et al., 2019). Technical change requires application of current skills in different way, impacting an organization at an environmental level (Costa & Garmston, 2016; Dilts, 2014; Waters et al., 2019). Adaptive change, considered second-order change, requires the acquisition of new tools and new thinking to meet needs of the customers of the organization, often at the level of identity, values, or beliefs that can be a great challenge on self-efficacy (Costa & Garmston, 2016; Dilts, 2014; Drago-Severson, 2009; Owens & Valesky, 2007; Waters et al., 2019). As change is rapid and complex, the absence of vicarious and mastery experiences may test self-efficacy beliefs limiting the belief a difference can be made (Abusham, 2010; Horton, 2013; Macaluso, 2018; Pujol, 2013). Adaptive change influences the heart and mind of the organization by reshaping the purpose and identity, birthing new ideas to achieve desired goals, which relies on individual efficacy beliefs (Dilts, 2014; Waters et al., 2019; Weston et al., 2017). In both technical and adaptive change, leadership is required to establish the goal

of change and choose congruent behaviors to move to the new desired state (Borgerding, 2012; Yukl, 2010).

In addition to clarity in type of change is the commitment to understanding the readiness level of the individuals and the organization and how change will be felt to individuals. Leaders who understand the magnitude of change and how it impacts the varying members of the organization are able to tailor leadership practices accordingly (Borgerding, 2012; Elmore, 2004; Yukl, 2010). Developing the why behind change and messaging it to the varied levels of readiness in the organization often lessens resistance to change (Main, 2017; Schein, 2010). While change is predictable, it may not be easy, but with a commitment to emotional, cognitive, and behavior considerations it can be eased. Engaging the emotion, shaping the path, and directing the behavior provide clarity for all levels of the organization (Ford, 2012; Heath & Heath, 2010; Rodd, 2015; Waters et al., 2019; Weston et al., 2017). Consideration of all three areas enhances readiness for change (Fullan, 2011; Nowack, 2017; Schein, 2010). As readiness increases, behaviors adjust accordingly to respond to human and organizational needs through the frame of human resources (Bolman & Deal, 2008; Hargreaves & Shirley, 2009; Kotter, 2014). Simultaneously, a sense of threat may develop that impacts resistance and stalls progression toward goal attainment (Ford, 2012; Rodd, 2015). This resistance can spread rapidly in the absence of consideration for varied readiness levels and impact the human resource frame of an organization (Bolman & Deal, 2008; Ford, 2012; Main, 2017, Yukl, 2010).

There are four levels of resistance that may surface that should be carefully assessed in advance to ease the resistance across the system (Kotter & Schlesinger, 2008;

Main, 2017). These levels include the desire to hang on to something of importance or value, a misunderstanding of the change and its implications, a belief or value that change doesn't make sense for the organization, and lower tolerance for change (Kotter & Schlesinger, 2008). Recognizing the why behind the resistance to change provides multiple perspectives that enhance the craftsmanship of framing by the leader (Bolman & Deal, 2008; Costa & Garmston, 2016; Elmore, 2004). By understanding readiness and resistance, leaders are able to impact change at all levels by dealing with the anticipated reactions and strategically planning to lessen resistance and increase commitment to the new vision (Reeves, 2009; Kegan & Lahey, 2009; Kotter & Schlesinger, 2008; Main, 2017).

Impacting change can also occur at many organizational levels. These levels should be considered by leaders to expand the scope of influence during organizational change (Rodd, 2015). The four organizational levels impacted by change are as follows: the micro level known as the individual, the meso level known as the departmental, the macro level known as the system, and the mega level known to branch beyond the system to stakeholders, the community, and other systems (Rodd, 2015; Weston et al., 2017). While each level may vary, a commonality is each includes personnel and customers, all elements of Bolman and Deal's (2008) human resource frame. Involving individuals at the micro, meso, macro, and mega levels to message an expectation of behavioral modifications for all is key. With this deep influence, adaptive changes can gain lift in identity and behavioral changes at many levels. This results in influencing people across school communities (Dilts, 2014; Heath & Heath, 2010; Nowack, 2017; Reeves, 2009).

Activation of individuals results in successful transformational change (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978; Novak, 2012; Reeves, 2009).

Knowing the great influence at the leader level, there is a need to prioritize culture building through unlocking individual potential, enhancing collaboration, aspiring to achieve results, boosting ethical productivity, and pushing beyond compliance (Cohen, 2007; Nowack, 2017). While time consuming and difficult to prioritize the human resources of an organization, this investment contributes to a shift in identity resulting in different skills and behaviors than experienced in the past (Costa & Garmston, 2016; Dilts, 2014; Owens & Valesky, 2007). Leaders that invite active participation through these means establish a trusting culture that is invested in the desired state of the organization (Reeves, 2009; Thompson, 2016).

Even in development of high-trusting environments, leaders will be faced with the challenge of resistance as stated in Schein's (2010) concept of letting go. Being asked to give up behaviors that may have felt successful is difficult for individuals and organizations. To a small percentage of the population, change is refused (Reeves, 2009; Schein, 2010). While the majority of the population is willing to change, it is not likely to happen simultaneously. This presents leadership challenges with varied follower readiness within the human resource frame (Bolman & Deal, 2008; Kotter, 2014; Reeves, 2009). Many will lead change, come alongside, and demonstrate awareness, openness, and excitement about the new possibilities facing the organization (Kotter, 2014; Reeves, 2009). A commitment to leading and managing these individuals with high readiness helps energize and organize efforts, but it is also key to consider strategies for engaging the entire organization as effective leaders of change lift the majority of followers (Bass

& Bass, 2008; Burns, 1978). Providing adequate support results in the authentic development of efficacious individuals that form a coalition willing to influence others in all levels of the organization. This efficacy can be leveraged to influence progress (Bandura, 1997; Cohen, 2007; Donohoo, 2017; Donohoo & Katz, 2017; Drago-Severson, 2009; Goddard, Hoy, & Hoy, 2000; Kotter, 2014). These behaviors contribute to the effectiveness of the leader in mobilizing change through all levels of the system while also utilizing the leadership frames for change (Bolman & Deal, 2008; Kouzes & Posner, 2017; Rodd, 2015; Weston et al., 2017).

Also needed to achieve framing a system through change, leaders must prioritize communication as this has the opportunity to build coherence around system goals in all four of Bolman and Deal's (2008) frames while sending messages of confidence across the system (Fullan & Quinn, 2016; Hargreaves & Shirley, 2009; Kouzes & Posner, 2017; H. A. Lawson et al., 2017; Phillips & Baron, 2013). Through this communication, assumptions and beliefs can be tested while the rationale for the new way can be explained (Bolman & Deal, 2008). Being able to gauge varied responses to change, hear ideas and concerns, and develop confidence in the organization builds mutual understanding while elevating system-wide belief that change is necessary (Bolman & Deal, 2008; DeWitt, 2017; Fullan, 2011; Kotter & Rathgeber, 2016). Focusing on communication helps to move organizational change across the line by building collective understanding for change while also expanding perspective on the readiness and resistance that may exist within and beyond the system (Amos, 2018; Kotter & Schlesinger, 2008; Kouzes & Posner, 1995; H. A. Lawson et al., 2017; Waters et al., 2019).

Bolman and Deal's Leadership Orientation

The craftsmanship of a leader in executing change is important. By expanding narrow, mechanical viewpoints of an individual to a systems view, a leader can create a navigation system for moving a system toward desired outcomes (Amos, 2018; Dinger, 2018; Phillips & Baron, 2013; Senge, 2006; Uzarski & Broome, 2019). The use of Bolman and Deal's (2008) leadership orientation of a multiframed approach in organizational change provides a view of the complex system through many lenses (Amos, 2018; Dinger, 2018; Uzarski & Broome, 2019). The many lenses provide direction, values, a sense of purpose, and an awareness of the human spirit. As a leader reframes the state of the organization through the symbolic frame, the political frame, the structural frame, and the human resource frame, clarity is achieved (Bolman & Deal, 2008; Dinger, 2018; Phillips & Baron, 2013). In reframing, a deep understanding of the organization is developed. Identification of successes and hurdles provide navigation to circumvent derailment of change efforts. The process of reframing allows situations to be considered through multiple lenses, resulting in increased flexibility and opportunity for identification of multiple solutions that influence self-efficacy (Amos, 2018; Bolman & Deal, 2008; Dinger, 2018; Ford, 2012; Rice & Harris, 2003; Phillips & Baron, 2013; Uzarski & Broome, 2019).

Bolman and Deal's (2008) framework for organizational change includes looking at the organization through four frames. This four-frame model allows for a conscious and unconscious view of the organization to anticipate the opportunities and barriers to change (Bolman & Deal, 2008; Dinger, 2018; Uzarski & Broome, 2019). Knowing change may be adaptive over technical, reframing provides the comprehensive

perspective to identify areas of leverage and balance. The outcome is a view of the organization that provides a coherent and powerful view providing clarity, balance, options, and strategies to impact transformation (Bolman & Deal, 2008; Dinger, 2018; Phillips & Baron, 2013). While one frame provides critical insight into an organization, the synergy from the compilation of frames is what creates an expansive view of needed steps to move an organization creating clarity in judgment and effectiveness while building a vibrant climate and culture (Amos, 2018; Bolman & Deal, 2008; Dinger, 2018; M. K. Lawson, 2014; Phillips & Baron, 2013; Uzarski & Broome, 2019). When utilizing a single-frame for viewing an organization, there is evidence of lower leadership effectiveness; often the single-frame is the primary leadership style of a leader inhibiting flexibility of perspective and thought; confirming some disconnectedness from the reality (Dinger, 2018; Phillips & Baron, 2013; Sotiriadou & de Bosscher, 2013; Wheelan, 2010). Expanding to a multiframe view is more likely to increase success as a manager and leader (Bolman & Deal, 2008; Rice & Harris, 2003; Uzarski & Broome, 2019).

The Symbolic Frame. Bolman and Deal's (2008) first frame of importance is the symbolic frame. This frame refers to the meaning and faith that are made by individuals and an organization to provide clarity for a complex world (Dinger, 2018; Phillips & Baron, 2013; Uzarski & Broome, 2019). Included in the symbolic frame are an interpretation and illumination of the basic issues through symbolism. These symbols convey the message needed to move the organizational culture forward. Representing the shared vision, the symbolic frame is a critical element in the planning of an organizational change. Within this frame, rituals and ceremonies socialize, stabilize, and convey the direction of the organization at the start and throughout change (Dinger, 2018;

Phillips & Baron, 2013; Uzarski & Broome, 2019). Outcomes of the symbolic frame include cohesion, clarity, and direction as a well-articulated vision has been established and symbolized moving a system to peak performance found in high levels of self-efficacy (Bandura, 1997; Bolman & Deal, 2008). Barriers include clinging to the past and losing meaning and purpose (Dinger, 2018). Investment in developing a symbolic culture in an organization on the front end elevates meaning, creating a symbolic representation for change that pays dividends (Bolman & Deal, 2008; Dinger, 2018; Phillips & Baron, 2013).

The Political Frame. The next of Bolman and Deal's (2008) frames is the political frame. The political frame refers to alliances, coalitions, and networks that form to move an organization forward through a change initiative. Power is a natural part of organizations and struggles for power stand to derail organizational progression if unaligned to the vision (Dinger, 2018; Phillips & Baron, 2013; Uzarski & Broome, 2019). Leveraging power where it is needed is an essential part of influencing an initiative by maintaining a higher ground and planning accordingly (Bolman & Deal, 2008; Dinger, 2018; Senge, 2006). Participation, openness, and collaboration can substitute for the sources of power present in the organization by allowing conflict to be addressed openly through collaborative structures, outlines, and agendas with the goal of seeking resolution and building alliances (Bolman & Deal, 2008; Phillips & Baron, 2013; Uzarski & Broome, 2019). Barriers include ongoing conflict between the winners and losers in addition to a sense of lack of power (Dinger, 2018). Investing in this frame during change helps to navigate the political landscape to successfully impact change. Creating ecosystems that influence and provide controls of power in the necessary places

helps to create coherence politically in the time of change. Building coalitions and maintaining higher ground aid the political frame (Bolman & Deal, 2008; Dinger, 2018; Hargreaves & Shirley, 2009).

The Structural Frame. The structural framework in Bolman and Deal's (2008) leadership orientation supports the previous two frames. The structural frame refers to the operational and architectural sides of an organization that include clear goals, roles, and relationships elevated by adequate coordination within the organization to bring about clarity (Bolman & Deal, 2008; Dinger, 2018; Phillips & Baron, 2013; Uzarski & Broome, 2019). While many structural configurations are feasible, knowing intentions and choosing congruence in structural design feeds organizational change (Bolman & Deal, 2008; Costa et al., 2014). Eliminating silos of work through structural integration while also ensuring clarity of responsibilities and roles is an element of the structural frame and should be left fluid. Strategic teams are important to the structural frame and need parameters, such as schedules and agendas, to move the work forward (Bolman & Deal, 2008; Phillips & Baron, 2013). Structural framing allows for realignment, communication, and negotiating with clear parameters. Barriers include ambiguity in roles, loss of reporting structures, discomfort, and absence of clarity and stability (Dinger, 2018). Continuous evaluation of the structure and fluid motion of teaming is expected as benefits are gained from vertical and lateral teams. Investing in the structural frame during change provides clarity to roles and responsibilities, allowing energy to be spent on the vision of the change. Defining roles and prioritizing communication aid the structural frame and help to stabilize efficacy beliefs (Bolman & Deal, 2008; Dinger, 2018; Uzarski & Broome, 2019).

The Human Resource Frame. The final of the four frames from Bolman and Deal (2008) is the human resource frame. This frame refers to the relationship between the organization and the people and how they work for one another (Bolman & Deal, 2008; Dinger, 2018; Phillips & Baron, 2013; Uzarski & Broom, 2019). Organizations exist to serve human needs, indicating a need for a deep understanding of the need of the people. Needs will vary, so developing an understanding of the people of the organization provides an understanding of how to frame change. Barriers include anxiety, uncertainty, and a tendency to feel inadequate (Dinger, 2018). With this understanding, as change is activated, there will be a need for many layers of support: professional learning to build capacity and desire for implementation of a new skills, psychological support for moving through the transition of loss to newness, and opportunity for involvement and participation at all levels of the organization to elevate buy-in to the desired state and create efficacy (Bolman & Deal, 2008; Borgerding, 2012; Dinger, 2018; Pujol, 2013; Uzarski & Broome, 2019). Investment in the human resource frame during change provides energy to the people of the organization by investing in the needs of all to guide behavior to impact systemic change. Building capacity, assuring psychological support, and providing adequate opportunity for learning aid the human resource frame (Dinger, 2018; Phillips & Baron, 2013).

Single-Frame Leadership. It is the process of viewing an organization through a single-frame of Bolman and Deal's (2008) four frames that brings forth the concept of a single-frame leader. A single-frame leader is one who applies a single-frame, typically the preferred frame, in an attempt to gain perspective and appreciation for the organization (Bolman & Deal, 2008; Uzarski & Broome, 2019). By only selecting one of

the four frames to diagnose what an organization is facing, issues and perspectives may be neglected that contribute to blind spots (Costa & Garmston, 2016; Dinger, 2018; Phillips & Baron, 2013; Rice & Harris, 2003). Judgments become narrow or blurry, creating opportunity for inefficiency or ineffective practices that miss the goal of change (Dinger, 2018; Phillips & Baron, 2013; Rice & Harris, 2003; Uzarski & Broome, 2019). An absence of multi-framing leads to clinging of preferred frames while ignoring others, creating blinders and decreasing effectiveness (Bolman & Deal, 1991; Phillips & Baron, 2013; Uzarski & Broome, 2019). Leaders typically notice and default to the preferred frame, or the structural frame, so viewing an experience through a single-frame is easy to do as it often occurs in preconditioned lenses and filters within a single-frame, neglecting the others (Bolman & Deal, 1991; Dinger, 2018; Phillips & Baron, 2013).

Rather than experiencing a high level of craftsmanship and understanding of the individual parts and whole of the system by being a multiframed leader in change, a single-framed leader may notice the following: less persistence to overcome challenges, increased uncertainty in desired outcomes, and decreased resources to access, leading to inferior outcomes and decreased efficacy (Costa & Garmston, 2016; Ford, 2012; Phillips & Baron, 2013). In low craftsmanship of frame leadership, challenges surface as a result of minimalized perspectives that can contribute to organizational resistance (Bolman & Deal, 2008; Rice & Harris, 2003). In this climate, if the human resources side is not prioritized, judgments arise that interfere with people's ability to openly learn and grow with one another, deteriorating the social capital needed for success (Fullan, 2011; Hargreaves & Shirley, 2009; Owens & Valesky, 2007). In addition, uncertainty can inhibit progress as wavering from the crucial mission to stay the course at all odds can

create confusion and misalignment that undermine the goal of systemic change (Daly et al., 2015; Fullan, 2011; Kotter, 2007). With an absence of the political frame, a lack of resources can present challenges in building capacity of those in the organization, the result being power struggles, competing interests, and low levels of empowering professional learning and collaboration (Borgerding, 2012; Novak, 2012; Uzarski & Broome, 2019). Without adequate capacity for craftsmanship of being a multiple framed leader, change efforts may be compromised as a result of a narrow view of the organizational needs, leading to blind spots for the organization (Bolman & Deal, 2008; Phillips & Baron, 2013; Rice & Harris, 2003).

Multiframe Leadership. It is the combination of any two or more of Bolman and Deal's (2008) four frames that brings forth the concept of a multiframe leader. A multiframe leader is a leader who applies more than one frame, preferably all four frames, to gain perspective and appreciation for the organization while creating a navigation system (Bolman & Deal, 2008; Dinger, 2018; Rice & Harris, 2003; Uzarski & Broome, 2019). Leaders need a systemic framework, or navigation system, to be effective and knowledgeable in supporting school improvement (Aitken & Aitken, 2008; Dinger, 2018). Increasing perspectives to diagnose the challenges of the organization provides increased options for next steps (Costa & Garmston, 2016; Dinger, 2018; Phillips & Baron, 2013; Rice & Harris, 2003). With a wider vantage point, the leader's ability to make clear judgments increases (Phillips & Baron, 2013; Sotiriadou & de Bosscher, 2013). Investing in perspective building through multiple frames pays dividend as leaders become more efficient and effective in moving toward the new goal as change agents tend to focus on reason and structure and neglect the human resource,

political, and symbolic frames of leadership orientation (Bolman & Deal, 2008; Dinger, 2018; M. K. Lawson, 2014; Uzarski & Broome, 2019).

Leadership is a privilege that holds a position of responsibility for setting direction, creating a vision, and doing so with energy and speed (Brock, 2017; Kotter, 2014; Novak, 2012). Professional maturity, not age or experience, is needed to “go slow to go fast” to successfully lead an organization toward a new goal. Developing knowledge, strategies, structure, procedures, and alignment of people along the way expedites the process through coherence (H. A. Lawson et al., 2017; Novak, 2012; Phillips & Baron, 2013; Rodd, 2015; Senge, 2006; Wilson, 2014). It is this leadership that develops others so the individuals and organization can collectively rise to the desired outcomes aligned to creating a better experience for all (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978; Fullan, 2011; Hargreaves & Shirley, 2009; Kouzes & Posner, 2017). To reach this success, clarity, precision, and integration of leadership are essential, these characteristics being connected to the craftsmanship of the leader (Costa & Garmston, 2016).

Costa and Garmston (2016) defined craftsmanship, a state of mind, as the human drive to hone, refine, and constantly work for improvement by striving for precision, elegance, refinement and fidelity. By endlessly working to deepen knowledge, skills, and effectiveness, the leader’s talents are experiencing continuous improvement with the understanding that there is always opportunity to be better. This demonstration of energy and persistence models learning and is important to being a change leader (Costa & Garmston, 2016; Fullan, 2011). Holding high standards for self, striving for conversation, continuously improving craft, and knowing what else there is to learn

connect to the need to move people through a change initiative. Specifically motivating the people, igniting the commitments of others, aligning the goals and values, and facilitating the work come from a leader's craftsmanship (Costa & Garmston, 2016; H. A. Lawson et al., 2017; Owens & Valesky, 2007). Being a leader who uses multiframed leadership orientation to improve craftsmanship in times of change is refining practice to gain the greatest system perspective to achieve the intended outcomes (Bolman & Deal, 2008; Dinger, 2018; Rice & Harris, 2003; Wheelan, 2010; Willert, 2012).

Moving through the frames of Bolman and Deal's (2008) framework has great impact on organizational change. The perspective provided by exploring the organization through four different frames brings the organization into clearer picture (Uzarski & Broome, 2019; Willert, 2012). To do this, continuous refinement is required as the craftsmanship of being a multiframed leader is not fixed, rather it is transitory, transforming, and transformable. Depending on the situation an individual faces, craftsmanship will increase and decrease as situations alter the craft and impact the influence of a leader at any given moment (Costa & Garmston, 2016). The level of performance equally fluctuates as a result of craftsmanship, making high craftsmanship in a multiframed leader important (Bolman & Deal, 2008; Costa & Garmston, 2016). In addition to honing, refining, and moving toward precision, craftsmanship can be impacted depending on efficacy of the individual (Costa & Garmston, 2016; Henry, 2012). To achieve a consistent level of craftsmanship, a leader must refine, nurture, support, practice, and regularly implement what needs to be done for self-improvement (Costa & Garmston; 2016).

It is in this investment of continuous improvement of craftsmanship that provides dividend from being a multiframed leader. Costa and Garmston (2016) noted that those with craftsmanship can meet the challenges, anticipate the outcomes, and access strategies for the betterment of the organization. By knowing the impact of acts by school leaders on culture, strategies, and structure, the capability of the leader is elevated to manage challenges presented in change (Borgerding, 2012; DeWitt, 2017; Novak, 2012). Framing an organization gives leadership this needed clarity by decreasing blind spots in frames (Bolman & Deal, 2008; Dinger, 2018; Uzarski & Broome, 2019). This craftsmanship is an essential element to executing effective change that includes developing an inspiring vision, hiring great people, encouraging self-directedness and risk-taking, expecting the best, and creating a climate of trust and continuous learning that in turn influences self-efficacy through experiences (Bolman & Deal, 2008; Costa & Garmston, 2016). Knowing organizations are always in motion, craftsmanship in reframing provides insight as to how to steer the ship effectively to achieve the desired outcome by looking beyond a preferred or limited frame (Bolman & Deal, 2008; Dinger, 2018).

Self-Efficacy

With the possibility of a single-framed or multiframed superintendent during change, the self-efficacy of the followers in the system is of interest as efficacy is a contributor to success (Bandura, 1997; Costa & Garmston, 2016; M. K. Lawson, 2014; McCollum & Kajs, 2009). To achieve organizational goals, there is a need for a cohesive relationship between the leaders and the followers (Bass & Bass, 2008; Burns, 1978; Kouzes & Posner, 2017; Phillips & Baron, 2013). Explored in this study were the

superintendent's single or multiframed leadership and the differences of self-efficacy of the followers. Self-efficacy is rooted in Bandura's (1997) social cognitive theory. The value of self-efficacy lives in the outcomes of high efficacy: increased motivation and persistence, decreased blame placed on others, increased resiliency, clarity in thinking under pressure, and goal achievement (M. K. Lawson, 2014; McCollum & Kajs, 2009; McCormick et al., 2002; Perez, 2018). Self-efficacy is defined as "a person's belief about his/her own level of functioning in response to situations presented" (Bandura, 1997, p. 3). With these factors present, self-efficacy has been found to have substantial impact on achievement and satisfaction (Costa et al., 2014; Horton, 2013; Macaluso, 2018; McCormick et al., 2002; Wilson, 2014).

Change is a natural part of existence yet it is frequently a challenge for individuals and organizations as both strive for a state of equilibrium, which often means maintaining the status quo (Katz & Kahn, 1978; Main, 2017). The status quo is the opposite of an initiative of change as the outcome is to make, become, or cause something to be different (Drago-Severson, 2009; Ford, 2012; Owens & Valesky, 2007). This tension presents a challenge in moving systems to a new level as human tendency is to strive for clarity, which contrasts with the ambiguity that comes with change (Bolman & Deal, 2008; Gladwell, 2002). Pair this human tendency with Bandura's (1997) social cognitive theory and the need for self-efficacy. Efficacy, the belief that one can achieve what one sets out to do, is fueled by four energy sources: mastery experiences, vicarious experiences through observation, verbal persuasion, and the emotional and physiological state of the individual (Bandura, 1997). The outcomes of these four sources of energy have proven to benefit the individual and the system. Superintendents influence efficacy

in district leaders through a variety of ways related to craftsmanship of change, namely nurturing levels of trust, providing autonomy to try new things, interacting frequently, and aligning strengths to work which comes in the human resource and structural frames (Azah, 2014; Bolman & Deal, 2008; Heath & Heath, 2010).

To be a successful follower answering to the superintendent's change initiative, it is important to be a voice in the change process and an advocate along the way. Open communication and collaboration among all stakeholders contribute to the motivation needed to create a coalition working toward the same goal (DeWitt, 2017; Fullan, 2011). With a sense of purpose, clear direction, strong values toward the goal, and a passion for the human spirit, district leaders develop social capital and relationships that can support and move change forward (Bass & Bass, 2008; Bass & Riggio, 2006; Bolman & Deal, 2008; Burns, 1978; Daly et al., 2015). Using interpersonal skills to enhance two-way communication improves execution (Daly et al., 2015; Fullan, 2011). Communication creates a culture of transparency that influences trust, with trust being foundational to each relationship within the organization (Daly et al., 2015; Thompson, 2016). Building on the foundation of trust, a deep understanding of what is needed by the people is clear, allowing for aligning decisions congruently (Novak, 2012; Thompson, 2016).

Self-Efficacy of the District Leader. Efficacy is a person's belief about his or her own level of functioning in response to situations presented (Bandura, 1997). The expectation of efficacy includes the belief that one can execute a behavior needed in order to produce a desired outcome (Bandura, 1977). Efficacy cannot be mandated; instead, it must be nurtured through energizing sources and experiences (Bandura, 1997; McCormick et al., 2002; Pujol, 2013). The degree of efficacy within an individual

determines whether one copes or avoids a situation at hand. When faced with issues beyond their perceived ability to resolve, individuals often allow avoidance and fear to give way to giving up (Bandura, 1977). In the case of systemic change, efficacy is essential to moving beyond fear and avoidance to resourcefulness, optimism, confidence, and persistence to make the difference for all involved (Abusham, 2010; Azah, 2014; Costa & Garmston, 2016). A key outcome of high self-efficacy includes goal achievement, the core of school reform efforts (M. K. Lawson, 2014; McCollum & Kajs, 2009; McCormick et al., 2002; Perez, 2018). High levels of self-efficacy have a substantial impact on personal and collective achievement, which are important to positive movement in school change initiatives (Costa et al., 2014; Donohoo & Katz, 2017; Horton, 2013; Le, et al., 2018; Macaluso, 2018; Machida-Kosuga, Schaubroeck, Gould, Ewing, & Feltz, 2017; McCormick et al., 2002; Wilson, 2014).

High levels of efficacy impact a system during stagnation or change. The personal and collective “belief in capabilities to organize and execute courses of action to produce a given attainment” (Bandura, 1997, p. 3) is necessary to influence organizational change (Abusham, 2010; Azah, 2014; Costa & Garmston, 2016; Ford, 2012; Murphy & Johnson, 2016). When an experience results in goal accomplishment, endorphins are secreted in the brain. These chemicals reward the body physiologically, foster intrinsic interest, and enhance the can-do attitude of an individual that can be replicated across the system (Costa & Garmston, 2016; Pujol, 2013). High efficacy taps into intrinsic motivation, an internal locus of control that captures attention and spreads initiative (Costa & Garmston, 2016; Fullan, 2011; Kotter, 2014). Efficacy development

results in sustainable improvements sourced by the belief that the collective group can make a difference (DeWitt, 2017; Donohoo & Katz, 2017; Pujol, 2013).

Benefits of high efficacy also include active efforts and persistence to overcome established challenges (Bandura, 1977; Daly et al., 2015; Ford, 2012; Wilson, 2014). Enhancing efficacy pushes individuals and organizations to achieve goals within the peer culture, overcoming challenging relationships (Daly et al., 2015; Ford, 2012; Fullan, 2011; McCormick et al., 2002; Wilson, 2014). This leads to the desire to get involved, tackle experiences, and learn new things to develop skills needed to face current challenges (Ford, 2012; Fullan, 2011; Heath & Heath, 2010; Hussain & Hassan, 2016).

In addition to persistence and motivation, studies on efficacy indicate a correlation between efficacy and teacher-administration relationships, parent-teacher relationships, and teacher stress. When levels of high efficacy are reported, relationships in noted areas increase while stress decreases. The decrease in stress results in less necessary control tactics due to high levels of resourcefulness, decreasing educator burnout (Costa & Garmston, 2016; Machida-Kosauga et al., 2017). There is also a positive correlation to self-efficacy and adaptability during organizational change and goal attainment that then influences the overall system in an era of change (Ford, 2012; Nowack, 2017; Pujol, 2013).

In contrast to high efficacy, low efficacy comes with liabilities to the individual and the system (Hussain & Hassan, 2016; Le et al., 2018). The capacity one holds to believe that a difference can be made is decreased with low efficacy as efficacy is a changeable concept, varying upon condition (Bandura, 1997; Costa & Garmston, 2016; Cobanoglu & Yurek, 2018). Decreased effort and lack of persistence become evident as it

is common to lose faith in capabilities when faced with failure (Hussain & Hassan, 2016). Blame, rigidity, and withdrawal are outcomes of low efficacy that can result in a state of stagnation that causes erosion to progress and effectiveness (Bolman & Deal, 2008; Costa & Garmston, 2016; Hussain & Hassan, 2016). Each can then impact trust, yielding a reduction of positive relationships in a system (Bolman & Deal, 2008; Daly et al., 2015; Ford, 2012; Hussain & Hassan, 2016). Relational breakdown challenges the ability to develop a common understanding regarding an initiative resulting in tensions. The deterioration of relationships becomes a human resource, political, and symbolic challenge in change (Bolman & Deal, 2008; Daly et al., 2015).

Failure and increasing challenges that exceeded the capacity of educator development result in low efficacy (Drago-Severson, 2009; Murphy & Johnson, 2016). Creating opportunities through the human resource frame for educators to support one another, develop new skills, and sustain efforts in the face of difficulty help build efficacy; without this, efficacy remains low (Bandura, 1977; Bolman & Deal, 2008; Drago-Severson, 2009; Hussain & Hassan, 2016; Machida-Kosauga et al., 2017; Rodd; 2015). When conditions to develop efficacy are absent, the following is evident: decreasing aspiration, shying away from task, weakening of commitment, dwelling on deficiencies, slackening of effort, and giving up (Hussain & Hassan, 2016; Stone, 2018). Low efficacy often leads to increased job dissatisfaction and stress, isolation, and inadequate support, resulting in burnout. Burnout is a primary factor of educator attrition (Costa & Garmston, 2016). Low efficacy results in lower adaptive skill than those with high efficacy (Bolman & Deal, 2008; Thompson, 2016).

While liabilities exist when dealing with low efficacy, it is important to note that high efficacy may also come with potential pitfalls (Carleton, Barling, & Trivisonno, 2018; Daly et al., 2015). With a lack of self-doubt surfacing in high efficacy situations, a leader may find challenge with other leaders. A resolve to this is developing individual efficacy that impacts the group to enhance climate due to its profound impact on improvement with an effect size of 1.57 (Daly et al., 2015; DeWitt, 2017; Donohoo & Katz, 2017; Hattie, 2011). It is also key to note that high levels of leader self-efficacy can result in a leader's overly optimistic view of abilities, which can be harmful (Carleton et al., 2018; Goddard et al., 2000). The benefits of high levels of self-efficacy outweigh the liabilities as evidenced in increased confidence to carry out behaviors, influence choice, motivate, and react accordingly to meet the needs of organizational development and change (Abusham, 2010; Horton, 2013; Macaluso, 2018; Pujol, 2013).

Sources of Self-Efficacy. Four noted sources of efficacy are mastery experiences, vicarious experiences, verbal persuasion, and the affective state of the individual (Bandura, 1997). In a school system, professional learning opportunities at all levels should be focused on building efficacy to improve performance (Donohoo & Katz, 2017; McCormick et al., 2002). Networking of peers builds common understanding of school improvement while engaging in conversation that challenges thinking and supports risk-taking. Included in this networking can be mentoring or coaching to build capacity and expertise (Azah, 2014; DeWitt, 2017; Nowack, 2017; Pujol, 2013).

Mastery experiences are defined as successful experiences that have occurred for an individual that can be replicated (Bandura, 1997). It is a natural human quest to continuously learn and grow, and through mastery experiences this happens. These

experiences are the most powerful for efficacy building as an individual feels success, improves skill, and replicates to gain personal mastery (Azah, 2014; Bandura, 1997; Costa & Garmston, 2016). Achieving genuine success has impact on efficacy by building skill, coping strategies, and task knowledge for the challenges ahead (Bandura, 1997; Costa & Garmston, 2016; McCormick et al., 2002; Wilson, 2014).

Vicarious experiences are those experiences that happen by learning through others (Bandura, 1997). When leaders are able to see others faced with similar opportunities and challenges that are overcome, personal efficacy increases. People begin to expect that they can achieve success under similar conditions that others face and in which they find success. These observations of others contribute to personal self-efficacy (Azah, 2014; Bandura, 1997; Donohoo & Katz, 2017). It is the efficacy of others that builds the efficacy of self (Bandura, 1997; Pujol, 2013).

Verbal persuasion is the source of efficacy building that comes from individuals persuading one another (Bandura, 1997). These experiences can come in the form of sharing expectation, which influences efforts; these efforts then influence achievement (Bandura, 1997; Donohoo & Katz, 2017; M. K. Lawson, 2014). Individuals and groups can have impact on the efficacy of others through verbal persuasion so creating conditions for collaborative persuasion to source efficacy is beneficial to success within an organization (Azah, 2014; Costa & Garmston, 2016; Costa et al., 2014).

Affective state is the source of efficacy that comes from the emotional and physiological state of an individual (Bandura, 1997). It is this source that provides a feeling of excitement or anxiety about challenges that are faced (Bandura, 1997; Donohoo & Katz, 2017). Increased efficacy affectively contributes to an increase in self-

managing, self-monitoring, and self-modifying behaviors (Costa & Garmston, 2016; Pujol, 2013). Outcomes of these behaviors include increased consciousness of self, others, and situations.

It is the combination of these four sources of efficacy that can build efficacy within a system (Bandura, 1997; Donohoo & Katz, 2017; Pujol, 2013). Leader efficacy can develop through many experiences with colleagues, subordinates, and supervisors as trust is nurtured, autonomy is honored, interactions are frequent, professional learning is provided, conversations are intentional, and strategic planning is inclusive (Azah, 2014; Costa & Garmston, 2016; Ford, 2012; Pujol, 2013). Each learning experience provides opportunity to connect beyond a school or department, establish new and strong relationships, and impact the belief that one can achieve the challenges that persist (Ford, 2012; Pujol, 2013). These opportunities come in response to the multiple options of a leader as a result of framing (Bolman & Deal, 2008).

Intersection of Multiframed Leadership and Self-Efficacy of District Leaders

As noted by Bolman and Deal (2008), “frames are both windows on the world and lenses that bring the world into focus. Frames filter out some things while allowing others to pass through easily. Frames help us order experience and decide what to do” (p. 12). The multiframed approach of a superintendent in times of change provides opportunity to view the organization from the symbolic, structural, political, and human resource frame and is associated with success as a manager and a leader (Bolman & Deal, 2008; Phillips & Baron, 2013). The connection between multiframed leadership and self-efficacy comes in the need for self-efficacy to cope with change in all frames as it is an important mediator to execution in change and reduction of stress (Abusham, 2010;

Bandura, 1997; Costa & Garmston, 2016; Ford, 2012; Horton, 2013; Macaluso, 2018; Perez, 2018; Wilson, 2014).

From the symbolic frame, a leader is able to bring enthusiasm and commitment through development of a shared vision that provides clarity to the individuals of the organization (Bolman & Deal, 2008; Kouzes & Posner, 2017; Senge, 2006). In this process, members of the organization have opportunity to be heard, which can positively impact self-efficacy (Azah, 2014; Horton, 2013; McCormick et al., 2002). In addition, through the symbolic frame, clarity surfaces for the direction of the organization, which can help to influence the beliefs of those within the organization, resulting in a can-do attitude that each individual can contribute to moving the system (Azah, 2014; Bass & Riggio, 2006; Burns, 1978; Dilts, 2014; Ford, 2012).

From the structural frame, a leader is often faced with restructuring that could impact the roles and responsibilities that were previously experienced (Bolman & Deal, 2008). With the decrease in mastery and vicarious experiences possible in the shift from the structural frame, self-efficacy could waver, leading to less confidence and determination to carry out necessary individual behaviors for change (Abusham, 2010; Horton, 2013; Macaluso, 2018; Pujol, 2013). While the structural frame does provide clarity and goals, which positively influence efficacy, the possibilities of decreased efficacy exist in structural shifts (Azah, 2014; Bolman & Deal, 2008).

Within the human resource frame comes the opportunity to influence self-efficacy in a persuasive manner through trusting relationships, support, and empowerment (Bolman & Deal, 2008; Elmore, 2004; Phillips & Baron, 2013). By mobilizing others to make extraordinary things happen, individual self-efficacy can increase through the

human resource frame as challenges are turned into successes (Costa & Garmston, 2016; Kouzes & Posner, 2017). The human capital within an organization during change is instrumental in moving an initiative forward, and creating mastery and vicarious experiences, elevating social persuasion, and tapping on the affective states of individuals impacts efficacy, which yields a greater chance at goal attainment (Bandura, 1997; Murphy & Johnson, 2016; Senge, 2006).

In perspective of the political frame comes the opportunity to navigate power and conflict that may surface in times of political pressures and competing interests (Bolman & Deal, 2008; Thompson, 2016). These tensions create stressful situations in which high self-efficacy can enhance the ability to cope with change and pressures through reduction in stress (Kotter & Whitehead, 2010; McCormick et al., 2002; Perez, 2018). Creating coalitions through the political frame can be done through collaboration, which has evidence to improve self-efficacy (Bolman & Deal, 2008; Horton, 2013). Outcomes of the political frame also include goals, structure, and policies, which can positively impact self-efficacy as each is understood and accomplished (Bolman & Deal, 2008; Costa & Garmston, 2016).

It is the connection between the four multiframe of leadership and self-efficacy that can mediate stress in times of change and enhance goal achievement (Abusham, 2010; Bandura, 1997; Costa & Garmston, 2016; Ford, 2012; Horton, 2013; Macaluso, 2018; Perez, 2018; Wilson, 2014). Benefits of self-efficacy include increased aspirations, effort to task, and persistence, which lead to secretion endorphins that act as a reward system (Costa & Garmston, 2016; McCormick et al., 2002). It is this increase in self-

efficacy of the system that assures sustainable improvements that can be scaled and replicated for maximum impact as efficacy builds efficacy (Pujol, 2013; Wilson, 2014).

Summary

Research reveals that 21st-century systems are challenged by the fast-paced world dominated by the demand to do things differently (Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston et al., 2017). With the demand for change, leadership at the helm of school districts is challenged to lead nimbly and with rapid responses to avoid slow organizational evolution (Bolman & Deal, 2008; Main, 2017; Owens & Valesky, 2007). While this is no small feat, it can be accomplished through four frames that provide a view of multiple perspectives to gain direction in moving change forward (Bolman & Deal, 2008).

Chapter Two included a thorough literature review of themes related to organizational change, Bolman and Deal's leadership orientation through the four frames, and Bandura's theory of efficacy. Within the exploration of organization change, the current demands on educational leaders were explained with considerations for how to move a system. Craftsmanship of a leader through the leadership orientation was detailed to support the value of multiframed orientation of leadership over a single-framed approach during change. Finally, the review of the importance and impact of self-efficacy was explored and then connected to the multiframed leadership orientation model. Chapter Three provides the research questions that guided the study, the methodology, the role of the researcher, and instrumentation used in this study. Discussions of the reliability and validity of instrumentation paired with ethical considerations are also included. Chapter Four includes the presentation of data collected

during the study, review of data organization, and the reporting and analysis of the findings of the study. Chapter Five summarizes findings, offers a conclusion, shares implications for practice, and makes recommendations for future research.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

Internal and external factors are demanding change in public education (Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston et al., 2017). Superintendent leadership is a critical element to moving a system through change. The use of Bolman and Deal's (2008) leadership orientation of four frames provides a view of multiple perspectives to provide clarity for action. This multiframe leadership is important to achieve successful and sustainable change (Kotter, 2007; Hargreaves & Shirley, 2009). Executing change requires collective commitment from the leader's followers. These followers, known as district leaders under the direction of a superintendent, are a necessary piece to the puzzle and bring forth a variety of strengths and perspectives. Included in this is the self-efficacy of the district leaders reporting to the superintendent. Self-efficacy is an important piece to meeting and exceeding goals, and a necessary ingredient to the implementation of systemic change (Bandura, 1997; McCormick et al., 2002; Perez, 2018; Wilson, 2014). The difference of district leader self-efficacy between the varied leadership orientations of single-framed and multiframe superintendents in times of change may expose important considerations for moving change forward.

Chapter Three outlines the purpose, research questions, and hypotheses that guided the study. The participants, procedures, and selection and sampling are shared with clarity in the research setting and design. The two instrumentations used in this study are discussed with information regarding the steps taken by the researcher to test

validity and reliability as needed. An explanation of the data analysis and statistics used in this study concludes this chapter.

Purpose of Study

The purpose of this quantitative study was to identify the significance in difference of the self-efficacy of district leaders reporting to the superintendent between single-framed and multiframed leadership orientation of the superintendent during change. Research points to a difference in effectiveness during change between a single-framed and multiframed leader with little research on the perception of efficacy of the followers reporting to the superintendent leading change (Amos, 2018; Bolman & Deal, 2008; M. K. Lawson, 2014; Phillips & Baron, 2013; Rice & Harris, 2003). This follower, known as a district leader, is one who directly reports to the superintendent. The independent variable in the study was the perceived leadership orientation of the superintendent during change. The dependent variable in the study was the perceived self-efficacy of the district leaders, also known as followers. Bolman and Deal's (2008) four-frame leadership model and Bandura's (1997) social cognitive theory based in self-efficacy were the theoretical frameworks used in this study. Therefore, the researcher selected survey tools specifically aligned to these works in the LOI-Other and the GSE.

The leadership orientation reveals a single or multiframed leader with four frames of leadership in mind: symbolic, political, structural, and human resource. While each frame is powerful on its own, the collection of the four frames results in a more comprehensive outcome often experiencing more success than a single-frame approach (Bolman & Deal, 2008; Rice & Harris, 2003). The self-efficacy of the followers, also described as district leaders, includes the leaders' perception of his/her ability to make a

difference by leading others effectively, performing specific behaviors aligned to goals, and persisting in the face of difficulty, obstacles, and disappointment (Bandura, 1997; Ford, 2012; McCormick et al., 2002). Higher self-efficacy results in an increased readiness for change as followers search for identity, competence, learning, mastery, and control during change (Costa et al., 2014). It is this difference of perceived self-efficacy and the single-framed or multiframed leadership orientation through the symbolic, political, structural, and human resource frames that is of interest to inform future leaders of school reform (Bolman & Deal, 2008; Kotter & Cohen, 2002).

Research Questions and Null Hypotheses

This quantitative research study addressed the difference in self-efficacy of district leaders reporting to the superintendent between the possible perceived leadership orientation of a single-framed and multiframed superintendent in times of organizational change. The independent variable was the perceived leadership orientation of the superintendent during change. The dependent variable in the study is the perceived self-efficacy of the district leaders, also known as followers. The single-framed and multiframed leadership orientation is revealed in four frames: symbolic, political, structural, and human resource. While each frame is powerful on its own, it is the collection of the frames that contributes to a comprehensive outcome of success in change (Bolman & Deal, 2008; Rice & Harris, 2003).

Given the four frames of Bolman and Deal's (2008) leadership orientation, levels of variables were considered in each research question. Research Question 1 had an independent variable with two groups: the single-framed and multiframed leader. Research Question 2 had one independent variable with four groups: political, symbolic,

structural, and human resource, each a result of a single-framed leader. The third research question also had the same independent variable with four groups, but was a result of a multiframed leader that leads with one frame dominantly. The fourth research question had one independent variable with two groups: a comprehensive framed leader versus a dominant framed leader. The last research question had one independent variable, district size with four groups: very small, small, medium, and large. Three of the research questions had four groups, requiring a post hoc analysis to compare all possible pairings if the one-way Analysis of Variance (ANOVA) showed statistical significance.

Research Questions

The following research questions guided this study:

1. What are the differences in self-efficacy of a district leader working under the direction of a single-framed or multiframed superintendent leading change?
2. What are the differences in self-efficacy of a district leader working under the direction of each of the four types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame)?
3. What are the differences in self-efficacy of a district leader working under the direction of each of the four dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame)?
4. What are the differences in self-efficacy of a district leader working under the direction of a comprehensive multiframed leader and dominant multiframed superintendent leading change?

5. What are the differences in self-efficacy of a district leader working in a district that falls in the categories of the following size: very small, small, medium, and large?

Null Hypotheses

In an attempt to answer the research questions set forth in this study, the following null (H_0) hypotheses were investigated:

1. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived single-framed or multiframed superintendent leading change.
2. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame).
3. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame).
4. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived comprehensive multiframed leader and dominant multiframed superintendent leading change.
5. H_0 : There will be no statistically significant difference of self-efficacy of district leaders among very small, small, medium, and large districts.

Participants

The participants in this study were district leaders that reported directly to the superintendent in public school districts in the state of Missouri. Within the state of Missouri, there were nine RPDCs as follows: Southeast, Heart of Missouri, Kansas City, Northeast, Northwest, South Central, Southwest, St. Louis, and Central. District leaders reporting directly to the superintendent within each of the nine RPDCs were contacted to participate in the study. If superintendent approval was needed, the researcher contracted the superintendent for permission. Of the 517 school districts in the nine RPDCs across the state, a minimum of one district leader reporting to the superintendent per district was invited to participate in the study. A total of 1,044 district leaders received the invitation to participate. The district leaders who participated were asked to complete two already existing digital surveys including demographic questions and open-ended questions embedded in QuestionPro. The two surveys were the GSE and the LOI-Other. Out of the 1,044 district leaders invited to participate, 208 viewed the study, 144 started the survey, 113 only completed only the LOI-other portion, and 102 participant completed both surveys and were included in the data analysis.

The researcher chose participants for this study from a district leadership list attained from the Missouri Department of Elementary and Secondary Education. Public school districts were used, including public districts designed specifically for special education and gifted education. The researcher's decision to include these public school districts was based upon the demands for change in all sectors of public education and the role the superintendent plays in leading change and the role that self-efficacy plays in contributing to the success of a school district.

To avoid needing a numbering system to match the GSE and the LOI-Other surveys to the same respondent, the researcher included both surveys in one link in QuestionPro. The use of QuestionPro allowed for a guarantee of safety, anonymity, and confidentiality in response. Ethical considerations and precautions were made to ensure that there was no risk to the participants given the nature of the survey by guaranteeing confidentiality in all responses. Due to the sensitivity of perceptions found in this study, caution was taken to protect participants from being identified by their responses.

Ethical considerations and precautions were activated to ensure zero risk to participants from whom the data were collected. Anonymity and confidentiality were guaranteed to protect respondents from whom the data were collected. A cover letter was provided in the body of the e-mail to all participants detailing the purpose of the study, its significance for the industry, and the commitment by the researcher to ensure results were shared with those participating. The letter addressed the need for anonymity and confidentiality as well as clearly outlined the rationale for demographic questions that included the RPDC membership, gender, years in current leadership position, years reporting to the current superintendent, district size, level of involvement in recent district change, proximity to the superintendent, level of education, and number of years in education.

Procedures

To ensure compliance with the Southwest Baptist University guidelines regarding the protection of human participants, the researcher followed expectation and provided a request for review to the Research Review Board (RRB) for approval. This request included the desire to survey Missouri district leaders across the 517 public school

districts that reported directly to the superintendent. 1,044 leaders were contacted to participate in the study. 102 district leaders fully participated in the survey instrument. The district leaders, also known as followers, were asked to complete two digital surveys: LOI-Other survey and the GSE survey. Each survey administered to district leaders measured perception of the district leader in regards to the superintendent's leadership orientation as a single-framed or multiframed leader and the self-perception of the district leader's self-efficacy. District leaders who opted to participate in the study were given the option to submit their name separately to be entered into a drawing for participation of the surveys. In addition, leaders were incentivized with the option to receive the findings of the study found in Chapter Five. Participants were invited to e-mail the researcher directly if results were desired. All participants were provided the chance to accept or decline participation at the beginning of the survey.

Recruitment of participants and collection of data began upon RRB approval. Consent and participation information detailing initial contact to participants are located in Appendix A. Prior to the administration of the survey, information about the purpose of the study, participation, anonymity, confidentiality, and intent to share the results was included at the beginning of the surveys. All participants were provided the opportunity to accept or decline participation by selecting Next upon beginning the surveys.

The purpose of this study was to determine the difference in self-efficacy of district leaders reporting directly to the superintendent between the single-framed and multiframed leadership orientation of the superintendents during change. As a result, it was not necessary to have a specific number of responses from the same school district, so just a single individual within a system could complete the survey questions from the

Leadership Orientation Inventory-Other and the General Self-Efficacy survey. With the structure of this study, it was crucial for district leaders to fully complete all questions and any submissions that only included incomplete responses were omitted as part of data cleaning. In addition, it was crucial for an operational definition to be shared regarding change as well as the request to answer the questions through the frame of the most recent change experienced by the current superintendent while the district leader served in the current capacity. This definition provided a standard for change, but did allow the participants to be selective on the degree of change that was considered while answering the survey questions. The researcher assumed that the questions were answered through the lens of significant change experienced in the public school system.

The researcher used QuestionPro to create an online survey that included two parts that housed the questions from each of the two surveys being used. The benefits of QuestionPro included automaticity of responses, quick distribution of surveys, and consistent surveying structure to the questions administered. QuestionPro created a unique link embedded into an e-mail to make survey completion possible with the click of the mouse. Within the e-mail sent, participants were provided with the purpose of the study, directions for completion, and details about anonymity and confidentiality. Within this e-mail was also the opportunity to accept or decline participation in this body of research.

The research first solicited responses for this study in the fall of 2019. Using a power analysis, the researcher sought a minimum of 180 non probability purposive responses to have a medium sample size. E-mail invitations were sent to district leaders across the state providing an opportunity for completion within an initial 3-week window

followed by a reminder with an additional week window for responses. Of those that clicked on the survey link, the completion rate was 70.96% during the survey window. All of the nine RPDCs in the state of Missouri were represented in the survey data.

On October, 16, 2019, the data collection window ended and no further responses were collected. Responses were captured in QuestionPro, allowing the data to be kept for a minimum of 5 years should future researchers desire analysis of the data gathered during this study. Upon closure of the data window, a drawing was held for those that submitted their names separately from the survey to be entered into the Amazon gift card give away. These individuals were contacted. Finally, the researcher downloaded the data into Microsoft Excel for data cleaning and entry into Statistical Packaging for Social Sciences (SPSS).

Selection and Sampling

The selection of the participants of this study included public school district leaders reporting directly to the superintendent. The selection was nonrandom and purposive with the intent to gather data from district leaders that reported directly to the superintendent in a Missouri public school district. If a Missouri district did not have the necessary structure of district leaders at the central office reporting to the superintendent, this information was noted in the demographic questions regarding proximity to the superintendent as some districts had leaders housed in school sites that directly reported to the superintendent. Of the respondents, 68 reported working in the same building as the superintendent and 34 reported not working in the same building. Nonpublic school systems such as charter schools, private schools, and parochial schools were not included in the study to keep the focus on public school districts that experienced similar demands

for change from the state and federal level. All Missouri public school districts with a reporting structure that included a minimum of one reporting leader to the superintendent were invited to participate. By using district leadership across the state of Missouri, the researcher was provided an in-depth sampling to make conclusions regarding the difference in district leader self-efficacy between the perceived leadership orientations of superintendents in change. Findings may be supportive to superintendents during change initiatives in regards to the four frames of Bolman and Deal's (2008) leadership orientation to support efficacy of district leaders being asked to move change.

The process for selection of the sample was a nonprobability sampling that was purposive. Members of a particular group of educational leaders across the state were sought to participate in the surveys. Sample size calculations were made to determine the needed size for an alpha level of .05, a power of .8, and a medium effect size. For a one-way ANOVA with four groups, a sample size of 180 complete responses was needed to ensure an .8 power (Faul, Erdfelder, Lang, & Buchner, 2007). For a one-way ANOVA with four groups, a return of 180 responses was attempted to achieve the desired power .80 with alpha =.05 and medium effect size.

In respect to district leader participation and sample, unique survey links were provided to each invited to participate. Using unique links in e-mails allowed ensuring confidentiality and anonymity. The RPDC of the district was named in the demographic questions to aid in disaggregation. While QuestionPro utilized each leader's e-mail address for disseminating the surveys, no further data was collected to identify the individual completing each survey.

Research Setting

The research setting was Missouri school districts and district offices. This setting was selected as the topic of the study involved superintendent leadership and district leader self-efficacy, which could be found in Missouri public school districts across the state. Superintendents in public school systems are faced with internal and external factors requiring systemic change to effectively impact teaching and learning making their perceived leadership through Bolman and Deal's (2008) four frames important to the problem of this study (Cobanoglu & Yurek, 2018; Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston et al., 2017). Knowing the impact of self-efficacy of the followers in a system, the self-perceptions of efficacy were essential to the problem in this study (Bandura, 1997; Costa & Garmston, 2016; M. K. Lawson, 2014).

Contact was made via e-mail to a minimum of one district leader reporting directly to the superintendent in a public school district. If superintendent permission was required, the researcher contracted the superintendent directly. Participants were given an initial time frame of three weeks to complete the survey, which was submitted digitally to the researcher. After each week, a reminder was sent to potential participants inviting participation in the study. Following three weeks, a final reminder was sent with an additional week for collection of responses. The subjects of the study experienced unique research settings based upon choice of when and where to participate in the research. Participants were asked to note gender, RPDC, years in current leadership position, proximity to the superintendent, years reporting to the current superintendent, size of district, level of involvement in the recent district change, level of education, and

number of years in education. The definition of change was provided to participants as each was requested to answer the survey in light of the most recent change experienced by the current superintendent.

Research Design

In order to answer the research questions and address the hypotheses, a quantitative study was designed and approved by the Southwest Baptist University RRB (Appendix B). Quantitative research is a data collection analyzed numerically to describe and explain occurrences that can be measured and generalized across comparable participants (Gay et al., 2009). By applying descriptive statistics, the researcher is able to quantify leadership behaviors and perceptions about self-efficacy to identify impacts that may contribute to a superintendent's leadership behavior while executing change in a system. The researcher relied on the significance level of .05 to examine the difference of district leader self-efficacy between the varied leadership orientations of the superintendent in change in the first four research questions. In the fifth research question the researcher relied on the significance level of .05 to examine the difference of district leader self-efficacy between the varied district sizes in the state of Missouri. This level is known as the alpha level, which is the acceptable probability value for rejecting the null hypothesis (Pelham, 2013). Open-ended questions were added to the end of the surveys to provide more detail to the researcher around efficacy and leadership orientation.

This causal comparative design was selected as a way to gather perceptions of self-efficacy of the district leader and the perceived leadership orientation as a single-framed or multiframe superintendent in times of change. This type of research was

selected as “ex post facto” research as the differences between or among groups is preexisting and the design allows opportunity to determine cause or consequence (Gay et al., 2009). The cause or consequence between the independent and dependent variables in each of the five research questions was of interest in this causal comparative design as an attempt to find the cause or explanation for differences between groups was made (Gay et al., 2009). With two groups identified in the data, an independent samples *t* test was run to determine the differences between the means. With four groups identified in the data, a one-way ANOVA was run to determine if difference existed among the groups. If a difference was found in the one-way ANOVA, a post hoc analysis was completed to determine differences between groups.

The validity and reliability of both instruments selected justified their use in gathering perceptions regarding leadership orientation and self-efficacy. Participants were asked to answer the survey questions through the lens of the most recent change experienced while reporting to the current superintendent. Anonymity was achieved by including the Leadership Orientation Inventory-Other and the General Self-Efficacy Scale in the same survey with a break between the surveys. This ensured survey respondents could not be identified. Respondents were notified of the structure for survey administration in the e-mail that accompanied the survey access.

Instrumentation

Quantitative data were obtained to answer the research questions posed in this study. The instrumentation included two instruments with analysis to identify the difference in self-efficacy of district leaders following a single-framed or multiframed superintendent in times of change. Both instrumentations used were preexisting. Both

instruments were combined into a single QuestionPro survey link for ease of participation and data collection. To measure the perception of leadership orientation of the superintendent by the district leader an electronic version of Bolman and Deal's LOI-Other (Appendix C) was distributed to district leaders who reported directly to a superintendent across the state of Missouri. Self-efficacy of district leaders was also collected electronically via the GSE to the same group of leaders, also known as followers, reporting directly to a superintendent. Followers were invited to note years of experience reporting to the current superintendent, years in current leadership position, gender, current RPDC in the state of Missouri, proximity to the superintendent, size of district, level of involvement in recent district change, level of education, and number of years in education. All demographic questions were included to aid in any further data analysis or research. In addition, open-ended questions were added to the end of each survey. These open-ended questions included the following:

1. What actions by the superintendent contributed to your success in change?
2. How has your interaction with your superintendent changed the way you view educational leadership?
3. How do your everyday realities concerning your superintendent match up to your initial expectations regarding organizational change?

Preferred Leadership Frame Orientation Instrument. Lee G. Bolman and Terrence E. Deal (1990) developed the Leadership Orientations Instrument. There are two possible versions of the LOI: the self and the other. The LOI-Self was not used in this study, but the LOI-Other was used to measure the perceptions regarding the characteristics of leadership. Permission to use the survey was requested and granted in

this study along with permission to make modifications and publish the instrument as needed (Appendix E).

The LOI-Other was the selected survey as the LOI-Self gathers the self-perceptions of leadership orientation through the frames from Bolman and Deal (1990) while the LOI-Other allows for the gathering of perceptions from others regarding leadership orientation. The LOI-Other was found to be both reliable and valid when conducting quantifiable leadership behaviors. The survey is comprised of 42 questions split into four sections. The first section lists 32 statements in which the respondent is to rate the superintendent on a Likert scale with 1 = *never*, 2 = *occasionally*, 3 = *sometimes*, 4 = *often*, and 5 = *always*. These 32 questions can be split into four categories of eight questions each. Items 1, 5, 9, 13, 17, 21, 25, and 29 are related to the structural frame. Items 2, 6, 10, 14, 18, 22, 26, and 30 are connected to the human resource frame. The political frame is represented by Questions 3, 7, 11, 15, 19, 23, 27, and 31. The symbolic frame is connected to Statements 4, 8, 12, 16, 20, 24, 28, and 32. Within the questions related to each of the four frames, there are also subscales. Statements 1, 9, 17, and 25 connect to analytical. Statements 2, 10, 18, and 26 are related to supportive. Statements 4, 12, 20, and 28 are inspirational. Organized connects to Statements 5, 13, 21, and 29. Participative ties to Statements 6, 14, 22, and 30. Adroit is related to Statements 7, 15, 23, and Statements 31. 8, 16, 24, and 32 are tied to charismatic (Bolman, n.d).

The second section of the LOI-Other contains six items in which choices are forced. The items under each question are arranged by the four frames—structural, human resource, political, and symbolic—in which the responder must describe the leadership style of the superintendent by ordering which best describes the individual

with a “4,” the next most like the individual a “3,” and so forth, with a “1” used to note which item is least like the individual (Bolman, n.d.).

The third section consists of two direction questions related to effectiveness as a manager and effectiveness as a leader of the superintendent in change (Bolman, n.d.). To answer each question, the rater considers and compares the individual to others known with comparable levels of experience and responsibility. This section was included in the survey to aid in further research around the topic of self-efficacy and perceived leadership frames of a leader, but not used in the data analysis of this study.

The final section of the LOI-Other includes demographic questions. Participants were invited to note years of experience reporting to the current superintendent, years in current leadership position, gender, current RPDC in the state of Missouri, proximity to the superintendent, size of district, level of involvement in recent district change, level of education, and number of years in education. The gender identification is present to aid in further research but was not used to answer the research questions. Proximity to the superintendent, RPDC in the state of Missouri, level of education, and level of involvement in recent district change is collected to aid in disaggregation of results. Years serving the current leader were not analyzed in this study but were included for possible future studies regarding leadership orientations and the self-efficacy of those that follow. District size was used to answer the last research question.

On Bolman’s (n.d.) Web site, an analysis of reliability and validity of the LOI-Other can be found. According to the information shared by Bolman, the statistics for reliability have been tested on more than 1,300 leaders from the business and education field. Internal consistency data reports were run on all items, even and odd items

separately. With the use of a Likert scale, multiple numbers are used to represent responses, therefore the use of Cronbach's alpha represents choices correctly allowing for internal consistency reliability when analyzing data (Gay et al., 2009). A Cronbach's coefficient alpha greater than .70 is considered an acceptable level for research in social sciences (Pallant, 2011). In the case of the LOI-Other survey, Bolman published the Coefficient (Cronbach's) alpha for each of the four frames. The published levels for each frame within the first section of the survey according to internal consistency data were as follows: the structural frame = .920, the political frame = .913, the symbolic frame = .931, and the human resource frame = .931. The published levels for each frame within the second section of the survey according to internal consistency data were as follows: the structural frame = .841, the political frame = .799, the symbolic frame = .842, and the human resource frame = .843 (Bolman, n.d.). A split-half correlation was also used to determine if the calculated reliability would yield the same score as a test for Cronbach's alpha (Pelham, 2013). A Spearman-Brown prediction formula tested reliability by using the split-half correlation alongside the coefficient alpha for a total score to evaluate if there were domains that were producing unreliable scores (Eisinga, Grotenhuis, & Pelzer, 2013). The inclusion of internal consistency reliability provided sufficient evidence that multiple test items meant to measure a specific frame were successful in consistently measuring the intended frame.

In regards to the validity of the LOI-Other, research has found that the validity of using this survey with self-ratings is usually low, therefore an advantage existed in colleague rating of Leadership Orientations as done in this study to increase construct validity (Bolman, n.d.). In addition, due to the validity with self-ratings being low, a

principal components analysis with the gathered data was conducted to verify the construct validity of this instrument for the first time. The result of the principal components analysis showed four extracted constructs and the findings are noted in Chapter Four with continued data analysis. Based on past research and the use of the Leadership Orientation (Other) Instrument, this tool is considered a reliable instrument in measuring preferred leadership frames of a leader from another perspective (Bolman, n.d). Numerous studies have used the LOI-Other in recent years to determine the perceived orientations of leader through the frames (Alston, 2016; Carpenter, 2019; Hannah, 2013; Sapp, 2017).

General Self-Efficacy Scale. The GSE was developed by Schwarzer and Jerusalem (1995). In this study, it was used to survey the perceptions of self-efficacy of district leaders reporting to the superintendent. Permission was granted to use and reproduce the GSE given the appropriate recognition of the source is made and the GSE is not published (Appendix D).

The GSE was utilized to assess a general sense of perceived self-efficacy with the intent to predict a leader's ability to manage the daily stresses present during organizational change. The GSE was found to be both reliable and valid when conducting quantifiable leadership behaviors. The survey is comprised of 10 questions with 1=*not true at all*, 2=*hardly true*, 3=*moderately true*, and 4=*exactly true*. The total score is calculated by funding the sum of all the items. The score range is between 10 and 40, with a higher score indicating more self-efficacy (Schwarzer & Jerusalem, 2013).

An analysis of relatability and validity of the GSE can be found. According to the information shared, the internal reliability for the GSE Cronbach's alphas was between

.76 and .90 (Schwarzer & Jerusalem, 2013). With the use of a Likert scale, multiple numbers are used to represent responses, therefore the use of Cronbach's alpha represents choices correctly allowing for internal consistency reliability when analyzing data (Gay et al., 2009). A Cronbach's coefficient alpha greater than .70 is considered an acceptable level for research in social sciences (Pallant, 2011). In regards to validity, the GSE is correlated to emotion, optimism, and work satisfaction. Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety, which are indicators of low self-efficacy resulting in less success (Bandura, 1997; Schwarzer & Jerusalem, 2013). Concurrent and prognostic validity of the GSE was used to predict outcomes and verified in two waves of data collection of East German migrants in 1989 and 1991. Concurrent validity was demonstrated when the test correlated well with measures previously validated (Schwarzer & Jerusalem, 1995). Expected positive correlations were found with self-esteem (0.52), internal control beliefs (0.40), and optimism (0.49), which are factors of high self-efficacy (Bandura, 1997). Expected negative correlations were found with general anxiety (-0.54), performance anxiety (-0.42), shyness (-0.58), and pessimism (-0.28), often tied to low self-efficacy (Bandura, 1997). Predictive validity was also assessed, with correlations with positive measures of self-esteem (0.40) and optimism (0.56) in women, with fewer correlations (0.20 and 0.34) found in men (Schwarzer & Jerusalem, 1995). The GSE was also tested for a single dimension, known as unidimensionality, in which the outcome was a measurement scale with only one dimension being a self-efficacy scale (Schwarzer & Jerusalem, 1995).

Data Analysis

In order to answer the central research questions in this study, the survey data were analyzed by the statistical software program Statistical Packaging for Social Sciences (SPSS). Software was used to calculate the p -value to determine whether the null hypothesis of each of the five research questions was rejected or accepted with an alpha level of .05. Data cleaning was completed to begin the data analysis. This process was used to detect and correct or remove corrupt or inaccurate records found in the data set. Next an independent samples t test and a one-way ANOVA was run. This was used to show difference between the groups within the study. The independent samples t test and the one-way ANOVA were selected as appropriate for this study due to the linear relationship between the variables measured.

Basic assumption testing was conducted to provide statistical analyses of six assumptions that are required for an independent samples t test to provide valid results. The basic assumptions test helped to ensure false conclusions were not drawn from the analysis (Field, 2013; Pelham, 2013). The basic requirements of the six basic assumption testing were complete to run the statistic. These tests included the scale of the measurement, random sampling normality of data distribution, adequacy of sample size, and equality of variance in standard deviation (Field, 2013). The results of these tests are included in Chapter Four.

In order to answer the first research question, the researcher identified the differences in district leader self-efficacy between a single-framed and multiframed superintendent in times of change. An independent samples t test was used to determine the statistical significance between a single-framed and multiframed leader on self-

efficacy of the district follower directly reporting to the superintendent. The independent samples *t* test is a procedure that allows a researcher to answer questions about two means with the assumption of a normally distributed variable (Pelham, 2013). A calculation of an effect size, known as a Cohen's *d*, was provided if statistically significant differences in the data for this research question were exposed. Also, if needed, a Cohen's *d* was run to show the comparison between two means to provide more information than the independent samples *t* test (Goulet-Pelletier & Cousineau, 2018).

To answer the second research question in this study, the researcher determined the difference of self-efficacy of a district leader who was led by each of the four types of a single-framed leader during times of change. A one-way ANOVA was used to determine the statistical significance between the four single-framed leaders on the self-efficacy of the district follower directly reporting to the superintendent. The one-way ANOVA is a procedure that allows a researcher to answer questions about three or more groups within each mean and between the means (Pelham, 2013). The assumptions held in this test were similar to the independent samples *t* test in which the dependent measure is normally distributed (Pelham, 2013). The one-way ANOVA indicated if the independent variables were different from one another, but being an omnibus test statistic, the one-way ANOVA did not show which groups were statistically significant. Therefore, a post hoc test was run upon indication of differences to identify statistically significant differences between specific groups. The post hoc test was selected based upon whether or not the data met the homogeneity of variances. In the case of homogeneity of variance, Tukey's honestly significant difference (HSD) post hoc test

was used. If the data had not met the homogeneity of variance, the Games Howell post hoc test would have been selected.

To answer the third research question in the study, the researcher determined the difference of self-efficacy of a district leader who was led by each of the four types of a dominant multiframed leader during times of change. The same process was used to answer this research question as with the second research question. The one-way ANOVA was used to determine any statistically significance difference within the four groups of dominant multiframed leaders and the district follower self-efficacy. If statistically significant differences were determined, the researcher ran a post hoc test dependent on the homogeneity of variances. Tukey's honestly significant difference (HSD) post hoc test was used. Had the data not met the homogeneity of variance, the Games Howell post hoc test would have been selected as a result.

In order to answer the fourth research question of the study, the researcher determined the difference of self-efficacy of a district leader led by a comprehensive multiframed leader and a dominant multiframed leader in change. An independent samples *t* test was used to determine the statistical significance between the comprehensive multiframed leader and a dominant multiframed leader on the self-efficacy of the district follower directly reporting to the superintendent. The independent samples *t* test is a procedure that allows a researcher to answer questions about two means for a normally distributed variable (Pelham, 2013). Had significance been found, the calculation of an effect size would have been provided to indicate how big or meaningful an effect is in regards to this study (Pelham, 2013). This effect size provided more information than the limited results of the independent samples *t* test.

To answer the final research question of the study, the researcher determined the difference of self-efficacy of a district leader who was serving a very small, small, medium, or large public school district in the state of Missouri. A one-way ANOVA was used to determine the statistical significance between the four sizes of school systems and the self-efficacy of the district leader reporting directly to the superintendent. The same process was used to answer this research question as with the second and third research question. If statically significant differences had been determined, the researcher used a post hoc test dependent on the homogeneity of variance. Tukey's honestly significant difference (HSD) post hoc test was selected. Had the data not met the homogeneity of variance, the Games Howell post hoc test would have been selected as a result.

In Chapter Four, the results of this study in response to the research questions are shared. Demographic information including gender, years serving in current position, years reporting to current superintendent, and Missouri Regional Professional Development Center (RPDC) is also be reported. Descriptive statistics are reported showing the demographic questions included in this study. Tables showing the categorical variables that can be quantified are included. The number of people surveyed, gender, mean number of years of superintendent tenure and reporting to the superintendent, and number of responses per Missouri RPDC are included. The outcomes of the independent samples *t* tests and effect size as well as the one-way ANOVA and post hoc tests is outlined and used in comparison to the null hypotheses in this study. The mean and standard deviation for each of the five research questions along with the

rejection or acceptance of the null hypothesis for each of the five research questions is also discussed.

Summary

Chapter Three focused on this study and its methodology. The details included information regarding the purpose of the research, the research questions and hypotheses, the validity and reliability of both instruments used in the study, explanation of design, and description of selection and sampling of participants. In addition, the researcher described the data analysis procedure for collection of multiple perspectives from each district leader. In Chapter Four, the researcher presents the demographics and findings from the two surveys used in the study. Chapter Five presents the research questions. Included with the questions is a summary of the research method and design controls. Findings are shared to accept or reject the null hypothesis connected to each of the five research questions in the study. Chapter Five concludes with recommendations for future studies in the area of superintendent leadership during significant change initiatives and a summary of the entire study.

CHAPTER FOUR

ANALYSIS OF THE DATA

Introduction

In Chapter Four, the data collected as outlined in previous chapters will be analyzed to address each of the five research questions in relation to the research findings. Previous research has indicated that change is a natural part of education as it is required to respond to both internal and external factors that demand change (Kotter, 2014; Main, 2017; Owens & Valesky, 2007; Thompson, 2016; Weston et al., 2017). Superintendent leadership is a critical element in moving a system through change. The use of Bolman and Deal's (2008) leadership orientation of four frames provides a view of multiple perspectives to provide clarity for action. When leaders frame situations from multiple viewpoints, they are more successful, resulting in sustainable change (Hargreaves & Shirley, 2009; Kotter, 2007; Yukl, 2010). Executing change requires collective commitment from the leader's followers. These followers, known as district leaders under the direction of a superintendent, are a necessary piece to the puzzle and bring forth a variety of strengths and perspectives found in high levels of self-efficacy. Self-efficacy is essential to meeting and exceeding goals, and a necessary ingredient to the implementation of systemic change (Bandura, 1997; McCormick et al., 2002; Perez, 2018; Wilson, 2014). The difference of district leader self-efficacy between the varied leadership orientations of single-framed and multiframed superintendents in times of change may expose important considerations for moving change forward for those within and beyond education.

The purpose of this study was to examine the difference in self-efficacy of district followers reporting to a single- or multiframe superintendent in times of change. The

researcher outlined procedures for conducting the study in Chapter Three that explained the selection process and participants. A complete description of the research setting involving district leaders reporting directly to the superintendent in Missouri public schools was also included. Accompanying the research setting was an outline of the research design and data treatment. An invitation to participate in the study was sent to 1,044 district leaders reporting directly to the superintendent in the state of Missouri. Results from the survey were uploaded into the IBM Statistical Package for Social Sciences (SPSS) software program for analysis. Descriptive statistics were used to present quantitative data in a simple and measurable form. Data presented in this chapter provide information about the differences in self-efficacy of district leaders reporting to a single- or multiframe superintendent. Additionally, the researcher included an analysis of the demographics and open-ended questions of the respondents reporting to single- or multiframed superintendents in times of change. Data reported provide insight into the difference in self-efficacy of district followers depending on the superintendents' single- or multiframe leadership.

Research Questions

The following research questions guided this study:

1. What are the differences in self-efficacy of a district leader working under the direction of a single-framed or multiframed superintendent leading change?
2. What are the differences in self-efficacy of a district leader working under the direction of each of the four types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame)?

3. What are the differences in self-efficacy of a district leader working under the direction of each of the four dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame)?
4. What are the differences in self-efficacy of a district leader working under the direction of a comprehensive multiframed leader and dominant multiframed superintendent leading change?
5. What are the differences in self-efficacy of a district leader working in a district that falls in the categories of the following size: very small, small, medium, and large?

Null Hypotheses

In attempt to answer the research question set forth in this study, the following null (H_0) hypotheses were investigated:

1. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived single-framed or multiframed superintendent leading change.
2. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame).
3. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame).

- 4 H₀: There will be no statistically significant differences of a district leader working under the direction of a perceived comprehensive multiframed leader and dominant multiframed superintendent leading change.
- 5 H₀: There will be no statically significant difference of self-efficacy of district leaders among very small, small, medium, and large districts.

QuestionPro was used by the researcher to distribute the Leadership Orientation Inventory-Other (Appendix C) and the General Self-Efficacy Scale to district leaders reporting directly to the superintendent in public school districts in the state of Missouri. The survey asked the district leader for consent to participate, provided directions, and explained confidentiality and anonymity of the survey. QuestionPro allowed the researcher to distribute the survey via e-mail and for the data to be collected automatically and immediately. The researcher did not require consent from the superintendent of each of the school districts unless a district leader requested superintendent approval first. Participants did consent to the study by clicking Next on the consent page.

Quantitative analysis was used in this study via an independent samples *t* test or one-way ANOVA to determine if the null hypothesis would be accepted or rejected. The researcher examined data for any differences in self-efficacy in district leaders reporting single- or multiframe leadership of the superintendent. Further analysis was done with each research question if a statistically significant difference was found to determine common themes and draw conclusions about the self-efficacy of district leaders and the frame of leadership of the superintendent in times of change. In addition, demographics

of the participants provided opportunity for additional analysis of differences found in the study.

Data Analysis and Findings

At the closure of the survey window, all survey responses were downloaded from QuestionPro to a Microsoft Excel spreadsheet, where the data were cleaned and combined to ensure an easy upload to IBM's SPSS for a complete analysis. Final results from the survey yielded 102 completed responses from 1,044 invitations, representing district leaders from all nine RPDCs across the state of Missouri. Only completed surveys were analyzed for this study, so 11 partial survey responses were excluded. The sampling resulted in a power analysis of a small effect size of .17, an alpha = .05, and a power = .13.

The researcher recorded the descriptive data for the four frames of leadership according to the LOI-Other. The first section listed 32 statements in which the respondent was to rate the superintendent on a Likert scale with 1 = *never*, 2 = *occasionally*, 3 = *sometimes*, 4 = *often*, and 5 = *always*. These 32 questions were split into four categories of eight questions each. Items 1, 5, 9, 13, 17, 21, 25, and 29 were related to the structural frame of leadership. Items 2, 6, 10, 14, 18, 22, 26, and 30 were connected to the human resource frame of leadership. The political frame was represented by Questions 3, 7, 11, 15, 19, 23, 27, and 31. The symbolic frame was connected to Statements 4, 8, 12, 16, 20, 24, 28, and 32 (Bolman, n.d). Scores were calculated for each of the four frames of leadership in change using the categories of questions provided by the survey. The analysis of the subscale categories that include analytical, supportive, inspirational, organizational, participative, and adroit was not

complete as the subscale categories did not connect to the research questions that guided this study.

The second section of the LOI-Other contained six items in which choices were forced. The items under each question were arranged by the four frames—structural, human resource, political, and symbolic—in which the responder must describe the leadership style of the superintendent by ordering which best described the individual with a “4,” the next most like the individual a “3,” and so forth, with a “1” used to note which item was least like the individual (Bolman, n.d.). The forced answers aligned to one of the four frames and the scores were included in the frame scoring for each response.

The third section consisted of two direction questions related to effectiveness as a manager and effectiveness as a leader (Bolman, n.d.). To answer each question, the rater considered and compared the individual to others known with comparable levels of experience and responsibility. This section was included in the survey to aid in further research around the topic of self-efficacy and perceived leadership frames of a leader but did not influence the framing score calculated from the first two sections of the LOI-Other.

Upon completion of the LOI-Other, respondents then answered 10 questions on self-efficacy in times of change. These questions scaled from *exactly true*, *moderately true*, *hardly true*, or *not at all true*. Each question connected to the concept of self-efficacy in the district leader and provided opportunity to identify the difference in district leader self-efficacy in times of change. Three open-ended questions and

demographic questions concluded the survey to provide opportunity for data analysis to support all five research questions.

Completed surveys included 42 questions related to the leadership orientation of the superintendent and 10 questions related to self-efficacy. The combination of these questions allowed the researcher to categorize responses into single- or multi frame leadership of the superintendent and degree of self-efficacy. This combination supported the researcher in analysis of all five research questions guiding this study.

The researcher conducted a principal components analysis (PCA) of the LOI-Other as a result of the low validity of this survey when participants conducted self-ratings. The PCA was run on Section 1 of the LOI-Other survey. These 32 questions measured the single- or multiframe leadership of a superintendent in times of change as perceived by 102 respondents. The suitability of the PCA was assessed prior to the analysis. Inspection of the correlation matrix showed that all variables had a least one correlation coefficient greater than 0.3. The overall Kaiser-Meyer-Olkin (KMO) measure was .940 with individual KMO measures greater than .871, which resulted in a classification of *marvelous* to *meritorious* according to Kaiser (1974). Results are found in Table F1 of Appendix F. Bartlett's Test of Sphericity, also found in Table F1, showed statistical significance ($p < .0005$), indicating that the data were likely factorizable.

The PCA revealed four components that had eigenvalues greater than 1 and which explained 58.9%, 7.4%, 4.8%, and 3.4% of the total variance, respectively. The PCA output table can be found in Table F2 of Appendix F. Visual inspection of the scree plot found in Appendix G indicated that four components should be retained based upon the components prior to the last inflection point of the graph (Cattell, 1966). In addition, a

four-component solution met the interpretability criterion. As such, four components were retained.

The four-component solution explained 74.5% of the total variance. A Varimax with Kaiser normalization was employed to aid interpretability. The rotated solution did not exhibit a simple structure (Thurstone, 1947). The interpretation of the data was consistent with the four frames of leadership as the survey was designed to measure four components within the LOI-Other. Questions 2, 6, 10, 18, and 22 indicated strong loadings of the first Component as this explains 58.9% of variance. Questions 7, 19, and 23 indicated loadings of the second Component. Questions 5, 9, 13, and 25 indicated strong loadings of the third Component. Question 29 was the only question to indicate a strong loading of the fourth Component. Table F3 found in Appendix F shows the results of the Rotated Component Analysis.

Participants

Participants of this study were district leaders reporting directly to the superintendent in school districts across the state of Missouri. The researcher contacted 1,044 Missouri public school leaders via e-mail through QuestionPro. Leaders were provided a survey including the LOI-Other questions and the General Self-Efficacy Scale questions. There were 102 district leaders who completed the survey.

There were 113 responses collected, but 11 responders did not complete the self-efficacy portion of the survey, resulting in 102 complete responses for data analysis. There were 22 of the 102 participants that selected not to answer all three open-ended questions but did answer all the questions connected to the LOI-Other and General Self-Efficacy Scale. The responses to the open-ended questions provided the researcher

information regarding perceptions and relationships between the district leader and superintendent, but were not essential to the data analysis so these responses were included in the data.

Demographics

Nine survey items composed a background information section. Respondents identified themselves as male or female. In addition, respondents reported length of time in current leadership position, length of time in education, level of education, length of time reporting to the current superintendent, and proximity to the superintendent. Indication of district size and RPDC were also collected. Finally, participants selected the degree of involvement they had in district change.

After survey responses were collected, the number of respondents and their gender were analyzed. Table 1 reports the number of total respondents and gender. Two participants preferred not to answer the question regarding gender.

Table 1

Gender of Respondents

	Gender		
	Male	Female	Prefer Not to Answer
Number of Responses	48	52	2

Another item that the researcher analyzed was the years in current leadership role of the respondent versus the years the respondent had reported to the superintendent. These responses were found in two separate demographic questions. The demographic questions regarding length of time in current leadership position and length of time reporting to the current superintendent provided data for this analysis. Table 2 reports the findings of these two demographic questions.

Table 2

	<i>Years</i>		
	Same	More Than	Less Than
Number of Responses	52	43	7

There were 52 respondents that had served in their current leadership position and had reported directly to the superintendent for the same amount of time. There were 43 respondents that had served the current leadership position longer than directly reporting to the current superintendent. There were seven respondents that indicated they had served the current role fewer years than directly reporting to the current superintendent.

Also included in the background portion of the survey was the opportunity for respondents to indicate of which Missouri Regional Professional Development Center (RPDC) the district of employment of the respondent was a member. There were nine RPDCs in the state of Missouri that covered the entirety of the state as follows: Southeast, Heart of Missouri, Kansas City, Northeast, Northwest, South Central, Southwest, St. Louis, and Central. Table 3 represents the number of respondents by Missouri RPDCs.

Table 3

<i>Missouri Regional Professional Development Center</i>	<i>Number of Responses</i>
Southeast	5
Heart of Missouri	4
Kansas City	11
Northeast	3
Northwest	3
South Central	11
Southwest	44
St. Louis	12
Central	9

Respondents also indicated to what degree they had been involved in recent district change. Being very involved in recent district change was the most selected response. If not very involved, the next most selected response was involved. The least number of survey respondents selected *Little Involvement*, with zero responses indicating no involvement. Table 4 reports the findings of this demographic question.

Table 4

	<i>Degree of Involvement in Recent District Change</i>			
	Degree			
	Very Involved	Involved	Little Involvement	No Involvement
Number of Responses	63	29	10	0

Participants also indicated the number of years in education. The data ranged from 2 to 40 years. The researcher elected to categorize the data by decades for reporting. More than 80% of respondents had worked in education between 10 and 30 years. Finally, 11 respondents had served education for more than 30 years. The findings of this demographic question can be found in Table 5.

Table 5

	<i>Years in Education</i>			
	Years			
	Less than 10	10-19	20-29	30 or More
Number of Responses	5	42	44	11

Level of education was also collected via the demographic questions for deeper analysis as needed. Table 6 shows the results of this question. The majority of

participants in the survey held an Education Specialist or Doctor of Education degree. Approximately 18% of respondents served education in a district leader position reporting to the superintendent with a Bachelor of Education or Masters of Education degrees. Just two served in their district leadership role via an alternative route outside of degrees in education.

Table 6

	<i>Level of Education</i>				
	Bachelor of Education	Master of Education	Level Education Specialist	Doctor of Education	Alternative Route
Number of Responses	2	15	44	39	2

Finally, the last demographic question collected showed the proximity of the district leader to the superintendent within the school district. Respondents selected whether or not the superintendent’s office was located within or at a different building than the respondent. Table 7 details the findings of this question.

Table 7

	<i>Proximity to the Superintendent</i>	
	Same Building	Location Not the Same Building
Number of Responses	68	34

The researcher also included a cross tabulation of the demographic questions to provide additional insight of respondents for recommendations for future research. The addition of crosstabs allowed for summarization of the data in categorical variables to determine if there were any associations present between the demographics of the participants. The first cross tabulation explored the categories of gender and level of

education and can be found in Table 8. The findings include more female participants held a specialist than a doctorate degree, whereas more males held a doctorate than a specialist degree. A greater number of males than females were serving in a leadership role reporting directly to the superintendent with a bachelor’s degree.

Table 8

Gender and Level of Education Cross Tabulation

	Level				
	Bachelor of Education	Master of Education	Education Specialist	Doctor of Education	Alternative Route
Gender Male	0	10	18	19	1
Female	2	4	24	20	2

In addition, a crosstabulation was run between level of education and degree of involvement in change on the part of the leader reporting directly to the superintendent. These results can be found in Table 9. The data indicated that 82% of those with a doctorate degree reporting directly to the superintendent were very involved in change. Only 56% of those with a specialist degree indicted being very involved in change within the district. All participants, regardless of level of education, reported some degree of involvement in change initiative within their district.

Table 9

Level of Education and Degree of Involvement Crosstabulation

Level of Education	Level			
	Very Involved	Involved	Little Involvement	No Involvement
Bachelor’s	1	0	1	0
Master’s	4	9	2	0
Specialist	24	14	5	0
Doctorate	32	5	2	0
Alternative Route	2	1	0	0

The final crosstabulation included in this study was that of district leader proximity to the superintendent and the degree of involvement in change. Proximity to the superintendent was measured in two categories: office of the district follower is in the same or office of the district follower is in a different building. The findings of this crosstabulation indicated that 68% of district followers located in the same building as the superintendent felt very involved in change, whereas 50% of district leaders not located in the same building felt very involved in change on part of the superintendent. Findings are noted in Table 10.

Table 10

Proximity to the Superintendent and Degree of Involvement Crosstabulation

	Level			
	Very Involved	Involved	Little Involvement	No Involvement
Proximity Same	46	17	5	0
Different	17	12	5	0

The addition of background questions in this study was to aid the researcher in analyzing the data. The data provided the researcher with characteristics of the population of respondents to be used without compromising the anonymity of each response. The demographics provided related to a research question, were used in a crosstab analysis, or could be accessed for further analysis if a statistically significant difference was found in self-efficacy in any one of the five research questions.

Data Cleaning

To ensure data entered into SPSS were complete, the researcher conducted cleaning of the data from QuestionPro. Once the data were downloaded to Microsoft Excel, there were 11 data sets in QuestionPro that were removed as self-efficacy answers

were found incomplete. Next, the researcher calculated the sum of each of the perceived four frames of leadership of the superintendent during change as rated by the district follower on the survey. The efficacy score of each respondent was then calculated based on the responses to the 10 efficacy questions found in the survey in QuestionPro. Upon completion of calculations for the four frames and efficacy, the researcher was able to code each response using numerical values for each of the five research questions.

Research Question 1 required a coding system of 0 or 1. Zero represented a single-frame leader and 1 represented a multiframe leader based upon the scores of the superintendent in the area of all four frames. Research Question 2 required a coding system of 0, 1, 2, 3, and 4. A 0 represented a multiframe leader with a 1 = *symbolic*, 2 = *political*, 3 = *structural*, and 4 = *human resource frame*. If a leader was determined to be a single-frame leader, the number was assigned for the single-frame leadership used in times of change. Research Question 3 required the same coding as Research Question 2 with the exception of a 0 representing a single-frame leader. The numbers were assigned based up on the dominant frame used by a multiframe leader in times of change. Research Question 4 required a coding system of 0, 1, and 2. A 0 represented a single-frame leader, with a 1 representing a multiframe leader who had equal, or near equal, values in all four frames of leadership. A 2 was assigned for the multiframe leader who showed a dominant frame while leading with two or more frames of leadership in times of change. Research Question 5 required the coding of 1, 2, 3, and 4. These numbers were assigned to show school district size of the respondent with a 1 = *very small* (less than 500 students), 2 = *small* (more than 500 but less than 2,000 students), 3 = *medium*

(more than 2,000 students but less than 10,000 students), and 4 = *large* (10,000 or more students).

Coding provided an opportunity for data to be entered into SPSS without error from Microsoft Excel. This process removed incomplete data, scored frames of leadership, provided efficacy scores, and determined district size of the respondents. With clean data, the researcher was able to run the independent samples *t test* or a one-way ANOVA needed to reject or fail to reject the null hypothesis of each of the five research questions in this study.

Self-Efficacy and Single- or Multiframe Analysis

Based on the analysis of the leadership orientation questions grouped by the four frames and that of the self-efficacy scale, an independent samples *t test* was conducted to analyze Research Question 1: What are the differences in self-efficacy of a district leader working under the direction of a single-framed or multiframed superintendent leading change? Group statistics for Research Question 1 are shown in Table 11.

Table 11

Group Statistics for Single- or Multiframe

Leadership Frame		<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>
Efficacy Score	Single-Frame	38	34.16	3.680	.597
	Multiframe	64	34.78	3.561	.445

For the independent samples *t test*, statistical significance is recognized when the *p*-value is below .05. For Research Question 1, responses of district leaders reporting directly to a single-frame superintendent in times of change were compared to the responses of district leaders reporting directly to a multiframe superintendent in times of change. Data for Research Question 1 are shown in Table 12.

Table 12

t test for Single- or Multiframe

Efficacy Score	<i>t</i>	<i>df</i>	Sig.	<i>M</i> difference	<i>SEM</i> difference	95% CI	
						<i>LL</i>	<i>UL</i>
Equal variance assumed	-.844	100	.401	-.623	.738	-2.09	.842

Note. CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

There were 38 district leaders that answered survey questions about self-efficacy during single-frame leadership and 64 district leaders that answered survey questions about self-efficacy during multiframe leadership. An independent samples *t* test was run to determine if there were statistically significant differences in single- and multiframe leadership and self-efficacy. There was one outlier in the data as assessed by the inspection of a boxplot, but it did not affect the statistical data and was included in the analysis. Self-efficacy scores of district leaders reporting to single- or multiframe superintendents in times of change were not normally distributed, as assessed by Shapiro-Wilk test ($p > .05$), as the significance of the efficacy of those reporting to a single-frame superintendent was .035 and that of those reporting to a multiframe superintendent was .003. The researcher carried on regardless of the violation in the results of normal distribution. There was homogeneity of variances for efficacy scores for district leaders reporting to a single- and multiframe leaders in times of change, as assessed by Levene's test for equality of variances ($p = .518$).

There were 38 leaders reporting to a single-frame and 64 reporting to a multiframe leader in times of change. An independent samples *t* test was run to determine if there were differences in efficacy between a single- or multiframe leader.

The efficacy of leaders reporting to a single-frame leader ($M = 34.16$, $SD = 3.680$) was less than the efficacy of leaders reporting to a multiframe leader ($M = 34.78$, $SD = 3.561$), with a difference of $M = -.623$, 95% CI [-2.088, .842], $t(-.844) = .401$, $p = .401$.

Therefore, no statistically significant difference existed between the two groups. Thus, the researcher failed to reject the null hypothesis (H_0) for Research Question 1.

Self-Efficacy and Single-Frame Leadership Analysis

Based on the analysis of the leadership orientation questions grouped by the four frames and that of the self-efficacy scale, a one-way ANOVA was conducted to analyze Research Question 2: What are the differences in self-efficacy of a district leader working under the direction of each of the four types of single-framed superintendents leading change? Descriptives for Research Question 2 are shown in Table 13.

Table 13

Descriptives for Four Single Frames of Leadership

Leadership Frame	<i>N</i>	<i>M</i>	<i>SD</i>	95% CI		Min	Max
				<i>LB</i>	<i>UB</i>		
Symbolic	1	39	-	-	-	39	39
Political	11	32.82	5.307	29.25	36.38	22	39
Structural	9	34.44	2.068	32.85	36.03	31	38
Human Resources	17	34.59	2.938	33.08	36.10	30	40

Note. CI = confidence interval; *LB* = lower bound; *UB* = upper bound.

For the one-way ANOVA, statistical significance has been recognized when the p -value is lower than .05. For Research Question 2, responses of district leaders reporting directly to a single-frame superintendent in times of change were compared based on the type of single-frame leader (symbolic, political, structural, and human

resource) leadership of the superintendent in times of change. Data for Research Question 2 are shown in Table 14.

Table 14

ANOVA for Four Single Frames of Leadership

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	56.341	4	14.085	1.090	.366
Within Groups	1252.914	97	12.917		

Of the 102 responses to the survey, 38 responses indicated reporting to a single-frame superintendent in times of change. There was one district leader that answered survey questions about self-efficacy through a symbolic single-frame leader. Eleven district leaders answered through the lens of reporting to a political single-frame leader in times of change. There were nine district leaders that reported to a structural single-frame leader in times of change, with 17 district leaders reporting to a human resource single-frame leader in times of change. A one-way ANOVA was run to determine if there were statistically significant differences in four types of single-frame leadership and self-efficacy. There were three outliers in the data of the structural frame as assessed by the inspection of a boxplot, but it did not affect the statistical data and was included in the analysis. Self-efficacy scores of district leaders reporting to each of the four single-frame superintendents in times of change was normally distributed for three of the frames as assessed by Shapiro-Wilk test ($p > .05$). The significance of those reporting to a political single-frame superintendent was .470. The significance of those reporting to a structural single-frame superintendent was .406. The significance of those reporting to a human resource single-frame superintendent was .753. The efficacy score was constant

for the symbolic single-frame superintendent and was omitted. There was homogeneity of variances for efficacy scores for district leaders reporting to one of the four single-frame leaders in times of change, as assessed by Levene's test for equality of variances ($p = .366$).

There were 38 leaders reporting to a single-frame leader in times of change. A one-way ANOVA was conducted to determine if differences in efficacy between and within groups was present. Efficacy of district leaders reporting to single-frame superintendents in times of change increased from those reporting to a political single-frame leader ($n = 11, M = 32.82, SD = 5.307$), to those reporting to a structural single-frame leader ($n = 9, M = 34.33, SD = 2.068$), and to those reporting to a human resource single-frame leader ($n = 17, M = 34.59, SD = 2.938$), in that order. The difference between the groups reporting to one of the four single-frame superintendents in times of change was not statistically significant, $F(4, 97) = 1.090, p = .366$. Thus, the researcher failed to reject the null hypothesis (H_0) for Research Question 2.

Self-Efficacy and Dominant Multiframed Leadership Analysis

Based on the analysis of the leadership orientation questions grouped by the four frames and that of the self-efficacy scale, a one-way ANOVA was conducted to analyze Research Question 3: What are the differences in self-efficacy of a district leader working under the direction of each of the four dominant frames of multiframed superintendents leading change? Descriptives for Research Question 3 are shown in Table 15.

Table 15

Descriptives of Dominant Multiframes of Leadership

Leadership Frame	N	M	SD	95% CI		Min	Max
				LB	UB		
Symbolic	12	35.58	2.778	33.82	37.35	31	39
Political	15	35.20	3.212	33.42	36.98	30	39
Structural	15	35.40	2.898	33.79	37.01	30	39
Human Resources	18	33.67	4.459	31.45	35.88	25	40

Note. CI = confidence interval; *LB* = lower bound; *UB* = upper bound.

For the one-way ANOVA, statistical significance has been recognized when the *p*-value is lower than .05. For Research Question 3, responses of district leaders reporting directly to a multiframe superintendent in times of change were compared to others also reporting directly to a multiframe superintendent with a differing dominant frame. Data for Research Question 3 are shown in Table 16.

Of the 102 responses to the survey, 60 responses indicated reporting to a dominant multiframe superintendent in times of change. Of the 60 respondents, there were 12 district leaders that answered survey questions about self-efficacy during a dominant symbolic multiframed leader. There were 15 district leaders that answered in response to a political multiframed leader. Fifteen district leaders answered survey questions about self-efficacy while working under a structural dominant multiframe leader, and 18 answered according to a human resource dominant multiframe leader in times of change. A one-way ANOVA was run to determine if there were statistically significant differences between the four groups reporting to multiframe leaders in time of change. There were no outliers in the data of the four groups reporting to a dominant

multiframe leader.

Table 16

ANOVA for Four Dominant Multiframes of Leadership

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig</i>
Between Groups	52.719	4	13.180	1.017	.402
Within Groups	1256.536	97	12.954		

Self-efficacy scores of district leaders reporting to each of the four single-frame superintendents in times of change was normally distributed for three of the four dominant multiframe groups as assessed by Shapiro-Wilk test ($p > .05$). The significance of those reporting to a symbolic multiframe superintendent was .324. The significance of those reporting to a structural multiframe superintendent was .168. The significance of those reporting to a human resource multiframe superintendent was .345. The efficacy score for the political multiframe group was .044. With three of the four groups normally distributed, the researcher decided to carry on regardless. There was homogeneity of variances for efficacy scores for district leaders reporting to one of the four single-frame leaders in times of change, as assessed by Levene's test for equality of variances ($p=.402$).

There were 60 leaders reporting to one of the four groups of a dominant multiframe leader in times of change. A one-way ANOVA was conducted to determine if differences in efficacy between and within groups were present. Efficacy of district leaders reporting to multiframe superintendents in times of change increased from those reporting to a human resource dominant multiframe leader ($n = 18, M = 33.67, SD = 4.459$), to those reporting to a political dominant multiframe leader ($n = 15, M = 35.20, SD = 3.212$), to those reporting to a structural dominant multiframe leader ($n =$

15, $M = 35.40$, $SD = 2.898$), and to those reporting to a symbolic dominant multiframe leader ($n = 12$, $M = 35.58$, $SD = 2.778$), in that order. The difference between the groups reporting to one of the four multiframe superintendents in times of change was not statistically significant, $F(4, 97) = 1.017$, $p = .402$. Thus, the researcher failed to reject the null hypothesis (H_0) for Research Question 3.

Self-Efficacy and Comprehensive or Dominant Multiframe Leadership

Based on the analysis of the leadership orientation questions grouped by a comprehensive or dominant multiframe leadership and that of the self-efficacy scale, an independent samples t test was conducted to analyze Research Question 4: What are the differences in self-efficacy of a district leader working under the direction of a comprehensive multiframed leader and dominant multiframed superintendent leading change? Group statistics for Research Question 4 are shown in Table 17.

Table 17

Group Statistics for Comprehensive or Dominant Multiframe

	Leadership Frame	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>
Efficacy Score	Comprehensive	3	33	6.083	3.512
	Dominant	61	34.87	3.452	0.442

For the independent samples t test, statistical significance has been recognized when the p -value is below .05. For Research Question 4, responses of district leaders reporting directly to a comprehensive multiframe superintendent in times of change were compared to others also reporting directly to a dominant multiframe superintendent. Data for Research Question 4 are shown in Table 18.

Table 18

t test for Comprehensive or Dominant Multiframe

	<i>t</i>	<i>df</i>	Sig.	<i>M</i> difference	<i>SEM</i> difference	95% CI	
						<i>LL</i>	<i>UL</i>
Efficacy	-.886	62	.379	-1.869	2.110	-6.086	2.348

Note. CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

There were three district leaders that answered survey questions about self-efficacy during comprehensive multiframed leadership. There were 61 district leaders that answered questions about self-efficacy while reporting to a dominant multiframed leadership in times of change. An independent samples *t* test was run to determine if there were statistically significant differences in self-efficacy of district leaders reporting to a comprehensive or dominant multiframe superintendent in times of change. There were two outliers in the data as assessed by the inspection of a boxplot, but they did not affect the statistical data and were included in the analysis anyway. Self-efficacy scores between district leaders reporting to a comprehensive or dominant multiframe leader in times of change were not normally distributed, as assessed by Shapiro-Wilk test ($p < .05$), as the significance of the efficacy of those reporting to a comprehensive multiframe leader in times of change was .157 and that of those reporting to a dominant multiframe superintendent was .003. The researcher carried on regardless of the violation in the results of normal distribution. There was homogeneity of variances for efficacy scores for district leaders reporting to a comprehensive multiframe and dominant multiframe leaders in times of change, as assessed by Levene's test for equality of variance ($p = .110$).

There were three leaders reporting to a comprehensive multiframe leader in times of change and 61 reporting to a dominant multiframe leader. An independent samples *t* test was run to determine if there were differences in efficacy between a comprehensive

or dominant multiframe leader. The efficacy of leaders reporting to a comprehensive multiframe leader ($M = 33.00$, $SD = 6.083$) was less than the efficacy of leaders reporting to a dominant multiframe leader ($M = 34.78$, $SD = 3.452$), with a difference of $M = .379$, 95% CI [-6.086, 2.348], $t(-.886) = 62$, $p = .379$. Therefore, no statistically significant difference existed between the two groups. Thus, the researcher failed to reject the null hypothesis (H_0) for Research Question 4.

Self-Efficacy and District Size Analysis

Based on the analysis of the leadership orientation questions grouped by the four frames and that of the self-efficacy scale, a one-way ANOVA was conducted to analyze Research Question 5: What are the differences in self-efficacy of a district leader working in a district that falls in the categories of the following size: very small, small, medium, and large? Descriptives for Research Question 5 are shown in Table 19.

Table 19

Descriptives for District Size

Size	N	M	SD	95% CI		Min	Max
				LB	UB		
Very Small	24	34.25	2.707	33.11	35.39	29	38
Small	36	34.33	3.825	33.04	35.63	25	40
Medium	29	35.43	2.873	34.36	36.54	29	40
Large	13	33.69	5.483	30.38	37.01	22	40

Note. CI = confidence interval; LB = lower bound; UB = upper bound.

For the one-way ANOVA, statistical significance has been recognized when the p -value is less than .05. For Research Question 5, responses of district leader self-efficacy reporting directly to a multiframe superintendent in times of change were compared between very small, small, medium, and large school district size. Data for Research Question 5 are shown in Table 20.

Table 20

ANOVA for Four District Sizes

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	36.813	3	12.271	.945	.422
Within Groups	1272.442	98	12.984		

There were 24 very small districts responses with less than 500 students, 36 small district responses with more than 500 and less than 2,000 students, 29 medium district responses with more than 2,000 and less than 10,000 students, and 13 large district responses with more than 10,000 students. A one-way ANOVA was run to determine if there were statistically significant differences in district size and self-efficacy of a district leader reporting to a multiframe leader. There were no outliers in the data of the four sizes of school districts in the study. Self-efficacy scores of district leaders in all four district size categories were normally distributed as assessed by Shapiro-Wilk test ($p > .05$). The significance of those reporting in a very small district was .194. For those in a small district the significance was .050. In a medium school district, the significance via Shapiro-Wilk was .093. The significance of those district leaders in a large district was .207. There was homogeneity of variances for efficacy scores for district leaders reporting in each of the four district sizes included in this study, as assessed by Levene's test for equality of variances ($p = .422$).

All 102 responses included the district size. A one-way ANOVA was conducted to determine if differences in efficacy between and among groups were present. Efficacy of district leaders increased from those in a large district ($n = 13$, $M = 33.69$, $SD = 5.483$), to those employed in a very small district ($n = 24$, $M = 34.25$, $SD = 2.707$), to those

employed in a small district ($n = 36, M = 34.33, SD = 3.825$), and to those in a medium district ($n = 29, M = 35.43, SD = 2.873$), in that order. The difference between the groups serving in one of the four district sizes was not statistically significant, $F(3, 98) = .945, p = .422$. Thus, the researcher failed to reject the null hypothesis (H_0) for Research Question 5.

Open-Ended Questions

The survey also included three open-ended questions. The three questions asked participants to provide insight into what actions by the superintendent contributed to success in change, how interaction with the superintendent changed views of educational leadership, and comparisons of expectation of change to realities of change by the superintendent. A simple qualitative analysis was performed by examining the responses from the participants to elevate themes and groupings. Categorical data and common themes were found in this qualitative analysis.

There were 84 responses to the first question that surfaced categories and themes. The open-ended question was: What actions by the superintendent contributed to your success in change? The answers clarified the responses from the district leaders reporting directly to the superintendent by asking them to describe the things that the superintendent did that helps navigate change for success. Several common themes emerged from the comments: communication, collaboration, opportunities for growth, clear visioning, encouraged risk taking, intentional reflection, and inspiration. Among these common themes, two predominant themes emerged: collaboration and communication. District leaders reporting to the superintendent indicated that collaboration elevates collective input from the team while pushing leaders to stretch

beyond comfort zones to empower change. Also, through collaboration, district leaders have the opportunity to politically elevate people and resources needed for successful change. Communication is essential as it creates clarity for what challenges are being faced, what vision is held for the future, the non-negotiables that exist, and the process needed to influence change. Respondents indicated that repetitive and consistent communication has supported personal success in change.

For the second open-ended question, there were 80 responses analyzed. The open-ended question was: How has your interaction with your superintendent changed the way you view educational leadership? The answers helped to clarify the responses from the district leaders reporting directly to the superintendent by asking them to consider how interactions have changed views of leading in education. Common themes emerged from the comments: understand the political sphere, be human focused, use discretion, focus on alignment, be a learner, and be a collaborative leader. A pattern also surfaced from respondents who mentioned poor leadership on part of the superintendent. These respondents had learned what to do to elevate change in absence of a superintendent that empowers others to make a difference for students.

Among these themes, understanding the political sphere and prioritizing the humans of the organization were dominant. District leaders reporting to the superintendent indicated that understanding the political sphere of leading education has changed the respondents' perspectives. Being a superintendent is much more political than realized and was likened to being an elected official. With that in mind, consistent messaging, empowering constituents, and keeping the focus on the goals of change are essential. This alignment allows for elevation of the political powers of the community

needed to move educational change. Connected to the political layer of leadership is the need to prioritize the human element within the organization. Helping people to focus on the vision while removing distractors was a pattern found in the data to support successful change. Serving the people of the organization while staying focused on the vision was also noted as a priority. Finally, showing respect, care, and concern for the members of the organization is a powerful way to build an internal coalition that supports the vision set forth by the superintendent.

As for the pattern in which district leaders mentioned learning in spite of their superintendent leadership, common themes surfaced. When district leaders had not felt supported by the superintendent, they recognized the need to prioritize individuals in the organization for collective growth. Poor leadership behaviors perceived by district leaders reporting to the superintendent also encourage those individuals to avoid such behaviors as they have a deep understanding of the counterproductivity of micro-managing, of focusing on the wrong things, and of ignoring accountability structures. In spite of perceived poor leadership in change, respondents felt equipped to understand what to do differently for success in leading change and held high self-efficacy while doing it.

For the final open-ended question, there were 76 responses. The open-ended question was: How do your everyday realities concerning your superintendent match up to your initial expectations regarding organizational change? The answers helped to clarify the responses from the district leaders reporting directly to the superintendent by comparing everyday realities to initial expectations of organizational change. Common themes emerged from the comments that included a misalignment in reality and

expectation, a reality that executing change is a challenge, and that change takes time and support. In regards to misalignment, participants recognized that they expected change to occur, but the way in which it happened with their system has not had the impact expected. The pattern was that an absence of clarity was the key component to failed movement. Noting change is challenging, participants in this open-ended question indicated that the desire to change is easy, but it is the execution that is the challenge. The need to activate people, build a common vision, and ensure clear communication create barriers to execution. Finally, change takes time, which may not have been expected by district leaders on the onset. To execute, laid out plans with political connection and communication will move a system. Anticipating resistance along the way may slow the process, but should not thwart change. According to patterns in this question, successful change is a process that should not be hurried.

The responses to these three open-ended questions have provided insight into what actions by the superintendent in times of change influence leaders' ability to feel success, to gain perspective, and to compare expectation and reality. The simple qualitative analysis performed provides additional context for leading through single- or multiframe in times of change. Patterns that surfaced in these responses connect to the symbolic, political, structural, and human resource frame of Bolman and Deal (2008). How the superintendent selects to lead change can be through a single- or multiframe including the political, symbolic, structural, and human resource frame and contributes to the success of an organization in times of change (Bolman & Deal, 2008; M. K. Lawson, 2014).

Summary

Chapter Four included an analysis and findings of the study. Completed survey responses from the 102 respondents were compiled and used to quantitatively analyze results to reject or fail to reject the null hypothesis of the five research questions. Analysis of the data revealed no statistically significant difference in efficacy of respondents between the groups of a single- or multiframe leadership of the superintendent in times of change, between the groups reporting to each of the four single-frames of leadership, between the groups reporting to one of the four dominant multiframe leadership, between the groups reporting to a comprehensive or dominant multiframe leader, or between the groups of varying district sizes. The researcher did not conduct further analysis as no statistical significance in difference of efficacy was found among groups. An independent samples *t* test was used to determine when to reject or fail to reject each of the null hypotheses in two research questions. A one-way ANOVA was used to determine when to reject or fail to reject each of the null hypotheses in three research questions involving more than two groups. In addition, open-ended questions were analyzed to identify common themes amongst respondents to provide further insight into the perspectives of the respondents on leading change connected to the research questions. Chapter Five provides a summary and conclusion of the research study. Included in the summary and conclusion is an overview of the research with recommendations for future study within the area of self-efficacy, single- and multiframe leadership, and organizational change.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to explore the difference in self-efficacy of district leaders reporting to a single- or multiframe superintendent in times of change. To understand the difference in self-efficacy, district leaders were invited to answer questions from two surveys to determine perceived single- or multi framed leadership and personal self-efficacy. With organizational change expected by internal and external factors in school districts, the self-efficacy of district leaders reporting to the superintendent in times of change was of interest.

The review of the literature supported the need for self-efficacy and multiframed leadership, but did not provide context for the difference in self-efficacy as a result of the superintendent's multiframed leadership in change. Districts face pressures to move change in a system, but superintendents need the people of the organization to achieve results and cannot accomplish change alone (Kean & Haycock-Stuart, 2011; Kouzes & Posner, 2017). How the superintendent selects to lead change can be through a single- or multiframe approach including the political, symbolic, structural, and human resource frame (Bolman & Deal, 2008). Leaders leading through multiframes result in great success in change within the organization as it provides a comprehensive approach of many perspectives (Bolman & Deal, 2008; Phillips & Baron, 2013).

Change is pervasive in education and the craftsmanship of the leader is important in executing change. By expanding narrow, mechanical viewpoints of an individual to a system view, a leader can create navigation systems for moving toward desired outcomes

(Amos, 2018; Dinger, 2018; Phillips & Baron, 2013; Senge, 2006; Uzarski & Broome, 2019). The use of Bolman and Deal's (2008) leadership orientation of a multiframed approach in organizational change provides a view of the complex system through many lenses (Amos, 2018; Dinger, 2018; Uzarski & Broome, 2019). The four lenses provide direction, values, a sense of purpose, and an awareness of the human spirit. As a leader reframes the state of the organization through the four frames, clarity is achieved (Bolman & Deal, 2008; Dinger, 2018; Phillips & Baron, 2013). It is this comprehensive framing that is of interest as well as the difference of the self-efficacy of the district leaders reporting directly to the superintendent in times of change.

This chapter provides a summary of the methods used to collect and analyze data connected to the five research questions of this study. The purpose of this causal comparative study was to identify the difference in self-efficacy of the district leader reporting directly to a single- or multiframe superintendent in times of change. Chapter Five presents a summary of the methods and findings for each of the research questions and implications for educational and other organizational change. Chapter Five ends with the researcher's conclusion of the study. This study provided opportunity for district leaders to provide perceptions of superintendent leadership in change and reflect on personal self-efficacy during the time of change. The study attempted to reject or fail to reject the null hypothesis of the five research questions around the difference in self-efficacy of district leaders reporting to a single-framed or multiframed superintendent in times of change.

Summary of Methods

This quantitative research study was conducted after the approval of the Research Review Board of Southwest Baptist University, which occurred in July 2019. Upon approval, the researcher waited until after the start of the school year in the state of Missouri to contact district leaders reporting to the superintendent in school districts across the state. In the meantime, the researcher collected contact information for 1,044 district leaders and 500 superintendents and uploaded the e-mails to QuestionPro. The researcher used QuestionPro to disseminate the survey via e-mail to the district leaders at the onset of the research. District leaders were asked to complete a survey that included the questions from Bolman and Deal's (2008) Leadership Orientation Inventory-Other (LOI-Other) and a General Self-Efficacy Scale (GSE). Three open-ended questions were included for additional information regarding leadership during change prior to the final nine demographic questions. The quantitative data were collected and analyzed using IBM SPSS software. The researcher conducted an independent samples *t* test or a one-way ANOVA to determine statistical significance. Using this information, the researcher rejected or failed to reject the null hypothesis of each of the five research questions included in this study.

All district leaders reporting directly to the superintendent in school districts with a reporting structure in Missouri were contacted via e-mail for participation. From this request, 208 district leaders viewed the survey with 144 who started the survey by agreeing to participate. Of the 144 who agreed to participate, there were 102 completed responses. Eleven completed all but the self-efficacy portion of the survey and the remainder dropped out early. Of the 1,044 district leaders invited to participate, there

was just under a 10% completion rate, with a 20% viewing rate. Each of the 102 responses was used in analysis to answer the five research questions.

An initial window of 3 weeks was provided for participation in the survey for district leaders across the state. An e-mail reminder was sent after one week. At the end of Week 2, the researcher sent an e-mail to superintendents across the state inviting each to pass the survey on to direct reports in hopes of increasing participation of the study. Following the 2.5-week mark, the researcher sent individual e-mails to district leaders reporting directly to the superintendents inviting participation individually. Survey responses continued to trickle in over the course of another week. At the end of a 4-week window, the survey was closed and all completed survey responses were collected. Additional time was not provided for further collection.

Summary of Findings

The difference of self-efficacy in district leaders reporting to single- or multiframed superintendents in times of change was the focus of this research. While significant research has been conducted about the multiframe leadership of a leader in change and research has been conducted about self-efficacy of leaders, little research has been found about the difference of self-efficacy of district leaders reporting directly to a single- or multiframe leader in times of change. As a result of the review of literature that indicated a gap in the research, the researcher established five research questions to analyze the difference in self-efficacy of district leaders reporting directly to a single- or multiframe leader in times of change.

Upon computation of results of the survey, the researcher failed to reject the null hypothesis of each of the five research questions. There was no statistically significant

difference in efficacy of respondents in all five research questions. In fact, the variation in efficacy of all 102 responses was minimal as the range of efficacy scores was between 30-40 for 93% of the respondents. The score of 40 is the top possible score on the General Self-Efficacy Scale. This low variation indicated a high level of self-efficacy in all respondents regardless of the single- or multiframe leadership of the superintendent in times of change. This may be a result of the belief that serving at a high level of leadership is a tough job that requires confidence. This confidence results in high levels of self-efficacy that is not reliant upon superintendent leadership through the four frames presented by Bolman and Deal (2008). The researcher did provide a simple qualitative analysis by examining the responses from the participants in three open-ended questions to elevate categories and themes. Categorical data and common themes were shared for further context to leadership during educational change.

In the following sections, an in-depth interpretation, analysis, and synthesis of the results of this study are shared. Noted previously was the emergent pattern that efficacy was generally high in those that completed the survey with little difference regardless of the perceived single- or multiframe leadership of the superintendent in times of change. As noted in the literature, a multiframe leader gains greater system perspective to achieve intended outcomes and influence efficacy than a single-frame leader (Amos, 2018; Bolman & Deal, 2008; Dinger, 2018; Ford, 2012; Rice & Harris, 2003; Phillips & Baron, 2013; Uzarski & Broome, 2019). The impact that each frame has on the efficacy of individuals in the organization indicates that behaviors by the leader in times of change within each of the four frames provide opportunity to influence efficacy of the followers (Azah, 2014; Bolman & Deal, 2008; Heath & Heath, 2010). The findings in this study

would indicate that efficacy could be influenced by the many frames of leadership in change resulting in no statistically significance difference among the different approaches in which superintendents lead change. This interpretation of the findings was not anticipated when the study was first described as the review of literature points to a multiframe leader having greater success in times of change than a single-frame leader, assuming differences in self-efficacy of the followers would be exposed.

As noted in previous chapters, a limitation to this study included a cross-sectional survey design causing district leaders to be surveyed at a single point in time and not when each was experiencing significant change led by the superintendent as a single- or multiframe leader. As a result, perceptions of leadership through change may have varied depending on the time of the school year or tenure of a superintendent resulting in efficacy scores with low variance. Other limitations were the opportunity for skewed results as self-reporting on behavior stems from individual perceptions may not have been others' realities and a bias may have existed in self-reporting efficacy accurately.

Research Questions

The following research questions as a result of the gap in literature guided this study:

1. What are the differences in self-efficacy of a district leader working under the direction of a single-framed or multiframe superintendent leading change?
2. What are the differences in self-efficacy of a district leader working under the direction of each of the four types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame)?

3. What are the differences in self-efficacy of a district leader working under the direction of each of the four dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame)?
4. What are the differences in self-efficacy of a district leader working under the direction of a comprehensive multiframed leader and dominant multiframed superintendent leading change?
5. What are the differences in self-efficacy of a district leader working in a district that falls in the categories of the following size: very small, small, medium, and large?

Null Hypotheses

In an attempt to answer the research questions set forth in this study, the following null (H_0) hypotheses were investigated:

1. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived single-framed or multiframed superintendent leading change.
2. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived types of single-framed superintendents leading change (symbolic, political, structural, and human resource frame).
3. H_0 : There will be no statistically significant differences of a district leader working under the direction of each of the four perceived dominant frames of multiframed superintendents leading change (symbolic, political, structural, and human resource frame).

4. H_0 : There will be no statistically significant differences of a district leader working under the direction of a perceived comprehensive multiframed leader and dominant multiframed superintendent leading change.
5. H_0 : There will be no statically significant difference of self-efficacy of district leaders among very small, small, medium, and large districts.

Research Question 1 Conclusions: Self- Efficacy and Single- or Multiframed Leadership

This section provides an in-depth interpretation, analysis, and synthesis of the results and findings of Research Question 1. To understand the difference in self-efficacy of a district leader reporting to a single- or multiframed leader, the results of the survey were calculated to categorize the perception of the superintendent's leadership into a single-framed or multiframed superintendent in times of change. An independent samples t test was run to determine if a statistically significant relationship ($p < .05$) was identifiable. Data revealed a p -value of .738. The efficacy of leaders reporting to a single-frame leader ($M = 34.16$, $SD = 3.680$) was less than the efficacy of leaders reporting to a multiframe leader ($M = 34.78$, $SD = 3.561$) but the mean values were nearly the same. Thus, there was no statistically significant difference in responses of efficacy from a single-framed to multiframed superintendent in times of change.

The information gleaned from the self-efficacy scale of the district leader in times of superintendent-led change indicated that district leaders directly reporting to the superintendent held a high level of self-efficacy regardless of single- or multiframe leadership in change. Of the 102 respondents, 93% rated self-efficacy in the range of 30-40 points of 40 possible points. In the case of this specific research question, a mean

score in the range of 34 with the highest possible total of 40 indicated that district leaders held positive emotion, optimism, and work satisfaction, as a higher score indicated more self-efficacy (Schwarzer & Jerusalem, 1995). Therefore, the researcher did not find a statistically significant difference in self-efficacy between the two groups as there was no variance in the dependent variable of the study.

As noted previously in this study, a multiframe leader gains greater system perspective to achieve intended outcomes than a single-frame leader (Amos, 2018; Bolman & Deal, 2008; Dinger, 2018; Ford, 2012; Rice & Harris, 2003; Phillips & Baron, 2013; Uzarski & Broome, 2019). The impact that each frame has on the efficacy of individuals in the organization indicates that behaviors within each of the four frames provide opportunity to influence efficacy (Azah, 2014; Bolman & Deal, 2008; Heath & Heath, 2010). Therefore, it is possible that the single or combination of leader behaviors among the four frames has similar impact on the efficacy of those reporting directly to the superintendent, resulting in similar efficacy scores among individuals reporting to a single- or multiframe superintendent in times of change. Efficacy is enhanced through mastery experiences, vicarious experiences, verbal persuasion, and the affective state of the individual (Bandura, 1997). In each of the four frames of leadership, the four energy sources could be influenced by decisions in moving change, resulting in similar efficacy scores despite single- over multiframe leadership. This possibility could contribute to the absence of statistically significant differences in efficacy between a single- or multiframe leader as efficacy is consistent among leaders reporting directly to a superintendent, which would indicate that energy sources are present regardless of the frame leadership of the superintendent.

Research Question 2 Conclusions: Self-Efficacy and the Four Single-Framed Leadership

This section provides an in-depth interpretation, analysis, and synthesis of the results and findings of Research Question 2. To understand the difference in self-efficacy of a district leader reporting to a superintendent that leads with any one of the four single-frames in times of change, the results of the survey were calculated to categorize the perception of the superintendent's leadership into a single-framed leader through the symbolic, political, structural, or human resource frame in times of change. A one-way ANOVA was run to determine if a statistically significant relationship ($p < .05$) was identifiable among the four types of single-frame leadership orientations. Data revealed a p -value of .366. Thus, there was no statistically significant difference in self-efficacy in the responses reporting to a symbolic, political, structural, or human resource single-framed superintendent in times of change. Efficacy of district leaders reporting to single-frame superintendents in times of change increased from those reporting to a political single-frame leader ($n = 11, M = 32.82, SD = 5.307$), to those reporting to a structural single-frame leader ($n = 9, M = 34.33, SD = 2.068$), and to those reporting to a human resource single-frame leader ($n = 17, M = 34.59, SD = 2.938$), in that order. Due to a single response of a district leader reporting to a single-frame superintendent leading through the symbolic frame, that frame has been omitted from the data, as the self-efficacy score was constant. The range of the mean of self-efficacy between the three different single-frame leadership approaches was less than 2 points.

Again, the information gleaned from the self-efficacy scale of the district leader in times of superintendent-led change indicated that district leaders directly reporting to the

superintendent held a high level of self-efficacy regardless of the four types of single-frame leadership in change. Very little variance existed in the self-efficacy scores of those reporting to a single-frame leader. Therefore, the researcher did not find a statistically significant difference in self-efficacy among the four groups, as there was little variance in the dependent variable of the study.

As noted previous in this study, a single frame leader may cling to preferred frames while ignoring others, creating blinders and decreasing effectiveness (Bolman & Deal, 1991; Phillips & Baron, 2013; Uzarski & Broome, 2019). Therefore, it is possible to expect decreases in efficacy of those reporting to a single-frame leader in times of change yet the research in this study found that self-efficacy does not show variance among the four frames of single-frame leadership. Similar efficacy scores were found among individuals reporting to a structural, political, symbolic, or human resource single-frame leader in times of change. Efficacy was enhanced through mastery experiences, vicarious experiences, verbal persuasion, and the affective state of the individual (Bandura, 1997). These sources of efficacy may be present for those reporting directly to the superintendent regardless of the frame that is prioritized in times of change. This possibility could contribute to the absence of statistically significant differences in efficacy between a single- or multiframe leader as efficacy is consistent among leaders reporting directly to a superintendent, which would indicate that energy sources are present regardless of approaching to framing change. This possibility contradicts the research in which it is stated that high craftsmanship and understanding of the individual parts and whole of the system by being a multiframe leader in change result in differences from a single-framed leader who may notice the following: less persistence to

overcome challenges, increased uncertainty in desired outcomes, and decreased resources to access, leading to inferior outcomes and decreased efficacy (Costa & Garmston, 2016; Ford, 2012; Phillips & Baron, 2013).

Research Question 3 Conclusions: Self-Efficacy and the Four Multiframed Leadership

This section provides an in-depth interpretation, analysis, and synthesis of the results and findings of Research Question 3. To understand the difference in self-efficacy of a district leader reporting to each of the four frames of a dominant multiframed leader, the results of the survey were calculated to categorize the perception of the superintendent's leadership into a dominant multiframed leader leading dominantly through the symbolic, political, structural, or human resource frame. A one-way ANOVA was run to determine if a statistically significant relationship ($p < .05$) was identifiable. Data revealed a p -value of .402. Thus, there was no statistically significant difference in self-efficacy of district leaders reporting to a dominant multiframed leader in times of change. Efficacy of district leaders reporting to multiframe superintendents in times of change increased from those reporting to a human resource dominant multiframe leader ($n = 18, M = 33.67, SD = 4.459$), to those reporting to a political dominant multiframe leader ($n = 15, M = 35.20, SD = 3.212$), to those reporting to a structural dominant multiframe leader ($n = 15, M = 35.40, SD = 2.898$), and to those reporting to a symbolic dominant multiframe leader ($n = 12, M = 35.58, SD = 2.778$), in that order. The range of the mean of self-efficacy between the four different dominant multiframe leadership approaches was also less than 2 points.

In the case of the multiframe leader using one of the frames as a dominant frame, the self-efficacy scale of the district leader in times of superintendent-led change indicated that district leaders directly reporting to the superintendent held a high level of self-efficacy regardless of the four dominant frames a leader might select as a multiframe leader in change. Very little variance existed in the self-efficacy score of those reporting to a multiframe leader. Therefore, the researcher did not find a statistically significant difference in self-efficacy among the four groups, as there was limited variance in the dependent variable of the study.

As noted previously in this study, it is important to know that organizations are always in motion, so continuous reframing provides insight as to how to steer the ship effectively to achieve the desired outcome by looking beyond a preferred or limited frame (Bolman & Deal, 2008; Dinger, 2018). The approach of reframing influences self-efficacy through experiences for all involved in the change (Bolman & Deal, 2008; Costa & Garmston, 2016). With a gap in literature regarding how multiframe leadership impacts self-efficacy, the results of this study add perspective that multiframe leaders yield little to no difference in self-efficacy of the follower in times of change despite the strongest frame used to lead. Therefore, it is not important for leaders to lead change through a specific frame as a multiframe leader, as self-efficacy scores show little variance. A statistically significant difference among the structural, political, symbolic, or human resource frame in multiframeing in change was not found.

The results of the open-ended questions in this study confirm the findings that each of the four frames of leadership has benefit to moving change and may impact efficacy similarly. In the question asking about actions of the superintendent that

contribute to success in change, patterns surfaced in many areas. These areas included the need for communication and clarity in roles and responsibilities, to attend to the political elements of education, to support and encourage the people of the organization, and to be a visionary. Each of these behaviors connects to one of the four frames respectively: structural, political, human resource, and symbolic. The perspectives from the open-ended question provide additional understanding as to why no statistically significant difference in self-efficacy was found in this study as each frame provided opportunity to build efficacy.

Research Question 4 Conclusions: Self-Efficacy and Comprehensive or Dominant Multiframed Leadership

This section provides an in-depth interpretation, analysis, and synthesis of the results and findings of Research Question 4. To understand the difference in self-efficacy of a district leader reporting to a comprehensive or dominant multiframed leader in times of change, the results of the survey were calculated to categorize the perception of the superintendent's leadership into multiframed leaders and then analyzed for dominant frames that surface. An independent samples *t* test was run to determine if a statistically significant relationship ($p < .05$) was identifiable. Data revealed a *p*-value of .379. Thus, there was no statistically significant difference in responses of efficacy from a comprehensive to dominant multiframed leader in times of change. The efficacy of leaders reporting to a comprehensive multiframe leader ($M = 33.00$, $SD = 6.083$) was less than the efficacy of leaders reporting to a dominant multiframe leader ($M = 34.78$, $SD = 3.452$). The range of the mean of self-efficacy between the two groups in this research question was less than 2 points.

Whether a superintendent led with a comprehensive multiframe style or a dominant multiframe style, the efficacy of the district leader reporting directly to the superintendent remained at a high level. Very little variance existed in the self-efficacy score of those reporting to a multiframe leader. Therefore, the researcher did not find a statistically significant difference in self-efficacy between the two groups reporting to a multiframe superintendent in times of change.

As noted previously in this study, organizations are always in motion, so continuous reframing through the four frames provides insight as to how to steer change effectively to achieve the desired outcome (Bolman & Deal, 2008; Dinger, 2018). With a gap in literature around comprehensive or dominant multiframe leadership and self-efficacy, the results of this study add perspective that self-efficacy was high in cases of multiframe leaders regardless of the strongest frame used to lead. When there is balance among the four frames in leadership decision making, and one frame surfaces as the dominant frame, the self-efficacy of the followers maintains a consistent level. This consistency indicates that autonomy of how to lead through the frames does not hamper self-efficacy of the followers. As noticed in the open-ended questions, participants confirmed the autonomy of how to lead through the frames as prioritizing people, developing a vision, focusing on the political layers, and creating a structure for success so the work gets done are all patterns in the question regarding how interactions with the superintendent have change perspectives on leading change. Each of these patterns connects to one of the four frames of leadership in change and was noticed by those surveyed in this study, supporting behavior within the frames to be important to moving change.

Research Question 5 Conclusions: Self-Efficacy and District Size

This section provides an in-depth interpretation, analysis, and synthesis of the results and findings of Research Question 5. To understand the difference in self-efficacy of a district leader reporting to a very small, small, medium, or large school district, the results of the survey were calculated to categorize the self-efficacy of district leaders due to district size. A one-way ANOVA was run to determine if a statistically significant relationship ($p < .05$) was identifiable. Data revealed a p -value of .422. Thus, there was no statistically significant difference in responses of efficacy regardless of very small (serving less than 500 students), small (serving 500 and less than 2,000 students), medium (serving more than 2,000 and less than 10,000 students), and large (serving 10,000 or more students) school districts in the state of Missouri. Efficacy of district leaders increased from those in a large district ($n = 13$, $M = 33.69$, $SD = 5.483$), to those employed in a very small district ($n = 24$, $M = 34.25$, $SD = 2.707$), to those employed in a small district ($n = 36$, $M = 34.33$, $SD = 3.825$), and to those in a medium district ($n = 29$, $M = 35.43$, $SD = 2.873$), in that order. Again, the range of the mean of self-efficacy scores among the four groups was less than 2 points.

Whether the district in the state of Missouri was very small, small, medium, or large, the efficacy of the district leader reporting directly to the superintendent remained at a high level. Very little variance existed in the self-efficacy score of those reporting across the four district sizes in the state. Therefore, the researcher did not find a statistically significant difference in self-efficacy among the four district sizes.

In the case of self-efficacy, it is essential to move beyond fear and avoidance to resourcefulness, optimism, confidence, and persistence to make the difference for all

involved in times of change (Abusham, 2010; Azah, 2014; Costa & Garmston, 2016). A key outcome of high self-efficacy includes goal achievement, the core of school reform efforts (M. K. Lawson, 2014; McCollum & Kajs, 2009; McCormick et al., 2002; Perez, 2018). High levels of self-efficacy have a substantial impact on personal and collective achievement, which are important to positive movement in school change initiatives (Costa et al., 2014; Donohoo & Katz, 2017; Horton, 2013; Le, et al., 2018; Macaluso, 2018; Machida-Kosuga, et al., 2017; McCormick et al., 2002; Wilson, 2014). Therefore, the interest in district size and self-efficacy of the follower in times of change was the focus of this research question. A gap in research was present regarding how district size impacts efficacy of the followers. This study provides evidence that self-efficacy of district followers working within a very small, small, medium, or large school district did not show great variance. Therefore, district size does not impact the self-efficacy of the follower in a statistically significant manner. While no statistical significance was found, suggestions for further study based on what was seen are identified below.

Professional Implications

This study aimed to understand the difference in self-efficacy of district leaders reporting directly to the superintendent in public schools in Missouri. Knowing educational leaders are asked to lead change across public school systems in the state of Missouri, it was of interest how leadership in change can influence differences in self-efficacy. Leading through change can be done in a single- or multiframed approach from the work of Bolman and Deal (2008). Through quantitative data from this study, it is evident that the decisions made that lead through single- or multiframed approaches do not necessarily result in differences in self-efficacy of those reporting directly to the

superintendent leading change. In the case of this specific study, the self-efficacy of district leaders reporting directly to the superintendent was high across the board, indicating favorable emotion, dispositional optimism, and work satisfaction in statewide district leaders (Schwarzer & Jerusalem, 1995). Evidence from the data suggests that the General Self-Efficacy Scale, designed for the general adult population, does not elevate a wide range of self-efficacy in individuals who have been selected as district leader in public school systems.

As the literature review suggests, both self-efficacy and multiframe leadership are essential elements of leadership in order to effectively move change in public schools. Based on the results of this study, the self-efficacy of district leaders is not dependent on whether or not a district leader is reporting to a single- or multiframe superintendent in times of change. In addition, if a superintendent leads by a single-frame or a multiframe, the frame selected as the dominant frame does not bear weight on the efficacy of the direct follower. Furthermore, should a superintendent lead with a multiframe approach, whether a balanced multiframe leader or a dominant multiframe approach, the self-efficacy of the follower will not be influenced. Finally, district size does not impact the self-efficacy of the district leader reporting to the superintendent in times of change either.

Knowing that all of the respondents of this study hold top district positions that can be tough, high levels of confidence are required. This confidence in self-efficacy comes regardless of the leadership of the superintendent. Using the human resource frame to hire well and then clearly establishing roles through the structural frame, district leaders are entrusted to represent the work of the superintendent with little or no

oversight as the superintendent focuses on his or her responsibilities. This, in turn, requires high levels of self-efficacy without reliance on the superintendent to build this capacity. With 92 respondents indicating *very involved* or *involved* in recent district change, the data suggests district leaders were empowered in change and showed high levels of efficacy. Therefore, those highly engaged in change don't necessarily rely on the superintendent's frame of leadership to influence practice with confidence being influenced by other factors.

For those in the education field, the findings of this study will not influence decisions about how to lead as a single- or multiframe if trying to support the self-efficacy of the district leaders directly reporting to the leader. What this study does confirm is that self-efficacy is evident in district leaders reporting directly to the superintendent, yet may not be a result of a specific single frame on behalf of the superintendent when framing the system through change. It may be a result of position, degree of involvement in change, or other unidentified factors not included in this study. Decisions made in any of the four frames during change result in self-efficacy of the followers. The open-ended questions provided additional perspective on what district leaders reporting to the superintendent learn from leaders who move change. Themes surface around the importance of being a leader who is collaborative, provides clarity in role and responsibility, is communicative, and is focused on the human element of the organization. In addition, it was noted that developing a collective vision is critical to change, otherwise the vision of a single person results in leadership in name only. As these things are developed through the four frames of leadership, a strong leadership team

is built that can allow for relinquishment of power and decision-making of the superintendent to the district leader to move a system positively through change.

For the individuals that report directly to the superintendent, the findings of this study indicate that self-efficacy is evident in leading change, but it is not a result of the specific way in which the superintendent leads change. There is more to self-efficacy than the factors of single-and multiframe leadership, and self-efficacy is evident in those at a high level of leadership in a school district likely due to the confidence needed to serve at the top level of leadership. The open-ended questions provide context for what is learned by superintendent leadership in times of change. Being a collaborative leader who is focused on the vision while prioritizing the human layers within and beyond the organization help to move a system through change. As the follower, being in communication with the leader, focusing on the human side of the organization, asserting politically as necessary, and helping individuals to accomplish assigned roles are lessons learned from interacting with the superintendent. These lessons align to the four frames of leadership on part of a leader during change.

Beyond education, this study affirms that self-efficacy is present in those that report directly to the leader regardless of the way in which change is led through the four frames. Decisions regarding change leadership made through the structural, political, symbolical, or human resource frame yield a similar value of self-efficacy in the follower; therefore, a leader who chooses action within the four frames results in high levels of self-efficacy of the follower. The culture of high efficacy results in increased motivation and persistence, decreased blame place on others, increased resiliency, clarity in thinking under pressure, and goal achievement (M. K. Lawson, 2014; McCollum &

Kajs, 2009; McCormick et al., 2002; Perez, 2018). In addition, high levels of self-efficacy have been found to have substantial impact on achievement and satisfaction within the organization, making self-efficacy a desirable concept in the individuals of the organization in times of change (Costa et al., 2014; Horton, 2013; Macaluso, 2018; McCormick et al., 2002; Wilson, 2014).

As a result of the conclusion of this research, leaders should be mindful of the importance of self-efficacy in leading. As the literature review suggests, efficacy cannot be mandated, but nurtured through energizing sources and experiences (Bandura, 1997; McCormick et al., 2002; Pujol, 2013). High self-efficacy moves individuals toward resourcefulness, optimism, confidence, and persistence to make a difference for all in the organization (Abusham, 2010; Azah, 2014; Costa & Garmston, 2016). In addition, high levels of efficacy have a substantial impact on personal and collective achievement needed to move a system positively forward (Costa et al., 2014; Donohoo & Katz, 2017; Horton, 2013; Le et al., 2018; Macaluso, 2018; Machinda-Kosuga et al., 2017; McCormick et al., 2002; Wilson, 2014). It is leading an organization through a multiframe approach that provides a navigation system for moving change forward toward the desired outcome (Amos, 2018; Dinger, 2018; Phillips & Baron, 2013; Senge, 2006; Uzarski & Broome, 2019). Knowing what the literature suggests, both self-efficacy and a multiframe approach are keys to change in a system but one is not dependent on the other.

Recommendations for Future Research

The following recommendations for future research will add to the field of educational research in the area of leadership in change or the efficacy of those involved:

1. As a result of two demographic questions in this study about number of years in current leadership position and number of years reporting to the current superintendent, further research on self-efficacy could include the difference of self-efficacy between leaders who have been hired by the current superintendent and leaders who have inherited a superintendent.
2. As a result of the absence of demographic questions included in this study requesting the role of the respondents, this study could be replicated with the addition of the reporting of the district leader position such as principal, associate or deputy superintendent, or chief officer allowing for disaggregation of data based upon leadership role directly reporting to the superintendent.
3. Replication of this study could occur using any followers in education reporting to a site or district leader using single- or multiframe leadership in times of change. This would expand the possible participants beyond the direct reports to the superintendent to expose any differences in self-efficacy and multiframe leadership based on different roles held in public education.
4. Replication of this study could occur measuring the collective efficacy of an organization rather than the self-efficacy of an individual reporting directly to a single- or multiframe superintendent.
5. Replication of this study could occur focusing on the subscale categories in the Leadership Orientation-Other survey rather than the single- or multiframe approach of the leader.
6. Future research could be conducted about the difference in self-efficacy of district leaders and Bolman and Deal's (2008) Leadership Orientation Inventory of the

district leader instead of the superintendent. This would require the use of the LOI instead of the LOI-Other.

7. A replication of this study with a new self-efficacy scale could be conducted. While the General Self-Efficacy Scale used in this study has high reliability and validity, it did not prove to show variance in self-efficacy scores of district leaders reporting directly to the superintendent.
8. Given the demographics provided in this study, further research could analyze gender, years of experience, or the RPDC of the district leader and the difference in self-efficacy of district leaders reporting to single- or multiframe leaders in times of change.
9. Future research could measure the longevity of district leaders reporting to single- or multiframe leaders in times of change.
10. Using the cross tabulations of this study, differences in self-efficacy as a result of location to the superintendent or level of education in reporting to a single- or multiframe superintendent could be run.

Conclusions

The purpose of this causal comparative perceptual study was to determine the difference of efficacy in district leaders reporting to a single- or multiframe leadership in times of change. In addition, the researcher analyzed data for differences in efficacy as a result of leading by a single frame or by a dominant multiframe in change and by district size of the district leader. Participants in this study included district leaders directly reporting to the superintendent across the state of public school systems in Missouri. To be included, the district had to have a reporting structure that included a direct report to

the superintendent. The survey was accessible to 1,044 district leaders across the state via a link provided by QuestionPro embedded in an e-mail. The qualitative results of this survey provided the researcher clarity in any differences in self-efficacy as a result of a single- or multiframe superintendent in times of change. For each of the five research questions, the researcher used an independent samples *t* test or one-way ANOVA to determine if statistically significant differences in self-efficacy were evident. Chapter Five described the conclusions of the research, implications of the study, and recommendations for future studies.

Research previous to this study revealed that multiframe leadership and self-efficacy are both important to moving a system through change. Researchers noted that people who lead through a multiframe leadership orientation with followers holding high self-efficacy are often more committed to school reform that resulted in goal attainment (Costa et al., 2014; DeWitt, 2015; McCormick et al., 2002). With self-efficacy being essential to organizational success, it is important to know how leadership influences efficacy (Abusham, 2010; Azah, 2014; Bandura, 1997; Ford, 2012; Murphy & Johnson, 2016; Nowack, 2017; Pujol, 2013). Results from this study indicate that self-efficacy is not dependent on the leadership decisions to lead through a specific single- or multiframe.

As a result of this study, differences in self-efficacy were not exposed in the district leaders reporting directly to a single- or multiframe superintendent in times of change. While there is confirmation that self-efficacy is evident in district leaders at top leadership levels, there were no statistically significant differences exposed in the research as a result of how the superintendent leads. Nor were differences exposed as a

result of the size of the district. A research gap continues in how self-efficacy of the follower is influenced by the decisions of the leaders in change. Knowing that efficacy is fueled by the energy sources of mastery experience, vicarious experiences through observation, verbal persuasion, and the emotional and physiological states of the individual, the results of this study indicate that the energy sources of efficacy are not impacted in different ways as a result of the frame of leadership of the superintendent (Bandura, 1997). This gap may provide opportunity for further exploration as to what does result in self-efficacy differences in leadership.

Findings from this study provide new insight that district leaders hold high levels of self-efficacy in times of change regardless of leadership framing or district size. This information will be helpful to educational leaders when doubting leadership decisions of framing by the superintendent. Recognizing that self-efficacy is not a result of the specific framing of another person should help individuals recognize that success can still be achieved through high levels of efficacy despite beliefs of ineffective leadership decisions on the part of the superintendent framing an organization.

In fact, it is the partnership between the leaders and the followers that helps to transform a system in change (Bass & Bass, 2008; Bass & Riggio, 2006; Burns, 1978). Collaborative efforts allow multiple perspectives to surface and influence change (Bass & Bass, 2008). In the case of each of Bolman and Deal's (2008) frames of leadership, there is expectation of collaborative efforts structurally, politically, symbolically, and in human resources. Therefore, it may be the approach of being collaborative that results in differences of self-efficacy of the district leader reporting directly to the single- or multiframe superintendent leading change. As a result, additional research in the area of

self-efficacy and leadership decisions must be conducted to provide clarity on what leaders do to impact the self-efficacy of individuals within an organizational change as school districts will continue to meet the demand for change from internal and external factors (Cobanoglu & Yurek, 2018; Kotter, 2014; Main, 2017; Owens & Balesky, 2007; Thompson, 2016; Weston et al., 2017).

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APPENDICES

Appendix A

Informed Consent to District Leader to Conduct Research

You are being asked to participate in a Southwest Baptist University Institutional (Research) Review Board approved research study conducted by Martha Doennig, from Southwest Baptist University. The result of this study will contribute to the fulfillment of requirements for an EdD in Educational Leadership. You may participate in this research study if you serve in the capacity of a district leader that directly reports to the superintendent in a public school system in the state of Missouri.

By clicking on the survey link, you are giving consent to participating in this research project and understand the following:

Purpose of the study

This research involves gathering data via an online survey through Question Pro. The survey is compiled of two surveys: The Leadership Orientation Inventory-Other and the General Self-Efficacy Scale. The two surveys embedded in this link will provide data to look at the statistical significance, if any, of the difference of district leader self-efficacy in times of change between being led by a single-framed or multiframed superintendent. The data will be collected for analysis and sharing. Participants must be a minimum of 18 years of age and currently hold a public school district leadership position that directly reports to the superintendent. Participants should define change as “the process of making, becoming, or causing something to be different” (Rodd, 2015). The participant should consider the most recent significant change led by the superintendent when answering the questions in the survey.

Purpose

The purpose of this study is to identify the difference, if any, of the self-efficacy of the district leaders directly reporting to a multiframed or single-framed superintendent in times of change. Open-ended and demographic questions will provide additional layers for analysis including gender and tenure.

Selection and Sampling

Participation in this research project is entirely voluntary. District leaders were purposively selected across the nine Missouri Regional Professional Development Centers (RPDC). All individuals invited to participate in the surveys for research are welcome to refuse to answer any questions or withdraw from the study at any time, without any penalty.

Procedures

District leaders directly reporting to the superintendent will receive an e-mail that includes an invitation and link to the online survey. The invitation to participate will go to a minimum of one district follower that reports to the superintendent directly in public school districts across the state of Missouri. Private and charter school districts will not

be contacted to participate in this study, as factors influencing change in those settings may skew the data.

This study seeks to identify the difference in self-efficacy between the follower of single-frame and multiframe superintendent leadership in times of change. Therefore, participants completing the survey will need to answer the two online surveys through the lens of change experienced under current superintendent leadership. Participants who elect to answer both surveys are eligible for Amazon gift card drawings of \$25 by submitting the participant name via a form not connected to the online surveys. Participants may also request the findings of the study found in chapter five by contacting the researcher via e-mail.

Study Commitment

Participation in this study should take the participants less than 10 minutes to complete. No further involvement will be necessary upon completion of the two surveys. Participants may request to receive a copy of the findings of the study when complete should there be interest.

Confidentiality and Anonymity

Both confidentiality and anonymity is guaranteed through participation in this study. While your survey responses do included demographic questions and identifying Regional Professional Development Centers (RPDC), there are no other data collected to isolate a survey response to a specific participant. Should those involved in the study wish to be entered into a drawing for Amazon gift cards, names will be submitted independent of the online surveys. The surveys will be administered via Question Pro, which is a secure, password protected system that keeps the data safe and confidential. Data will be reported in accumulation, not isolation.

Risks

This study does not pose any risk to participants greater than those experienced on a daily basis.

Benefits

Participation in this research project will provide information to educational leaders involved in change. District leaders will learn about self-efficacy in times of change when reporting to a single-framed superintendent or a multiframe superintendent using Bolman and Deal's (2008) four frames of leadership in organizational change. In addition, district leaders reporting to superintendents may gain insight into the benefits of self-efficacy in movement of educational reform. Finally, district leaders gain perspective on how to lead change for the greatest difference in self-efficacy of those directly reporting to the leader.

Your assistance in gathering research for this study is greatly appreciated. Understanding the difference in self-efficacy as a result of single- and multiframe leadership may help to understand how to focus efforts in significant times of change to create significant impact. If you have questions regarding this study, please contact me at (417) 827-5359

or s759355@sbuniv.edu. You may also contact my Faculty Advisor, Dr. Lee Skinkle, at (417) 328-1601.

Sincerely,
Martha Doennig, Doctoral Candidate
Southwest Baptist University

Appendix B

Research Review Board



Southwest Baptist University

The Courts Redford College of Theology and Ministry

July 20, 2019

Martha Doennig

Re: The Difference in District Leader Self-Efficacy Between Single-Frame and Multi-Frame Leadership in the Superintendent

Dear Martha,

On July 20, 2019, the RRB completed a review of your application and supporting documents for the above named research proposal. The Research Review Board (RRB) for Southwest Baptist University has determined that the proposed research project meets the criteria for Exempt status as per policy I . 15.3 in the faculty guidelines. As per the above policy "If the project is certified exempt, the principle investigator need not resubmit the project for continuing RRB review as long as there are no modifications in the exempted procedures." Therefore, the project has been approved and work on the project may begin.

If any modifications to the exempted procedures are made, the RRB will need to complete a new review of the changes to determine if the project remains Exempt or if further review is necessary.

Congratulation on the approval of your project and we wish you the best. If you have any questions regarding the RRB's decision, please contact me at 417-328-1742.

Sincerely,

A handwritten signature in black ink, appearing to read "Duke Jones".

Duke Jones, Ph.D.
Southwest Baptist University
Research Review Board, Chairman

Appendix C

Leadership Orientation Inventory-Other

This questionnaire asks you to describe your superintendent in terms of leadership and management style during the most recent time of change.

I. Leader Behaviors

You are asked to indicate *how often* each item is true of the person that you are rating. Please use the following scale in answering each item.

1 = Never 2 = Occasionally 3 = Sometimes 4 = Often 5 = Always

So, you would answer '1' for an item that is never true of the person you are describing, '2' for one that is occasionally true, '3' for one that is sometimes true, and so on.

Be discriminating! The results will be more helpful to the ratee if you think about each item and distinguish the things that the ratee really does all the time from the things that s/he does seldom or never.

1. _____ *Thinks very clearly and logically.*
2. _____ *Shows high levels of support and concern for others.*
3. _____ *Shows exceptional ability to mobilize people and resources to get things done.*
4. _____ *Inspires others to do their best.*
5. _____ *Strongly emphasizes careful planning and clear time lines.*
6. _____ *Builds trust through open and collaborative relationships.*
7. _____ *Is a very skillful and shrewd negotiator.*
8. _____ *Is highly charismatic.*
9. _____ *Approaches problems through logical analysis and careful thinking.*
10. _____ *Shows high sensitivity and concern for others' needs and feelings.*
11. _____ *Is unusually persuasive and influential.*
12. _____ *Is an inspiration to others.*

13. _____ *Develops and implements clear, logical policies and procedures.*
14. _____ *Fosters high levels of participation and involvement in decisions.*
15. _____ *Anticipates and deals adroitly with organizational conflict.*
16. _____ *Is highly imaginative and creative.*
17. _____ *Approaches problems with facts and logic.*
18. _____ *Is consistently helpful and responsive to others.*
19. _____ *Is very effective in getting support from people with influence and power.*
20. _____ *Communicates a strong and challenging vision and sense of mission.*
21. _____ *Sets specific, measurable goals and holds people accountable for results.*
22. _____ *Listens well and is unusually receptive to other people's ideas and input.*
23. _____ *Is politically very sensitive and skillful.*
24. _____ *Sees beyond current realities to create exciting new opportunities.*
25. _____ *Has extraordinary attention to detail.*
26. _____ *Gives personal recognition for work well done.*
27. _____ *Develops alliances to build a strong base of support.*
28. _____ *Generates loyalty and enthusiasm.*
29. _____ *Strongly believes in clear structure and a chain of command.*
30. _____ *Is a highly participative manager.*
31. _____ *Succeeds in the face of conflict and opposition.*
32. _____ *Serves as an influential model of organizational aspirations and values.*

II. Leadership Style

This section asks you to describe the leadership style of the person that you are rating. For each item, give the number "4" to the phrase that best describes this person, "3" to the item that is next best, and on down to "1" for the item that is least like this person.

1. The individual's strongest skills are:

- a. *Analytic skills*
- b. *Interpersonal skills*
- c. *Political skills*
- d. *Ability to excite and motivate*

2. The best way to describe this person is:

- a. *Technical expert*
- b. *Good listener*
- c. *Skilled negotiator*
- d. *Inspirational leader*

3. What this individual does best is:

- a. *Make good decisions*
- b. *Coach and develop people*
- c. *Build strong alliances and a power base*
- d. *Energize and inspire others*

4. What people are most likely to notice about this person is:

- a. *Attention to detail*
- b. *Concern for people*
- c. *Ability to succeed in the face of conflict and opposition*
- d. *Charisma*

5. This individual's most important leadership trait is:

- a. *Clear, logical thinking*
- b. *Caring and support for others*
- c. *Toughness and aggressiveness*
- d. *Imagination and creativity*

6. This person is best described as:

- a. *An analyst*
- b. *A humanist*
- c. *A politician*
- d. *A visionary*

III. Overall rating

Compared to other individuals that you have known with comparable levels of experience and responsibility; how would you rate this person on:

1. Overall effectiveness as a **manager**.

1 2 3 4 5
Bottom 20% Middle 20% Top 20%

2. Overall effectiveness as a **leader**.

1 2 3 4 5
Bottom 20% Middle 20% Top 20%

IV. Open Ended Responses

1. What actions by the superintendent contributed to your success in change?
2. How has your interaction with your superintendent changed the way you view educational leadership?
3. How do your everyday realities concerning your superintendent match up to your initial expectations regarding organizational change?

V. Background Information

1. Are you: Male Female
2. How many years have you been in your current leadership position? _____
3. How many years have you reported to your current superintendent? _____
4. What is the size of the district you serve? Very small (less than 500 students), Small (more than 500 but less than 2,000 students), Medium (more than 2,000 students but less than 10,000 students), and Large (10,000 students or more)
5. Which Regional Professional Development Council in the state of Missouri does your district belong? Select from one of the following:
6. To what degree have you been involved in recent district change? Very involved, involved, little involvement, or no involvement.
7. How many years have you been in education?
8. What is your level of education?
9. What is your proximity to the superintendent? Office location in the same building as the superintendent. Office location not located in the same building as the superintendent.

Appendix D

Permission to Use General Self-Efficacy Scale



Freie Universität Berlin, Gesundheitspsychologie (PF 10),
Habelschwerdter Allee 45, 14195 Berlin, Germany

Fachbereich Erziehungs-
wissenschaft und Psychologie
- Gesundheitspsychologie -

Professor Dr. Ralf Schwarzer
Habelschwerdter Allee 45
14195 Berlin, Germany

Fax +49 30 836 55634
health@zedat.fu-berlin.de
www.fu-berlin.de/gesund

Permission granted

to use the General Self-Efficacy Scale for non-commercial research and development purposes. The scale may be shortened and/or modified to meet the particular requirements of the research context.

<http://userpage.fu-berlin.de/~health/selfscal.htm>

You may print an unlimited number of copies on paper for distribution to research participants. Or the scale may be used in online survey research if the user group is limited to certified users who enter the website with a password.

There is no permission to publish the scale in the Internet, or to print it in publications (except 1 sample item).

The source needs to be cited, the URL mentioned above as well as the book publication:

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp.35-37). Windsor, UK: NFER-NELSON.

Professor Dr. Ralf Schwarzer
www.ralfschwarzer.de

Appendix E

Permission to Use Leadership Orientation Inventory-Other

Bolman, Lee G. <BolmanL@umkc.edu>

Sun 5/12/2019 12:54 PM

Ms. Doennig,

I'm happy to give you permission to use the instrument.

Best wishes in your research. I look forward to learning about your results.

Lee G. Bolman, Ph.D.
Professor and Marion Bloch/Missouri Chair in Leadership
Bloch School of Management
University of Missouri-Kansas City
5110 Cherry Street
Kansas City, MO 64110

Tel: (816) 235-5407

From: Martha Doennig <s759355@sbuniv.edu>

Sent: Saturday, May 11, 2019 10:50 PM

To: lee@bolman.com

Subject: Permission to Use Leadership Orientation Inventory-Other

Dear Dr. Bolman,

I am requesting your permission to use and publish the Bolman and Deal's Leadership Orientations Instrument (Other version) in my study entitled, "The Difference in District Leader Self-Efficacy between Single-Frame and Multiframe Leadership of the Superintendent." The project is for my doctoral dissertation in Educational Leadership at Southwest Baptist University in Bolivar, Missouri.

The purpose of this study is to identify differences in district leader self-efficacy of those reporting to a single-frame or multiframe superintendent in public schools in Missouri. Leadership orientations of the superintendent will be identified through the LOI-Other completed by district leaders reporting to the superintendent. The district leader will also complete the General Self-Efficacy Scale. The results from both surveys will be used to determine the difference in self-efficacy as a result of the leadership orientation. The information gathered will assist leaders in leading change through the four frames that positively impacts self-efficacy of followers.

In this study, district leaders in the state of Missouri directly reporting to the superintendent will be surveyed. In addition to the General Efficacy Scale and Leadership Orientation-Other Survey, participants will be asked to complete a brief demographic survey that I have generated. The results of the two surveys will be compared and will serve as the basis for the research. At the completion of my research, I will be glad to share my data and findings with you.

Thank you for your assistance.
Sincerely,

Martha Doennig
Doctoral Candidate
s759355@sbuniv.edu
(417) 827-5359

Appendix F

Principal Component Analysis Output Tables

Table F1

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.940
Bartlett's Test of Sphericity Approx. Chi-Square	3300.313
<i>df</i>	496
<i>Sig.</i>	.000

Table F2

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of variance	Cumulative %
1	18.868	58.962	58.962	18.868	58.962	58.962	8.783	27.446	27.446
2	2.369	7.401	66.364	2.369	7.402	66.364	7.339	22.936	50.382
3	1.542	4.818	71.182	1.542	4.818	71.182	6.656	20.800	71.182
4	1.073	3.352	74.534						
5	.700	2.188	76.721						
6	.663	2.073	78.795						
7	.613	1.917	80.712						
8	.549	1.716	82.428						
9	.485	1.516	83.944						
10	.473	1.480	85.423						
11	.437	1.365	86.788						
12	.426	1.331	88.119						
13	.401	1.252	89.371						
14	.342	1.067	90.439						
15	.326	1.019	91.458						
16	.272	.850	92.307						
17	.251	.785	93.092						
18	.245	.766	93.859						
19	.242	.755	94.614						
20	.229	.714	95.328						
21	.203	.634	95.962						
22	.187	.586	96.548						
23	.176	.549	97.097						
24	.162	.507	97.604						
25	.137	.428	98.032						
26	.125	.389	98.421						
27	.115	.359	98.780						
28	.111	.346	99.126						
29	.095	.296	99.422						
30	.077	.242	99.664						
31	.065	.205	99.869						
32	.042	.131	100.000						

Table F3

Factor Analysis – Rotated Component Matrix

Component	1	2	3	4
Q2	.857			
Q10	.851			
Q6	.816			
Q18	.779			
Q22	.775			
Q4	.752	.380	.336	
Q28	.723	.437		
Q12	.691	.439	.389	
Q26	.691	.439	.389	
Q15	.637		.386	
Q14	.632	.302	.442	
Q32	.596	.401	.500	
Q7		.786		
Q19		.761		
Q11	.346	.733		
Q24	.330	.721	.321	
Q23		.713		.322
Q8	.525	.693		
Q16	.338	.636	.347	
Q27	.339	.549	.393	.443
Q31	.339	.630	.307	
Q3	.442	.547	.482	
Q25		.776		
Q13	.400		.749	
Q9	.435		.736	
Q5			.734	
Q21		.561	.645	
Q1	.400	.317	.592	.388
Q20	.301	.566	.570	
Q17	.532		.551	.403
Q29				.751
Q30		.340	.393	.435

Appendix G

Figure G1

Principal Component Analysis Scree Plot

