8-2023

The Influence of Secondary Principals' Perceived Trust of Assistant Principals and Central Office Supervisors on Principal Self-Efficacy for Instructional Leadership

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Recommended Citation

THE INFLUENCE OF SECONDARY PRINCIPALS' PERCEIVED TRUST OF

ASSISTANT PRINCIPALS AND CENTRAL OFFICE SUPERVISORS ON

PRINCIPAL SELF-EFFICACY FOR INSTRUCTIONAL LEADERSHIP

by

Cody J. Reutzel

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Curriculum and Instruction

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UTAH STATE UNIVERSITY
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2023

ABSTRACT

The Influence of Principals' Perceived Trust of Assistant Principals and Central Office

Supervisors on Principal Self-Efficacy

by

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Utah State University, 2023

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Although self-efficacy has been studied widely in education, variables associated with the self-efficacy of principals have received relatively limited attention. The current study investigated the relationship between secondary principals' perceptions of trust in their assistant principal and central office supervisor and their own self-efficacy for instructional leadership. Surveys were collected from 80 secondary principals. Open-ended questions were utilized to gain greater understanding of the behaviors contributing to principals' perceptions of trust and feelings of self-efficacy. Data were analyzed using correlation and multiple regression. Quantitative results revealed that no statistically significant relationship is present between trust perceptions in the relationships investigated and principals' self-efficacy for instructional leadership. Analysis of the open-ended responses indicates that behaviors categorized as *offer support, dependability, communication, and competence* were the most frequently cited by principals as contributing to trust. In reference to behaviors that serve as a source of self-efficacy, principals referenced those categorized as *supports my decision making, engage*

in support behaviors, and verbal persuasion most frequently. Responses related to instructional leadership were noticeably absent from the open-ended responses. Recognizing the value of trusting relationships and instructional leadership established in existing research, the discussion of this study outlines the necessity to balance efforts for both. Principal perceptions of trust may be a necessary but insufficient condition for principals to experience self-efficacy for instructional leadership. Practical instructional leadership skills are also required. Recommendations are made that principal preparation programs, district leaders, and assistant principals take intentional action to support the development of instructional leadership skills to build principal self-efficacy for instructional leadership.

(160 pages)

PUBLIC ABSTRACT

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ACKNOWLEDGMENTS

I would like to express my deepest gratitude to Dr. Alyson Lavigne for her unwavering support, endless patience, and careful guidance. I could not have endured this process without her. She skillfully recognized when I needed encouragement and when I needed to be challenged to strive for more. I would also like to thank my wife and my children for their support and understanding as I committed the time necessary for completion of this time-consuming and lengthy project. My parents and siblings were also instrumental in motivating me to pursue and fulfill this challenge.

<div align="right">Cody J. Reutzel</div>

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CHAPTER 1: INTRODUCTION

The current American educational landscape is characterized by expectations of school improvement and accountability. This is largely the result of diverse and persistent calls for schools that fulfill the needs of *all* students, which is reflected in U.S. policies such as No Child Left Behind (U.S. Department of Education, 2002), Race to the Top (U.S. Department of Education, 2009), and Every Student Succeeds Act (U.S. Department of Education, 2015). A primary lever for reform efforts has been school leadership (Louis et al., 2010). This emphasis has served to elevate the importance of the principal role. An extensive body of research seems to warrant this emphasis. Research, current and past, has established the significance of principals in influencing the numerous aspects of schools (Blase & Blase, 1997; Grissom et al., 2021; Hallinger & Heck, 1998). As leaders of learning organizations, *instructional* leadership has been the contemporary approach to school improvement-oriented principal leadership (Darling-Hammond et al., 2007; Hallinger, 2010; Murphy et al., 2016; Parylo & Zepeda, 2014). Instructional leadership is intended to improve the processes of teaching and learning in schools. Hallinger and Heck (1998) identify three defining aspects of instructional leadership: defining the school mission, managing the instructional program, and promoting school climate. This form of school leadership is characterized by an overarching emphasis on teaching practices designed to produce instructional improvement resulting in student growth (Honig, 2012; Leithwood et al., 1999). Evidence suggests that effective instructional leadership produces marked increases in student achievement (Grissom et al., 2013, 2021; May & Supovitz, 2011; The Wallace Foundation, 2013) and catalyzes school improvement efforts (Grissom et al., 2021; Louis

et al., 2010), indicating that at least some of the effects of principals can be explained by their instructional leadership efforts.

As a necessary function of advancing the work of principals, factors that shape principal practices take center stage. This work, as opposed to describing principal practice and the effects thereof, is in its relative infancy (Barnitz & Conley, 2020; Hallinger et al., 2018; Kellar & Slayton, 2016). Kellar and Slayton (2016) assert that:

> While the existing research provides tremendous insight into the effects of leadership on teacher practice and student achievement, it does not help us understand how external school, district, and other factors—as well as internal personal conditions—influence the extent to which a leader is successful in accomplishing what she sets out to accomplish. (p. 699)

Additional research is needed to more fully understand the personal and contextual factors that contribute to the manifestation of principal leadership behaviors. Hallinger et al. (2018) call these factors, "personal antecedents of leadership" (p. 801). Among the personal antecedents with potential influence on leadership behavior is self-efficacy. In describing the utility of self-efficacy, Bandura (1997) notes that the, "exercise of control that secures desired outcomes and wards off undesired ones has immense functional value and provides a strong source of incentive motivation" (p. 2). The motivation to persist, as a central attribute of elevated self-efficacy, serves as a critical link between self-efficacy and behaviors that characterize successful leadership. Self-efficacy is associated with a spectrum of positive effects on principals, including work engagement, job satisfaction, employee confidence, and instructional leadership performance (Federici & Skaalvik, 2012; Friedman, 1997; Licklider & Niska, 1993; Paglis & Green, 2002). The

host of qualities associated with principal self-efficacy (PSE) illustrates the benefit to educational agencies oriented to school improvement.

Exploration of contributors to PSE is a logical next step to provide practitioners and scholars with a more functional and nuanced understanding of PSE development. An array of factors has been investigated as PSE contributors. Part of this body of literature has uncovered that demographic variables, including gender, race, socio-economic status, marital status, and years of administrative experience carry little weight as PSE contributors (Fisher, 2014; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2004, 2005). Other studies have concluded that principal preparation, professional development, and breadth of educational experiences can contribute to PSE (Aas & Blom, 2018; Barnitz & Conley, 2020; Versland, 2016). School- and district-level variables such as formal mentoring, quality of facilities, availability of resources, central office staff support, staff and parent support, autonomy, organizational structure, clarity of vision, and communication have all been found to be related to elevated levels of PSE (Federici, 2013; Messer, 2019; Osterman & Sullivan, 1996; Tschannen-Moran & Gareis, 2005). While not explicit in current research, *relationships* seem to have a central role in PSE. Many of the factors discovered to contribute to PSE have connections to the relationships cultivated and experienced by principals. Among the most important, and perhaps most influential, are the relationships nearest the principal in the professional hierarchy—assistant principals and central office supervisors. This evidence, along with a recognition of the vast number of other relational aspects yet to be investigated, indicates that principal *relationships* are a worthy site for more extensive research attention.

Work relationships have received considerable attention in the study of social

psychology. Scholars in the field have sought to illuminate the characteristics and dimensions of relationships. A common theme expressed among researchers engaged in understanding relationships is the central role of trust (Kramer & Tyler, 1995). Trust is a fundamental dimension of relationships in general, and management relationships in particular (Limmerick & Cunnington, 1993). Trust is generally associated with enhanced relationships and interactions (Connell et al., 2003). Enabling efficient communication and productive collaboration (McElroy, 2002), trust is particularly critical in relationships between employees and their leaders and organizations. Employees' feelings of trust are associated with psychological well-being, specifically increased job satisfaction and reduced perceptions of stress (Kelloway et al., 2012; Liu et al., 2010). Where trust has been studied in the educational environment, similar benefits are noted, emphasizing trust as a key component of successful school leadership relationships (Daly et al., 2015; Hughes, 1999). As a result of extensive study into the effects of trust on schools, Bryk and Schneider (2002) had this to say about its importance:

> trust fosters a set of organizational conditions, some structural and other social-psychological, that make it more conducive for individuals to initiate and sustain the kinds of activities necessary to affect productivity improvements. (p. 116)

Trust, as a fundamental aspect of relationships, could be an influential factor in the development of PSE. Trust and self-efficacy have been investigated widely in relation to other variables (Daly et al., 2015; Kelloway et al., 2012; Leithwood & Jantzi, 2008), whereas, the link between trust and self-efficacy has received limited attention, especially in the context of principals and key relationships.

Purpose of the Study

Acknowledging PSE as a personal antecedent to leadership behavior, this study seeks to test a possible conceptual and theoretical premise—perceptions of trust as a factor in principals' relationships that influences levels of principal self-efficacy. Given the relevance of instructional leadership for today's principals, in this study, I examine these variables in the context of principals' self-efficacy for instructional leadership.

The term instructional leadership has been selected in this study to encompass instructional improvement and instructional change. These terms are often used interchangeably in the literature, in scales of instructional leadership, and to describe the primary work of principals. Throughout this document, the term *instructional leadership* will be used as a term unifying these concepts.

Two of the most significant relationships involved in the work of a principal are those with their direct central office supervisor (COS) and their highest-ranking assistant principal (HRAP). The purpose of this study is to investigate how traditional public secondary school secondary principals' trust in assistant principals and central office supervisors may be associated with their own perceived self-efficacy for instructional leadership. Central office supervisors are defined as the primary supervisor of the principal. The highest-ranking assistant principal is defined as the assistant principal the principal would appoint as acting principal in their absence. These relationships have been intentionally selected to account for both directions of the vertical relationships, upward and downward, experienced by principals. This study design also seeks to investigate the relative influence of upward and downward relationship on PSE for instructional leadership.

While there are many aspects of principal leadership that could be affected by perceptions of trust, this study seeks to partition the effects of trust on efficacy for *instructional* leadership in *secondary* principals. There are two reasons for this approach. Principal leadership in its contemporary form is primarily defined as instructional leadership directed at improving instructional practices (Grissom et al., 2021; Tan et al., 2021). The ability to develop, articulate, and enact a vision to enhance student learning through the improvement of classroom teaching is the pinnacle of principal leadership. Tasks and responsibilities related to these processes account for much of principals' daily work. While only a corner of the entire picture, understanding the link between trust perceptions and secondary principal self-efficacy for instructional leadership is a significant step in understanding the link between trust perceptions and self-efficacy for the principalship as a whole. Secondly, self-efficacy is known to operate within domains (Bandura, 1997; Schwarzer, 1992). To effectively investigate the effects of trust on self-efficacy requires a focus narrow enough to detect the connection of trust to a specific domain of expertise. Expanding the scope of effects to include the entirety of principal self-efficacy could result in a type II error in which the influence of trust on more nuanced aspects of PSE could be overlooked. In addition, the number of survey items required to inquire into multiple aspects of PSE creates a burdensome time commitment among participants. This constraint could limit the pool of willing participants, creating concerns of feasibility for such a study. Secondary principals have been selected for study for a practical reason. Many elementary schools do not employ assistant principals. Secondary schools, except in very small schools, have assistant principals. Investigating the link between trust perceptions and instructional leadership in secondary schools as a

specific aspect of PSE will serve as a feasible and productive initial consideration of the broader connections between trust and PSE.

Research Questions

1. Does secondary school principals' perceived trust in their highest-ranking assistant principal correlate with their own self-efficacy for instructional leadership?

2. Does secondary school principals' perceived trust in their central office supervisor correlate with their own self-efficacy for instructional leadership?

3. Does the perceived trust of assistant principals or the perceived trust of central office supervisors have a greater correlation with secondary school principals' self-efficacy for instructional leadership?

4. Do the five facets of trust correlate with secondary school principals' self-efficacy differently for upward and downward relationships?

Significance

Principal leadership matters and self-efficacy is a powerful construct in the realm of individual behavior and decision-making. Consequently, practitioners and researchers desire further knowledge of variables that are related to effective principal leadership. A range of findings, as will be described in the subsequent chapter, illustrate the value of principal supports in developing efficacious principals. This study will add to the understanding of self-efficacy theory, specifically as it pertains to school principals. The outcome of this research will contribute precise information about the influence of principals' feelings of trust in meaningful individuals on their own self-efficacy. Current research has explored the influence of self-efficacy in various scenarios, including the

investigation of trust in upward and downward relationships and how this contributes to teacher self-efficacy. This phenomenon is yet to be explored among principals.

The results of this study will also inform school district leaders, principal supervisors, and principal preparation programs. The research questions are structured to investigate topics of concrete relevance to the practitioners tasked with developing and supporting principals. Knowledge of the extent to which trust in assistant principals and principal supervisors influences principal self-efficacy assists in determining how to prioritize trust as a consideration in a range of personnel decisions for district leaders. Perceived levels of trust, potential for the development of trust, and propensity for trusting relations, as considerations for personnel decisions, merit elevated status when equipped with knowledge of self-efficacy implications. The leadership behaviors of principal supervisors, professional learning, job-embedded training, and other district-provided principal development programs will benefit from recognition of the meaningful contributions of these vital upward and downward relationships to principal leadership. Awareness of the presence and importance of these relational influences on principals' self-efficacy is a topic worthy of curricular attention in principal preparation programs. Additionally, recognition of the *relative* influence of assistant principals versus principal supervisors will more fully inform the design, development, and allocation of efforts to support principals. If discovered, the implications of variance in the contributions of select dimensions of trust will inform curricular and professional learning design for programs intended to develop the leadership abilities of assistant principals, principals, and principal supervisors. This variance will also enlighten principal supervisors as they seek to implement the most efficient and productive supportive actions to address the

needs of the principals they serve.

Definition of Terms

The following terms are operationalized for this study using the following definitions:

Instructional leadership - Supervision focused on the improvement of teaching practices designed to result in enhanced student learning (Honig, 2012; Leithwood et al., 1999). The scale in this study further defines instructional leadership as motivating teachers, generating enthusiasm for a shared vision, managing change, creating a positive learning environment, facilitating student learning, and raising student achievement on standardized tests (Tschannen-Moran & Gareis, 2004).

Trust - "An individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (Hoy & Tschannen-Moran, 1999, p. 189).

Self-efficacy - "Beliefs in one's capabilities to organize and execute the course of action required to produce given attainment" (Bandura, 1997, p. 3).

Highest ranking assistant principal - The assistant principal the principal would appoint as acting principal in their absence.

Central office supervisor - The primary supervisor of the principal.

Secondary principal - A school administrator with the position title of principal, as opposed to position titles of "director," "coordinator," or "administrator," in a Utah public school serving students in grades 7-12 that has at least one assistant principal.

Upward relationship - The relationship between the secondary principal and their primary supervisor.

Downward relationship - The relationship between the secondary principal and their highest-ranking assistant principal.

CHAPTER 2: REVIEW OF LITERATURE

This study aims to explore principal experiences related to two relationships hypothesized to be influential to the construct of self-efficacy. The involved individuals, their roles and responsibilities, the nature of interactions, the foundations of their productive relationships, and the intricacies of the connections between each of the embedded theories and constructs need to be carefully unpacked. This review begins by summarizing the work of principals, assistant principals, and central office principal supervisors, and the features that typically define the relationships between principals and these colleagues. The constructs of self-efficacy and trust are then described, including the theoretical origins, definition, value, and measurements. As the culmination of this information, the conceptual model details the hypothesis of how the nuanced interplay between the individuals and constructs targeted in this study influence principal self-efficacy.

Principals

According to the National Teacher and Principal Survey (Goldring & Taie, 2018), there are 86,180 public school principals in the United States. Among these, 77.7 percent identify as white, 10.5 percent as Black, 8.9 percent as Hispanic, 0.9 percent as Asian, 0.2 as Native Hawaiian or Other Pacific Islander, and 1.7 percent reported as Other. Women represent 54 percent of principals. Approximately 40 percent of principals are under the age of 45, 37 percent are between the ages of 45 and 54, and 23 percent are above the age of 54. Roughly 59 percent of principals report working 60 hours or more per week.

Defining the Work of Principals

The work of principals comprises an extensive and intensive list of roles and responsibilities. They are "the linchpins in the enormously complex workings, both physical and human, of a school" (Sherman, 2000, p. 2). The expectations of school principals are broad and reside within multiple stakeholders. State officials, central office officials, parents, students, and community members represent a multitude of needs and desires, exerting pressure upon principals (Peck et al., 2013). Principals manage and coordinate events and processes to fulfill state and district-level mandates. They direct school-level initiatives, whether school, district, or state initiated. Development, evaluation, and discipline are among the personnel-related responsibilities of principals. Strategic allocation of resources, budgeting, and ordering are also at least partially the responsibility of the school principal. Management of school facilities to ensure student, staff, and patron safety and well-being is a responsibility coordinated with custodial and secretarial staff. Principals regularly teach, mentor, and discipline students through group and individual interactions. Managers of auxiliary services, such as transportation and child nutrition, require collaboration and direct coordination with principals. School-level public relations processes and procedures are also part of the principal role. Scheduling, enforcing policy, and coordinating with other community leaders are a few of the other miscellaneous responsibilities assigned to principals (Kafka, 2009).

Principals as Instructional Leaders

As previously detailed, instructional leadership is a predominant feature of the contemporary principalship (Darling-Hammond et al., 2007; Hallinger, 2010; Honig, 2012; Murphy et al., 2016; Parylo & Zepeda, 2014). Principals can "no longer function

simply as building managers, tasked with adhering to district rules, carrying out regulations and avoiding mistakes. They have to be (or become) leaders of learning who can develop a team delivering effective instruction." (The Wallace Foundation, 2013, p. 6). DeBevoise (1984) defines instructional leadership as, "those actions that a principal takes, or delegates to others, to promote growth in student learning" (p. 15). Hallinger and Heck (1998) propose three defining tasks of instructional leadership: defining the school's mission, managing the instructional program, and promoting school climate. In summary, instructional leadership is embodied by supervision focused on the improvement of teaching practices designed to result in enhanced student learning (Honig, 2012; Leithwood et al., 1999).

Many studies and meta-analyses illustrate the centrality of instructional leadership in the principal's role (Grissom et al., 2013, 2021; Louis et al., 2010; May & Supovitz, 2011; The Wallace Foundation, 2013). Instructional leadership has so permeated the principalship that the role of the central office supervisor has shifted to account for its presence as the primary aspect of principal leadership (Honig, 2012). Principals' work as instructional leaders requires monitoring and developing processes related to teaching and learning. Effective principals spend significant portions of their day shepherding teaching practices intended to advance instructional quality (Leithwood et al., 1999). Because instructional leadership pervades the work of principals, PSE in this area is likely to contribute significantly to principals' perceptions, and importantly, to satisfaction, commitment, and intentions to remain on the job.

The Need for Principal Support

As illustrated earlier, the work of principals is challenging. One indication of the difficulties faced by principals is the rate of turnover. The annual principal turnover rate in U.S. public schools is approximately 18% (Goldring & Taie, 2018). Almost 50% of principals leave by their fifth year in the profession (Baker et al., 2010). Only 20-40% of principals remain by year six (Gates et al., 2006; Papa, 2007). Thirty-five percent of principals have been at their school for less than two years while only 11% have for 10 years or more (Levin et al., 2019). Recent conditions created by the COVID-19 pandemic have functioned to increase the strain on principals. A survey conducted by the National Association of Secondary School Principals (2021) found that, "79% of principals report they have been working harder, 73% report working longer hours and 62% report having a harder time doing their job than ever before," in addition, "more than one-quarter (26%) report that the pandemic had a "great deal" of impact on their inclination to consider leaving their role as principal." This trajectory limits the number of qualified and competent principals in a time of desperate need for school leadership.

Principals accept a pivotal role in the school community. One that requires an expansive set of skills for a wide-ranging list of demanding responsibilities. This reality has the potential to discourage principals. Successful navigation of the principal position requires engagement and commitment to the work. This state of contentment requires contributions and support from many colleagues, particularly those who occupy roles immediately upward and downward from the principal. Work engagement is strongly associated with principal self-efficacy for instructional leadership, elevating its importance as a key concept to understanding principal motivation and behavior (Federici

& Skaalvik, 2011). Central office supervisors and assistant principals occupy upward and downward positions critical to the experiences of principals. The level of cooperation and engagement present in these relationships is influential to the mindset and approach of the principal.

Assistant Principals

Defining the Work of Assistant Principals

The individual occupying the most immediate downward role from the principal is the assistant principal. Assistant principals perform such duties as supervising students, supervising extracurricular events, mentoring and disciplining students, managing school calendars, supporting teachers and other staff, communicating with parents, and updating student information systems (Barnett et al., 2012; Mertz, 2000; Reed & Conner, 1982; Rodrick, 1986). Hughes (1999) interviewed assistant principals to better understand their roles and responsibilities and found that the results grouped into three main categories: communication, decision-making, and support. Assistant principals communicate day-to-day information to teachers, parents, students, and other staff members. They make decisions about scheduling, program finances, discipline, assemblies, events, and contribute to decisions about school goals. Assistant principals can be found supporting teachers in need, students with questions, staff members lacking direction, and parents who are concerned.

The Influence of Principals on the Work of Assistant Principals

Assistant principals act as a stabilizing force to allow the principal to manage and lead the school. The degree to which assistant principals' support is deployed in different areas and responsibilities of the school depends largely on the views and preferences of

the respective principal (Bush, 1981; Ribbins, 1997). Wells et al. (1999) note that

whereas principals feel a responsibility for all decisions affecting the school, assistant

principals' involvement fits as a smaller part of a global system. The portion fulfilled by

assistant principals is generally a reflection of the assignments given by the principal

(Scoggins & Bishop, 1993). Gaston (2005) conducted a quantitative analysis of the

differences in the reported roles of assistant principals at the elementary, middle, and

high school levels. While subtle differences were found in the work of assistant principals

at different levels, the roles involved devotion of time to nearly the same roles,

responsibilities, and tasks at much the same rate. Findings did indicate that high school

assistant principals spent slightly more time engaged in instructional leadership activities

than middle school assistant principals. Calabrese (1991) found that the principal's vision

for the assistant principal's role heavily influences the level of involvement of assistant

principals in leadership related to curriculum and instruction.

Principal-Assistant Relationship

The principal-assistant relationship has, and continues to be, defined by the

hierarchical arrangement of leader and subordinate (Hughes, 1999). The assistant

principal operates under the direction of, and as a subordinate to, the principal (Scoggins

& Bishop, 1993). In a case study investigating the principal-assistant relationship, Nias

(1987) contends that acknowledgment of this hierarchical arrangement is foundational to

a successful relationship. Within this hierarchical arrangement, the relationship benefits

from assistant principals' involvement in decision-making. This delegation confirms the

importance of the assistant's role, empowers the assistant in ways that increase

organizational effectiveness, and informs the principal through the assistant's unique

network (Hughes, 1999; Mortimore et al., 1988; Southworth, 1994). As a safeguard for this relational structure, the value of mutual loyalty is noted in multiple studies (Nias, 1987; Vulliamy & Webb, 1995). Hughes (1999) emphasizes the finding that, "loyalty was considered by all respondents to be essential" (p. 89). Hartzell et al. (1994) assert that the quality of a relationship depends on knowledge and awareness of the other. The principal and assistant principal must understand the other's capabilities and limitations. Recognizing the other's intentions and how they tend to approach situations sustains a healthy relationship. A common, shared philosophy is another important element, as it undergirds the pursuit of school goals (Coulson, 1976). Drawing on the research relating to principal-assistant relationships, Hughes (1999) analyzed factors that contribute to successful head principal-deputy principal relationships. Five factors emerged: a shared understanding (of the relationship and various aspects of school operations), trust and respect, shared moral and educational values, a mutual willingness to discuss conflicts and differences in opinion, and loyalty and support. In reference to trust and respect, the researchers noted, "these attributes were considered to be essential ingredients for a successful working partnership" (p. 88). The roles, responsibilities, and relationships fulfilled by assistants are key pieces of the intertwined surroundings that influence how principals function. The interplay between what principals expect from assistants, what they receive, and how this is optimized illuminates possible links between principals' perceptions of trust and their efficacy for leadership.

The presence of a healthy relationship offers mutual benefits to the principal and assistant principal. The principal relies on assistant principals to supervise and accomplish a range of responsibilities necessary for the achievement of the larger school

vision (Wells et al., 1999). The reliable and successful management of these tasks provides necessary support to the principal while also extending the capability of the principal to complete the tasks necessary to advance their vision. Principals often rely on assistant principals' specialized skills that are rare or difficult to replace (Hartzell et al., 1995). The principal is highly influential to the assistant principal experience and serves as a gateway to opportunities. Gorton (1987) reported that:

> the principal is the key to improving the assistant principalship, and follows up with, no other entity has a greater impact on the fortunes of an assistant principal in a specific school than the principal of that school. (p. 3)

Most assistant principals advance to the principalship (Scoggins & Bishop, 1993). The building principal can provide access to influential people within and outside of the school and district community. This is helpful in two important ways: to gain distinction leading to career advancement and to secure support and resources to operate successfully in the current position (Hartzell et al., 1995). The importance of the assistant principal-principal relationship to each respective party is further underscored by the findings of Bartanen et al. (2020), which illustrate the connection between the mobility and the rate of turnover for each party. Increased mobility of assistant principals is associated with increases in principal mobility and, alternately, the mobility of principals is associated with increased turnover among assistant principals. The significance of this relationship increases the likelihood that both parties are committed to its ongoing success. It also indicates that the feelings, perceptions, and outcomes associated with the relationship are meaningful to the work-life experiences of principals and assistant principals.

Central Office Principal Supervisors

School districts are continuously in search of levers to improve principal effectiveness. Principals need and desire feedback to improve and thrive as school leaders (Levin et al., 2019). Nelson et al. (2021) confirm that principals find value in frequent feedback from supervisors. Central office principal supervisors, as intermediaries between the central office and schools, function to fill this void as they work directly with principals to guide and develop their school leadership capacity (Ford et al., 2020; Honig & Rainey, 2019; Thessin & Louis, 2019). They are well positioned to fulfill this role as most are former principals who have exhibited success in the position. Except in small school districts, where district personnel are required to fulfill a range of supervisory roles, principal supervisors' responsibilities are devoted to supporting principals and schools on their ongoing journey to success. Corcoran (2013) notes the primary responsibilities in summarizing, "principal supervisors are expected to be in schools, to provide instructional leadership, and to be intimately aware of and responsive to principal needs and issues as they arise in real-time" (p. 27). In 2015, the Council of Chief State School Officers published standards to define and orient the work of principal supervisors. This document includes eight standards, categorized by improvement of principals' instructional leadership, ensuring organizational effectiveness, and functioning as a district leader. As the primary evaluator and key providers of mentorship and support, central office supervisors are a potentially meaningful part of principals' experiences. Goldring et al. (2020) assert, "principal supervisors are a potential point of leverage for supporting and developing principals' effectiveness" (p. xv). Interactions and communications with principals occur regularly, creating conditions for relationships of

great depth. These supervisors provide ongoing, intensive, and job-embedded support to principals in many areas, but most notably for the purpose of developing instructional leadership (Honig, 2012). As an extension of trends in principal leadership, the contemporary standard for principal supervision leans heavily toward instructional leadership (Janovitz, 2018). Multiple studies and large-scale initiatives demonstrate this ideal while detailing efforts to concentrate principal supervision on the cultivation of effective instructional leadership support for principals (Corcoran, 2013; Goldring et al., 2020; Marsh et al., 2005; Saltzman, 2016).

This intensive form of professional supervision and support requires extensive time and continuous interaction, which inherently places the central office supervisor-principal relationship near the top of the list of influences recognized by principals. These influences have at least some empirical connection to PSE. To the extent that principal supervisors are role models to principals, there is evidence that relationships with successful role models are associated with principals' perceptions of self-efficacy (Osterman & Sullivan, 1996). Messer (2019) reported that novice principals who participated in a formal mentoring process experienced increased PSE, though principal supervisors were not specified as the mentors. In studying the contributions of district-level variables to PSE, Tschannen-Moran and Gareis (2005) discovered a positive relationship between central office staff support and self-efficacy beliefs. Osterman and Sullivan (1996) reported similar findings indicating that in districts where PSE was higher, principals felt supported by central office personnel and were able to describe instances where they had personally benefited from that support.

Intertwined in the interactions between principals and their supervisors, early

evidence indicates that relations with the central office generally, and supervisors specifically, are important to the development of PSE (Honig & Rainey, 2019; Thessin & Louis, 2019). Where communication is direct and personalized, principals perceive higher levels of efficacy (Osterman & Sullivan, 1996). This also extended to organizational vision. PSE is also related to the clarity of the district's vision and goals (Osterman & Sullivan, 1996). The organizational context of the central office supervisor-principal relationship may also play a part in the cultivation of PSE. Landy (2013) found that an enabling district structure, where district structure enables rather than hinders principal problem solving, was predictive of PSE. Given an array of findings relating to supports that contribute to the development of efficacious principals, the current study will add to, and extend, this literature by investigating one aspect of the supervisor-principal relationship. The insight gained will offer principal supervisors and district office personnel direction for more intentional principal support.

Principal-Supervisor Relationship

The simple presence of principal supervisors does not guarantee the success of principal instructional leadership and principal-supervisor relationships (Ford et al., 2020; Honig, 2012). The quality of the relationship between principal and supervisor is foundational to the effectiveness of supervisor support and principal development (Baron & Morin, 2009; de Haan et al., 2011; Kilburg, 1996). Both the principal and supervisor make important contributions to the relationship. The success of the central office supervisor-principal relationship relies on the credibility and skillfulness of the principal supervisor (Thessin, 2019). A proven track record and real-time demonstration of leadership skill establish relevance for principals to accept direction and advice from their

supervisors. In productive principal-supervisor relationships, the supervisor must establish and cultivate collegiality (Thessin, 2019). Honig (2012), applying sociocultural and cognitive learning theories, suggests that principal-supervisor relationships are predicated on the extent to which supervisors engage in the following practices with principals: focus on joint work, model or demonstrate, develop and use tools, broker, create and sustain social engagement. Also emphasized was the importance of instilling the value of principal instructional leadership and utilizing external tools as the basis for directing critical conversations. The potency of these supports and behaviors is founded on the extent to which trust is perceived in the relationship. Once the supervisor's intentions and abilities are understood, as a function of trust, the content within the interactions can be absorbed and the supervisory direction more readily considered.

On the other end of the relationship, principal characteristics and attitudes are also critical, though this has been given much less attention in the literature. Thessin (2019) reports that principals' dispositions toward learning also facilitate the opportunity for successful relations with their supervisors. Principals who are open to ongoing learning and operate as self-regulated learners are most successful in productive principal-supervisor partnerships. Another layer to the contributions of principals is the extent to which they are goal-oriented instructional leaders. When the principal is committed to improving conditions at their school, the principal-supervisor relationship is reported to be of more value (Thessin, 2019).

All of this information is to demonstrate that central office supervisors are significant figures in the professional lives of principals, especially in the realm of instructional leadership (Ford et al., 2020; Goldring et al., 2020; Honig, 2012; Honig &

Rainey, 2019; Thessin & Louis, 2019). This concept is significant to the current study for two reasons. It establishes the connection between principals and their central office supervisor as an important relationship for further investigation. It also establishes the prominence of central office supervisors' potential contributions to PSE for instructional leadership. As significant figures, their influence on PSE is facilitated and amplified by their status as social models. Trust within these highly influential relationships is a variable that is likely to exert significant influence over the perceived quality of the relationship. Social models wield particular influence in producing self-efficacy perceptions (Bandura, 1997), which could be important to understanding the influence of trust in producing self-efficacy beliefs. The theoretical underpinnings explaining the implications of social models will be detailed in later sections relating to social cognitive theory.

Social Cognitive Theory

This study adopts social cognitive theory (SCT) as the overarching theory explaining human behavior. SCT is rooted in concepts of behaviorism yet distinct in its recognition of cognitive influences. Observational learning and associative conditioning are credited for much of what informs behavioral development. Yet, SCT departs from the behaviorist tradition in emphasizing the powerful effects of cognition and personal beliefs (Hartman & Betz, 2007). A central tenet of SCT is triadic reciprocal determinism. Three components form the triad: behavior, personal (cognitive), and environmental factors (social and other) (Bandura, 1986, 1997). SCT posits that environmental stimuli interact reciprocally with cognitive and affective variables—such as motivation and perceptions of efficacy. The social and environmental component of the triad

demonstrates SCT's acknowledgment of social influences, which Bandura refers to as vicarious learning. Vicarious learning is produced by observing others, known as social models, to make inferences about application to oneself. Observing the outcomes of the chain of decisions and consequences of social models provides information about the consequences we're likely to encounter when engaging in similar behaviors (Tracey & Morrow, 2017). Each of the components of the triad, "operate as interacting determinants that influence one another bidirectionally" (Bandura, 1997, p. 6). This does not imply that each of the components exerts equal deterministic power, as the influence of any component is dynamically dependent on situational context. Rather, the components continuously fluctuate and integrate to inform human learning and decision-making.

In analyzing the behavior of principals, SCT provides a framework for understanding why principals do what they do and the forces that may motivate these decisions. Principals are in a position that requires frequent decision making. They possess and experience internal thoughts and feelings that inform these decisions. They also encounter numerous sources of external influence over those decisions. SCT takes into account the reciprocal nature of these interactions and the resulting feedback loop of behavioral significance. This perspective guides the study of principal behavior to the analysis of specific and consequential influences. Recognizing that some of the most important influences are their environmental conditions and social relationships, investigation of principals' perceptions of particular conditions and relationships is needed. These perceptions could have a significant effect on behavioral decisions—such as the types of activities one chooses to engage in, and the challenges they are willing to pursue.

Self-Efficacy

SCT is founded on human agency and autonomy. Pajares (2002) notes, "social cognitive theory is rooted in the view of human agency in which individuals are agents proactively engaged in their own development and can make things happen by their actions" (p. 2). SCT cites self-efficacy beliefs to explain many of the internal processes influencing agency, autonomy, and the activities in which people decide to engage. Emphasizing this connection, in reference to self-efficacy, Bandura (1989) asserts, "among the mechanisms of personal agency, none is more central or pervasive than people's beliefs about their capabilities to exercise control over events that affect their lives" (p. 1175). Bandura (1997) defines self-efficacy as, "beliefs in one's capabilities to organize and execute the course of action required to produce given attainment" (p. 3). In describing the significance of self-efficacy beliefs in contrast to other internal processes, Bandura (1982) explains that, "knowledge, transformational operations, and component skills are necessary, but insufficient for accomplished performances" (Bandura, 1982, p. 122). Self-efficacy thoughts function to enhance or diminish the level of knowledge and skill possessed by the individual. These perceptions offer considerable explanatory power for situations where people seem to outperform or underperform external expectations. Bandura (1982) further clarifies the motivational influence of self-efficacy perceptions in stating, "people avoid activities that they believe exceed their coping capabilities, but they undertake and perform assuredly those that they judge themselves capable of managing" (p. 123). In practical terms, internal perceptions and beliefs relating to one's own efficacy often overwhelm environmental factors. In summary, Bandura and Locke (2003) explain that personal efficacy perceptions:

affect whether individuals think in self-enhancing or self-debilitating ways, how well they motivate themselves and persevere in the face of difficulties, the quality of their well-being and their vulnerability to stress and depression, and the choices they make at important decision points. (p. 87)

This translates into the acceptance or rejection of tasks, responsibilities, and courses of action of cumulative behavioral consequence.

Self-efficacy beliefs affect internal cognitive, motivational, affective, and selection processes. Four sources are theorized to inform these internal processes through perceptions of self-efficacy: mastery experience (or performance attainments), vicarious experience, verbal (or social) persuasion (e.g., encouragement, criticism), and physiological (or emotional) states or arousal (Bandura, 1982; Bandura & Adams, 1977; Schwarzer, 1992). The environment, personal experiences, and social interactions each contribute to the assessment of personal efficacy beliefs. In relation to social interactions, social models influence self-efficacy beliefs as sources of vicarious experience and verbal persuasion. For example, role models have been found to be predictive of interest and efficacy for career decisions (Cunningham et al., 2005; Moran-Miller & Flores, 2011). In the case of principals, assistant principals and central office supervisors occupy significant relational positions. For this reason, their influences can be particularly powerful to the development or detriment of PSE.

It is worth noting here that while the benefits of self-efficacy are broadly documented, self-efficacy beliefs should not be confused with overall self-confidence. Self-efficacy perceptions are domain specific and do not necessarily translate to other domains (Bandura, 1997; Hannah et al., 2008; Schwarzer, 1992). As the sources of self-

efficacy suggest, experiences contributing to the development of efficacy perceptions are related to specific activities, growing out of interactions that are highly contextualized. The belief that one can perform surgical operations successfully does not transfer well to beliefs about piloting aircrafts. This has important implications in the analysis of principal self-efficacy beliefs; the relationship between principal self-efficacy perceptions and a variable in one domain may be much different than the relationship with the same variable in another.

Benefits of Self-Efficacy

General Benefits of Self-Efficacy

Several benefits of high self-efficacy beliefs have been cited in the literature. These benefits provide a basis for the relevance of further study of self-efficacy. In general, those who perceive high levels of self-efficacy seek and accept more challenging goals (Bandura, 1991). Individuals with limited self-doubt in a given domain outperform their skills (Collins, 1982; Schwarzer, 1992). With stronger self-efficacy beliefs comes visualization of success which results in higher rates of success (Bandura, 1993). Under these conditions, people expend more effort to solve problems and exhibit perseverance in the face of adversity (Bandura, 1997). Individuals with more positive efficacy perceptions have been found to engage in analytical thinking, display increased motivation, and enjoy the benefits of psychological well-being (Bandura, 1992; Bouffard-Bouchard et al., 1991). Alternatively, Schwarzer (1992) found, "a low sense of self-efficacy is associated with depression, anxiety, and helplessness" (p. ix). In the workplace, Nielsen et al. (2009) noted the important link between employee self-efficacy and reports of well-being, though the direction of this relationship is not easily

understood. Liu et al. (2010) found a connection between self-efficacy and decreased stress symptoms and perceptions of work stress.

Benefits of Self-Efficacy to Principals

The benefits of self-efficacy in principals are extensive and diverse, ranging from school leadership-specific skills to mental health advantages. McColl (2020) found that the skills most associated with high PSE were the ability to raise student achievement scores, allocate time according to leadership goals, manage the stress that accompanies the position, and influence the school's policies and procedures. Effectively handling student discipline, promoting appropriate student behavior, managing time demands, and creating a positive learning environment were most commonly associated with principals holding the lowest sense of PSE. Considering the skill of productive data use, Vanhoof et al. (2014) reported that PSE, in combination with attitude toward data use, significantly explained principals' actual use of data in developing and justifying school policy decisions.

Principals with a higher sense of efficacy experience elevated levels of job satisfaction and are less susceptible to burnout (Federici, 2013; Federici & Skaalvik, 2012). Federici and Skaalvik (2011) found two areas of PSE to be significantly associated with work engagement: instructional leadership and administrative management. Guglielmi et al. (2012) found that job resources mediated the relationship between PSE and work engagement, suggesting that perceptions of efficacy contribute to the identification of job resources leading to work engagement. In both studies of work engagement, it was carefully noted that the directionality of this relationship has not yet been established. It is not clear whether increased PSE creates greater work engagement,

the reverse, or both.

Enthusiasm and optimism often characterize principals who possess high self-efficacy (Osterman & Sullivan, 1996). Principals with elevated efficacy beliefs are often found to be undeterred by exhaustion or difficulty (Barnitz & Conley, 2020). They are often unable to recall failures or reframed them as challenges with an eye toward progress. Principals with high self-efficacy exhibit persistence and creativity in overcoming obstacles, and flexibility in modifying goals to solve problems (Meyer et al., 2019; Osterman & Sullivan, 1996). In contrast, principals with lower levels of self-efficacy often expressed loneliness, emotional rides, anger, stress, and pressure, resulting in discouragement. Feelings of disappointment are experienced due to their perceived gaps between expectations and outcomes. Subsequently, they frequently express frustrations and concerns related to the unattainability of goals (Osterman & Sullivan, 1996).

Dimmock and Hattie (1996) found that principals who exhibited higher levels of self-efficacy dealt more effectively with change. They managed concern and demonstrated accommodation for change in a way that seemed to maximize the benefits of the challenging process for their school community. Those with lower PSE are less willing to revise their goals and strategies and attempt fewer solutions in pursuit of solving problems (Osterman & Sullivan, 1996). These principals were reported to exhibit leadership defined by rigidly established goals and expectations about the functions of the principal. As a result, they experienced difficulty in garnering teacher support, and were unable to adapt their vision to account for the input of stakeholders. On the other hand, principals at the upper end of the PSE spectrum exhibit leadership that is collaborative

and contextualized to the needs of the school (Osterman & Sullivan, 1996). Dimmock and Hattie (1996) add that principals with high self-efficacy show confidence in their ability to retain control as a leader even while allowing others significant input.

School leaders who positively perceive their own management and leadership abilities are more likely to be seen as a source of energy and influence (Liou & Daly, 2019). Meyer et al. (2019) found novice principals with high PSE to be more critically reflective, and to employ agentic and constructive approaches in building relationships, whereas, principals with lower PSE made negative causal attributions, struggled to develop productive interpersonal relations, and exhibited less persistence in attaining goals. Gulmez and Negis Isik (2020) found a significant positive relationship between PSE and transformative leadership. Their study indicated that self-efficacy was an antecedent of transformative leadership, also reporting that principals with a greater sense of self-efficacy were more likely to utilize contingent rewards and active management by exception. Lyons and Murphy (1994) found that principals who had a lower sense of self-efficacy in producing student achievement were more likely to employ coercive, reward, or legitimate power in their leadership. Alternatively, high PSE correlated significantly with use of expert and referent power, as well as a propensity to take responsibility for low student achievement.

The benefits of self-efficacy are demonstrably significant and expansive in human behavior and specifically in principals. To improve schools, principal leadership quality is a central emphasis. As states and districts attempt to understand principals—what motivates them, what contributes to their success, what can be done to support them— self-efficacy is distinct as a construct of interest and potential.

Empirically Discovered Antecedents of Self-Efficacy

With the value of self-efficacy documented, the antecedents to self-efficacy provide an important foundation for the continued study of factors that may influence PSE. The following studies demonstrate empirical evidence of factors believed to contribute to leader and principal self-efficacy.

Teacher self-efficacy correlates with trust. Hoy and Tschannen-Moran (1999) reported that teachers' perceptions of trust in upward (principals) and downward (students and teachers) relationships are related to efficacy beliefs. Kosar (2015) reported similar findings. The importance of trust in upward and downward relationships is not confined to self-efficacy beliefs but also applies to collective efficacy beliefs (Gray, 2016). These findings are relevant to the current study as they provide evidence that a similar relationship between trust and self-efficacy may be present in principals.

Prior leadership performance, along with beliefs about the controllability of organizations and events, influence efficacy for leadership (Bandura & Wood, 1989; McCormick et al., 2002; Onglatco et al., 1993; Paglis & Green, 2002). Encountering and successfully navigating difficult job assignments (developmental challenges), acquiring meaningful feedback from personal experience, peers, and supervisors, and support from colleagues and supervisors are each positively related to leader self-efficacy (Machida-Kosug, 2017). In the analysis of self-efficacy in the domain of entrepreneurship, Newman et al. (2019) reported work experience, education and training, and role models and mentors to be significant contributors, citing mastery experience, vicarious experience, and verbal persuasion as the mechanisms for the effects of these variables. Mellor et al. (2006) confirmed verbal persuasion as a powerful source of efficacy in the domain of

leadership. These studies offer insight into the types of activities and experiences among supervisors, colleagues, and subordinates that influence leader self-efficacy. The findings contribute to an understanding of what types of variables, such as meaningful feedback and role models, may need to be studied to learn more about experiences leading to enhanced PSE.

Principal Self-Efficacy

The following studies transition the conversation from investigating the literature on general leadership efficacy to principal self-efficacy. In consideration of the demographic variable of principals, multiple studies have concluded that age, gender, years of principal experience, socioeconomic status of students served, and grade level of students served are not significantly related to PSE (Dimmock & Hattie, 1996; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2004, 2005). This has implications for the types of demographic variables to be included in the current study.

The influence of professional relationships has been found to be meaningful in the development of PSE. Osterman and Sullivan (1996) reported that principals with a high sense of self-efficacy had personal or professional relationships with successful role models prior to entering the principalship. Alternatively, less efficacious principals reported having fewer relationships with successful role models. Messer (2019) reported that novice principals who participated in a formal mentoring process experienced increased PSE. These findings reinforce the significance of professional relations and mentoring to the state of PSE, which underscores the relevance of principals' relationships with assistant principals and central office supervisors.

The types of support principals receive in the form of professional learning have

also shown value as a variable contributing to PSE. Airola and Bengtson (2014) reported

the results of a professional development program for principals involving extensive job-

embedded training designed specifically to support the development of self-efficacy. By

concentrating on creating a deep understanding of effective leadership and instructional

practices, mission and vision establishment, relationship building, and sustainable

accountability systems, principals gained vicarious and mastery learning experiences.

Findings indicated that principals progressively increased PSE with each year of

participation in the program. The effects of short-term training do not appear to influence

PSE (Gilbert, 2017). Other studies analyzed particular forms of professional

development. In a study of the contributions of professional development opportunities,

participation in a Massive Open Online Course, posting a personal learning question on

social media, and earning a micro-credential yielded a positive influence on the self-

efficacy of principals (McColl, 2020). Grodzki (2011) reported that principals in new

positions experienced difficulty adjusting but were able to recover perceptions of self-

efficacy through a blend of formal training, informal socialization, and mastery

experiences. Federici (2013) found a positive relationship between principals'

perceptions of autonomy and PSE, also discovering that perceived contextual constraints

to autonomy and PSE were negatively related. Contextual constraints included, "financial

and administrative constraints, employee participation, municipal authority, and national

evaluation programs" (p. 73). Landy (2013) found that enabling district structure (EDS),

defined as a district structure that enables rather than hinders principal problem solving,

was predictive of PSE. This range of studies informs the ways that districts and principal

supervisors structure their supports for principals. This has implications for the approach

taken by principal supervisors in supporting the development of PSE.

Osterman and Sullivan (1996) investigated the communication of vision and relationships present within districts. In districts where principals reported higher PSE, the visions and goals were clearly defined and aligned with the visions that principals had for their own schools. Communication with district personnel was direct and personal. Principals also reported feeling supported by their Superintendent. Principals were able to reference numerous sources of potential support and described several that they had personally utilized. Those reporting lower levels of PSE felt a lack of inclusion in cooperative district efforts, often expressing their own insignificance in the view of the district. Their districts demonstrated a vague vision and inconsistent expectations. Sources of support were perceived to be scarce, noting the absence of connection to district personnel, specifically the Superintendent. These findings further emphasize the importance of district-level support in increasing PSE.

Tschannen-Moran and Gareis (2005) considered a broad range of antecedents to principal self-efficacy. The study measured principal perceptions using the 18-item Principal Sense of Self-Efficacy Scale (PSES). The scale assessed efficacy for instructional leadership, management, and moral leadership as predicted by a host of demographic, preparation, context, and interpersonal support variables. It was discovered that perceptions of preparation quality and support from superintendent, central office staff, teachers, school staff, parents, and students were positively and significantly associated with principals' judgments of efficacy. Of particular relevance to the present study is the following statement, "high self-efficacy principals tended to indicate that their perceptions of their own effectiveness are, in part, predicated on the support they

receive from the superintendent and the central office" (p. 21). These findings are informative in identifying individuals, such as principal supervisors, for greater investigation to better understand their contributions to principal self-efficacy.

Leithwood and Jantzi (2008) also studied antecedents of school leader efficacy, with an emphasis on district conditions. Leader efficacy was measured using the PSES. A district emphasis on teamwork was reported to exhibit the strongest influence. Other district conditions significantly related to leader efficacy were a focus on achievement and quality instruction, district culture, use of data, targeted and phased focus of school improvement, and investment in instructional leadership. Leithwood and Jantzi (2008) advise, "future research would do well to inquire more deeply into the leadership behaviors of district administrators that nurture a sense of efficacy and confidence on the part of school leaders" (p. 521).

This collection of studies informs researchers in the study of principal behaviors and school districts in the cultivation of conditions to influence principals' feelings of efficacy for the role. Many of the findings apply specifically to the influences of assistant principals and principal supervisors as they provide some of the most essential supports to principals through their inherently significant work relationships (Federici, 2013; Landy, 2013; Messer, 2019; Osterman & Sullivan, 1996). In the above studies, the relevance of working relationships, job-embedded supports, an emphasis on improving instruction, and instructional leadership are noted (Airola & Bengtson, 2014; Leithwood & Jantzi, 2008; Tschannen-Moran & Gareis, 2007). These findings point to a potential convergence of concepts tied to productive relationships of trust that result in contributions to principals' feelings of efficacy for instructional leadership. The potential

of this connection warrants further investigation.

Trust

Trust is valued across industries but is particularly foundational to the work of educators (Bryk & Schneider, 2002; Gray, 2016; Hoy & Tschannen-Moran, 1999). Deutsch (1958) proposed the following definition of trust: "an individual may be said to have trust in the occurrence of an event if he expects its occurrence and his expectation leads to behavior which he perceives to have greater negative motivational consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed" (p. 266). Organizational research often cites the definition of Mayer et al. (1995) describing trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p. 712).

The task of defining trust has plagued researchers due to a plethora of disciplinary-specific perspectives, though the dimensions within the construct largely converge. McKnight and Chervany (2001) reviewed the trust literature finding 65 distinct published definitions of trust, concluding that trust is composed of four sub-constructs: benevolence, integrity, competence, and predictability. Athos and Gabarro (1978) cite the following dimensions of trust: integrity, honesty, competence, consistency, loyalty, and openness. Similarly, out of research specific to school environments, Hoy and Tschannen-Moran (1999) summarized trust as, "an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (p. 189). Forsyth et al. (2011) confirm this

definition in their description of collective trust as, "a faculty's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (p. 35). Tschannen-Moran and Hoy (2000), in their analysis of the importance of trust in schools, reaffirmed these dimensions, calling them the five facets of trust: benevolence, reliability, competence, honesty, and openness. This assertion is based on a factor-analytic study previously conducted by Hoy and Tschannen-Moran (1999) which illustrated statistically the covariance of these five facets. These five facets will be central to the current study because of the convergence with a multitude of sources and statistical evidence established in the distinctive context of schools and education. Each of the facets will be further described in the paragraph to follow.

Benevolence has been described as the assurance that another will act in one's best interest, refusing to exploit vulnerability, regardless of circumstance (Cummings & Bromiley, 1996; Tschannen-Moran & Hoy, 2000). Reliability integrates benevolence with predictability, combining good will to protect the interests of another with the consistent fulfillment of commitments. Hoy and Tschannen-Moran (1999) describe reliability as, "the extent to which one can count on another to come through with what is needed" (p. 187). Competence extends beyond good will and consistency. Lee (2004) emphasizes competence as a dimension of trust that requires more than positive intentions, but in addition, requires successful completion. Where skill is required, trust is dependent on the ability of another to fulfill the expectation—which is competence (Hoy & Tschannen-Moran, 1999; Lee, 2004). Honesty reflects truthfulness in words, written or spoken (Rotter, 1967). Honesty prioritizes accurate depictions over self-motivated

interpretations or misrepresentations. Hoy and Tschannen-Moran (2003) note, "many scholars and researchers see honesty as a pivotal feature of trust. Indeed, honesty is assumed when we think of what is entailed in trust" (p. 185). Openness is the active sharing of relevant information. Openness demonstrates a willingness to connect by voluntarily sharing information, often personal, with others (Butler & Cantrell, 1984; Hoy & Tschannen-Moran, 1999). These dimensions of trust form the basis for the analysis of the interplay between trust and PSE.

<div align="center">**Trust in Supervisor-Subordinate Relationships**</div>

The following studies illustrate the effects of trust on supervisor-subordinate relationships. These studies share observations and explain mechanisms linking the phenomenon of trust to relational consequences and outcomes occurring in upward and downward dyads. This will inform the concepts embedded in the conceptual framework which draw a connection between the effects of principals' perceptions of trust and self-efficacy.

Conditions of trust are affected by leadership which influences other aspects of employee perceptions and performance. Lee (2004) discovered that where trust in leadership is high, employees exhibit an increased desire for continuous improvement, but only under conditions where employees perceive belongingness to the organization. Trust in leadership is predictive of organizational commitment (Simon, 1994). Podsakoff et al. (1990) discovered a relationship between trust in managers and extra role organizational citizenship behaviors, which is likely to be associated with organizational commitment. Trust in superiors relates positively to overall performance (Rich, 1997), which may be explained by the chain of the above findings: trust in leadership contributes

to organizational commitment which prompts a commitment to continuous improvement.

Levels of trust also have a profound influence on communication and information sharing

between subordinates and superiors (O'Reilly, 1978). This type of authentic

communication may be one factor contributing to the widely documented association

between trust and job satisfaction (Butler et al., 1999; Liu et al., 2010; Rich, 1997;

Simon, 1994), and Liu et al.'s (2010) findings indicating that trust in the workplace is

associated with reduced work stress.

Trust and self-efficacy have been studied side-by-side as independent variables

contributing to another dependent variable (Alves & Mainardes, 2017; Liu et al., 2010;

Ter Huurne & Gutteling, 2009), but less attention has been devoted to the explicit

relationship between trust and self-efficacy. Where studies do exist, findings on the

relationship seem to converge. Cheung and Chan (2000) investigated self-efficacy for

charitable donations finding that trust directly influenced self-efficacy for donating.

Pavlou and Fygenson (2006) discovered a similar relationship in the realm of e-

commerce adoption by consumers—increases in trust translated into self-efficacy for e-

commerce behaviors. Hsu et al. (2007) came to a similar conclusion in studying the

development of knowledge-sharing habits in virtual communities. Self-efficacy for

knowledge sharing in these communities was contingent on perceptions of trust in the

community. These studies each analyze scenarios in which trust and self-efficacy share a

target. Trust in *donations* shares the target of self-efficacy for *donations*. Trust in *e-

commerce* shares the target of self-efficacy for *e-commerce*. Trust in *knowledge sharing*

shares the target of self-efficacy for *knowledge sharing*. Hoy and Tschannen-Moran

(1999) deviated from this pattern by investigating trust's influence on self-efficacy when

the target is different. In this case, investigation concentrated on whether teachers'

perceptions of trust *within meaningful relationships* was associated with self-efficacy *for*

the work teachers perform. The findings indicated that the relationship between teachers'

perceptions of trust in upward (principals) and downward (students and teachers)

relationships and teacher self-efficacy was positive and statistically significant. Gray

(2016) confirmed these findings on a collective scale, discovering a strong relationship

between collective trust (in principal, colleagues, and clients) and collective efficacy.

Kosar's findings (2015) provided additional evidence of the relationship between trust in

principal and teacher self-efficacy. While the existence of the relationship between trust

and self-efficacy has been studied in teachers and other individuals outside education, to

the knowledge of this researcher, the same relationship has not been studied in principals.

Measuring Trust

Measures of trust, like definitions of trust, are diverse and numerous. Tschannen-

Moran and Hoy (2000) conducted an analysis of notable trust instruments, including the

type of relationship the instrument was intended to measure and the facets of trust

represented. This analysis discovered that scales have been developed for interpersonal,

intimate, employer, organizational, and school-specific relationships. These scales assess

a broad range of trust dimensions, including ideas such as cooperation (Deutsch, 1958),

skepticism (Rotter, 1967), suspicion (Heretick, 1981), benevolence (Larzelere & Huston,

1980), predictability (Rempel et al., 1985), and promise fulfillment (Butler, 1991).

Deutsch (1958) proposed an instrument narrowly constrained to the measurement of

cooperation as a representation of trust. Heretick (1981) expanded the measurement of

trust to include levels of suspicion. The Dyadic Trust Scale (Larzelere & Huston, 1980)

was proposed to analyze benevolence in intimate relationships, surveying perceptions of a partner's behavior. Athos and Gabarro (1978) shifted the unit of analysis to employers by investigating emotional trust and reliability perceived by employees.

Cook and Wall (1980) and Scott (1980) broadened the analysis of workplace trust by including measures of both colleague and management trust. Cook and Wall's questionnaire partitioned the ideas of faith in the intentions and confidence in the actions of both groups by posing three questions pertaining to each group. Shaw (1997) designed a scale of general organizational trust surveying employee perceptions of results, integrity, and concern. Lee (2004) measured competence-based organizational trust by surveying employees' perceptions concerning resources, capacity to deliver, technological competence, and confidence in the organization's ability to compete.

Previous measures targeted particular aspects of trust and lacked a focus on the school-specific context. Hoy and Kupersmith (1985) attempted a purpose-built trust measure for the school context but failed to account for competency and openness. Hoy and Tschannen-Moran (1999) later developed a scale tailored to schools and the interpersonal relationships that comprise school organizational trust. This instrument was refined and later titled the Omnibus Trust Scale (2003), accounting for the breadth of facets of trust: benevolence, reliability, competence, honesty, and openness. The scale was designed to assess teachers' trust in principals, colleagues, and clients—students and parents. Enduring input from a panel of experts, field testing, pilot testing, and comprehensive analysis of reliability and validity, this scale emerged as a robust tool for measuring trust. Following the scale validation process, Hoy and Tschannen-Moran (1999) summarized, "we developed a set of trust scales that yielded reliable and valid

measures for faculty trust in principals, in colleagues, and in clients" (p. 204). This scale

has been employed extensively in the study of trust within schools (Babaoglan, 2016;

Gray, 2016; Kalkan, 2016; Kearney et al., 2013).

Principals are a highly influential players in schools (Blase & Blase, 1997;

Grissom et al., 2021; Hallinger & Heck, 1998). Educational literature and the

contemporary political environment in education have vaulted principals and their

accompanying instructional leadership abilities among the most important variables in

school improvement processes, broad reform, and overall success (Darling-Hammond et

al., 2007; Hallinger, 2010; Honig, 2012; Murphy et al., 2016; Parylo & Zepeda, 2014).

Assistant principals and central office principal supervisors fill key support roles which

function as significant relationships in the professional lives of principals (Bartanen et al.,

2020; Ford et al., 2020; Goldring et al., 2020; Hartzell et al., 1995; Honig, 2012; Honig &

Rainey, 2019; Thessin & Louis, 2019). Among the variables that contribute to effective

leadership, self-efficacy beliefs are associated with a range of positive leadership, and

principal-specific, behaviors (Dimmock & Hattie, 1996; Federici & Skaalvik, 2012;

Federici, 2013; McColl, 2020; Meyer et al., 2019; Osterman & Sullivan, 1996). Evidence

from education and other fields indicates that principals' self-efficacy may be related to

the trust perceived in upward and downward relationships (Gray, 2016; Hoy &

Tschannen-Moran, 1999; Kosar, 2015; Lee, 2004; O'Reilly, 1978; Rich, 1997).

Conceptual Model

Tschannen-Moran and Hoy (2000) offer insight that summarizes the basis of the

current study in stating, "at all levels of the organization, trust facilitates productivity, and

its absence impedes progress" (p. 585). The conceptual model illustrating the hypothesis

of the current study is illustrated in Figure 2.1.

Figure 2.1

Hypothesized Contributions of the Five Facets of Trust to Self-Efficacy Beliefs
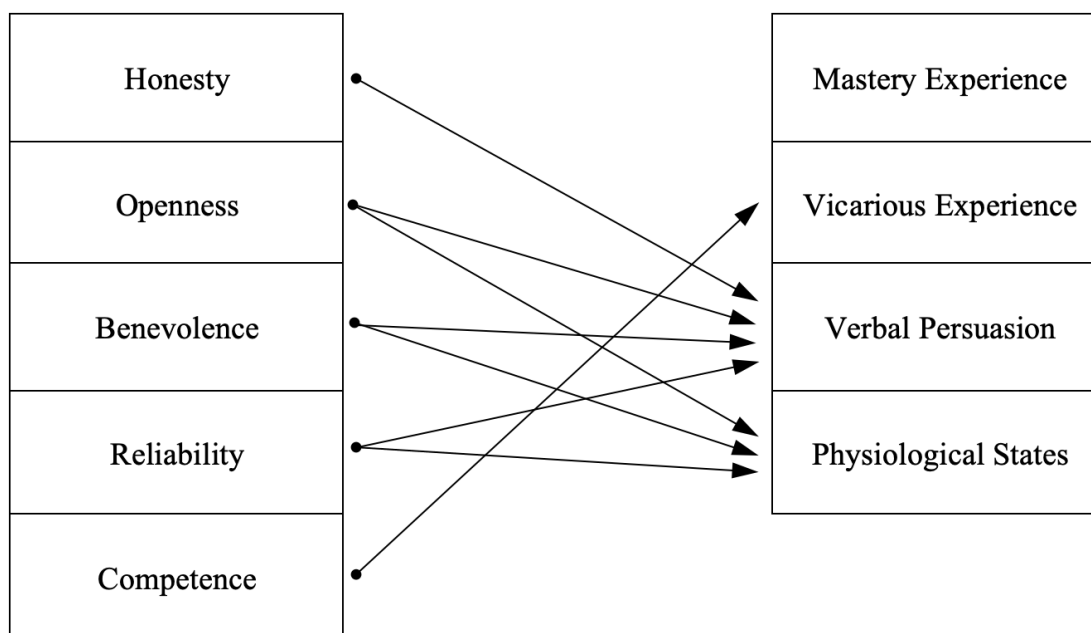
This model seeks to help explain how conditions of trust contribute to productive school organizations through the mechanism of principal self-efficacy beliefs. Trust is defined by an implicit set of beliefs that the other party will behave in a positive and predictable manner and will not take advantage of any given situation (Gefen et al., 2003). As previously described, trust is comprised of five facets: honesty, openness, benevolence, reliability, and competence (Tschannen-Moran & Hoy, 2000). In this study, the facets of trust are expected to supply principal self-efficacy through the sources of mastery experience, vicarious experience, verbal persuasion, and physiological states (Bandura, 1982). These four sources merge to form perceptions of one's own capability, ultimately informing expectations for the prospects of success in any given domain

(Tschannen-Moran & Hoy, 2007). This model seeks to clarify how trust contributes to principal self-efficacy. In the literature reviewed previously, the importance of proximal working relations (Cunningham et al., 2005; Mellor et al., 2006; Moran-Miller & Flores, 2011), interpersonal support from central office and school-based personnel (Leithwood & Jantzi, 2008; Osterman & Sullivan, 1996; Tschannen-Moran & Gareis, 2005), substantive feedback (Machida-Kosug et al., 2016; Messer, 2019), and district focus and clarity (Airola & Bengtson, 2014; Leithwood & Jantzi, 2008; Osterman & Sullivan, 1996) to leader self-efficacy was described. In other similar contexts, trust has exhibited influence on self-efficacy beliefs (Cheung & Chan, 2000; Gray, 2016; Hoy & Tschannen-Moran, 1999; Hsu et al., 2007; Kosar, 2015; Pavlou & Fygenson, 2006). These findings point to a convergence of concepts tied to productive relationships of trust that result in contributions to principals' feelings of efficacy. The potential of these ideas forming perceptions of trust and contributing to feelings of efficacy warrants further investigation. This chain is dissected by more closely investigating:

- the contributions of a specific aspect (trust) of two meaningful principal relationships (assistant principal and central office supervisor)

- one specific aspect of PSE (instructional leadership)

After describing the four sources of self-efficacy, the hypothesis of the connection between facets of trust and self-efficacy is described by explaining how each of the five facets informs the sources of self-efficacy.

The Function of Self-Efficacy

According to self-efficacy theory, self-efficacy beliefs are informed by four distinct sources: mastery experiences, vicarious experiences, verbal persuasion, and

physiological states (Bandura, 1982, 1997; Tschannen-Moran & Hoy, 2007). Mastery

experiences are attainments that individuals have personally achieved. In contrast,

vicarious experiences are not personally achieved but are the observed attainments of

others. Vicarious experiences are most powerful under certain conditions: the observer

judges the other individual to be similar to the observer and the circumstances reflect

those faced by the observer. Verbal persuasion accounts for the influences of others who

are significant in the life of the individual. Despite the narrowly descriptive label, *verbal*

persuasion is inclusive of any form of social feedback including spoken language,

behavioral expressions, and body language. The presence, or absence, of these actions,

whether active or passive, inform personal efficacy beliefs. Physiological states are

comprised of the positive or negative feelings experienced in association with a particular

task or domain. Physiological states influence self-efficacy perceptions through arousal;

powerful feelings such as elation, satisfaction, comfort, anxiety, agitation, fatigue, and

pains. As individuals do in any domain, *principals* conduct an internal assessment of their

own competence in contrast to the instructional leadership demands of the principalship.

This assessment results in self-efficacy perceptions. A principal encounters myriad cues

that inform self-efficacy perceptions. The formation of such perceptions is nuanced, as

emphasized by Schwarzer (1992) in explaining, "self-efficacy does not simply reflect the

perception of accomplishments; instead, it is based on subjective inferences from

different sources of information" (p. x).

Bridging the Connection Between Trust and Self-Efficacy

Honesty, openness, benevolence, reliability, and competence integrate to form the

construct of trust. It is the central hypothesis of this study that each contributes distinctly

to self-efficacy perceptions. Honesty can be defined as consistent congruence between the portrayal of events and reality (Rotter, 1967). Honesty from an individual of ongoing interaction generally indicates the existence of some form of a positive relationship. This can be interpreted to mean that the other person values the relationship enough to share information accurately and truthfully. The acquisition of honest feedback, from peers and supervisors, along with feelings of support from colleagues and supervisors, contributes to leader efficacy (Machida-Kosug et al., 2016). From the perspective of a leader, and coming from a colleague of significance, honesty is an expression of acceptance of the leader. This demonstrates that the colleague perceives enough respect for the person, and value in the relationship, to engage meaningfully. This line of reasoning is supported by experimental social research. People continually assess the abilities of others to cope with life events; when they are judged to do so successfully, they are more willing to engage with them in supportive ways (Schwarzer, 1992). Behaviors indicating meaningful engagement and acceptance serve as subtle yet founded confirmations of perceptions of leadership competence. This is further evidenced by Lee's (2004) findings which indicate that employees naturally exhibit a desire for continuous improvement when they feel they belong in an organization. This chain of interpersonal feedback results in a source of self-efficacy, often in the form of verbal persuasion.

Openness operates much the same as honesty—with an added measure of depth. Honesty and openness both suggest a willingness to engage in a relationship. Whereas honesty exhibits an inclination to share information accurately, openness reveals a disposition to *willingly* share information (Butler & Cantrell, 1984; Hoy & Tschannen-Moran, 2003). The level of vulnerability required to voluntarily open oneself to another

indicates greater depth in the relationship. Tschannen-Moran and Hoy (2000) suggest,

"openness signals a kind of reciprocal trust, a confidence that neither the information nor

the individual will be exploited, and recipients can feel the same confidence in return" (p.

558). In addition to the confirmation accompanying meaningful relations—likely a

significant contributor to the efficacy experienced in association with honesty—

interactions indicative of openness also produce physiological responses that result in

potent positive associations. This may offer some explanation for studies demonstrating

the strong influence of role models on career interests and efficacy for career decisions

(Cunningham et al., 2005; Moran-Miller & Flores, 2011). These affirmative emotional

associations buttress optimistic perceptions of self-efficacy.

Benevolence is the selflessly motivated disposition to protect the interests of, or to

refrain from taking advantage of, another (Cummings & Bromiley, 1996; Tschannen-

Moran & Hoy, 2000). Like honesty and openness, benevolence can be perceived to

indicate the value another person assigns to a relationship. This perception contributes to

self-efficacy as a form of verbal persuasion. Benevolence signals safety and a sense of

insulation from harm. Perceiving this assurance implies that personal interests are

protected and secure, allowing both parties to operate in a state of contentedness. This

creates feelings of minimal vulnerability, which can have powerful consequences. The

generalized confidence associated with minimal vulnerability, especially in relationships

with those of professional significance, causes individuals to experience feelings of

invincibility in which people are more likely to take risks. These feelings may motivate

risks that enable accomplishments previously unattainable. This sequence describes a

central tenet of self-efficacy theory—the resilience to persist in the face of adversity

(Bandura, 1977). Bandura explains (1982), "people avoid activities that they believe exceed their coping capabilities, but they undertake and perform assuredly those that they judge themselves capable of managing" (p. 123). Perceptions of benevolence may contribute to emotional states of invincibility that supply self-efficacy. Invincibility generates confidence influencing the tasks a person judges themselves capable of managing, wherein individuals accept elevated risk and withstand considerable setbacks.

Reliability integrates the ideas of predictability and benevolence. Predictability entails consistency of behavior, which is a necessary but insufficient condition of reliability. Reliability also requires that the consistently delivered behavior aligns with the interests of the other party; the alternative would result in distrust out of benevolence concerns (Tschannen-Moran & Hoy, 2000). Reliability likely generates self-efficacy through the sources of verbal persuasion and physiological states. Reliability, as a function of consistency, is an expression of cooperation. This cooperation indicates a mutually maintained professional relationship, which leads back to the logic connecting honesty to verbal persuasion: willingness to engage consistently in a relationship, and in good faith to the other party, signals acceptance—which is interpreted as a vote of confidence. Positive physiological states are produced by these reliable demonstrations of shared interests. These positive associations become strengthened over time, contributing to feelings of efficacy.

Competence makes a break from the other facets of trust. Competence is not characterized by voluntary intentions or willingness to engage in a relationship (Hoy & Tschannen-Moran, 2003). Competence is defined by the skills an individual is perceived to possess (Hoy & Tschannen-Moran, 1999) and represents the ability to produce quality

outcomes (Baier, 1986; Tschannen-Moran & Hoy, 2000). When domain-specific skills and abilities are perceived in another, the potential for influential vicarious experience is present. In the case of colleagues with whom one regularly associates, an increase in perceived competence may increase perceptions of one's own abilities. Murphy and Ensher's (1999) study offers support for this idea as findings indicate that the self-efficacy of leaders is related to their own ratings of subordinates. If a person is perceived to be comparable to the one perceiving, the potential of the vicarious experience to produce self-efficacy is increased. When the perceiver encounters comparable others who they believe to be successful, this provides evidence that they too can be successful. The greater the individual resemblances, the greater the perceived probability of similar achievements. This logic equates to self-efficacy from vicarious experience produced by collegial interactions.

In the Absence of Trust

Perhaps even more powerful than the generative capability of each facet as a source of self-efficacy is the influence of the alternative (Rousseau et al., 1998). In the absence of the respective facets, the probability of positive self-efficacy beliefs is tremendously diminished. In circumstances where honesty, openness, benevolence, reliability, or competence are missing, the interpersonal fallout is profound. Using students as an example, Tschannen-Moran and Hoy (2000) emphasize the inefficiency of behavior when trust is absent, explaining, "without trust, a student's energy is diverted toward self-protection and away from learning…without trust, communication becomes constrained and distorted, making problems more difficult to resolve" (p. 585). In the absence of trust, energy is allocated to protective and preemptive behaviors provoked by

uncertainty, anxiety, and concern about betrayal (Keyton & Smith, 2009). This severely limits circumstances and opportunities contributing to self-efficacy. Like the availability of air to breathe, trust garners little consideration until it is absent. Just as the body is imperceptibly engaged in the work of breathing while still completely dependent on the process, the pressing pursuits of an organization are reliant on trust in professional relationships. When the absence is noticed, all other priorities, such as the efficacious engagement with challenging leadership tasks, become superfluous until this foundation of everyday functioning is restored.

Variations in The Contributions of Individual Facets of Trust

In professional environments, facets of trust may contribute differentially to trust in upward and downward relationships, respectively. Mixed reviews have been reported on whether certain facets of trust exert greater influence on overall trust in upward (superiors) and downward (subordinate) relationships. Athos and Gabarro (1978) reported that in downward relationships, credibility and honesty were the primary concerns of supervisors as they form trust perceptions of subordinates. Credibility in this context equates to competence and reliability (Tschannen-Moran & Hoy, 2000). In the appraisal of trust in downward relationships, supervisors gauge, "how good is he?," "can I rely on him?," "will he talk straight to me?," "what does he see as the problems?" (Athos & Gabarro, 1978, p. 293).

Subordinates' trust assessments of supervisors—upward relationships— may be most influenced by three facets: honesty, openness, and benevolence (Athos & Gabarro, 1978; Blake & MacNeil, 1998). In upward relationships, subordinates' trust perceptions rely on different questions than supervisors—questions that necessitate openness and

benevolence. Subordinates examine, "what does he want?," "what are his concerns?," and "what are his motives?" (Athos & Gabarro, 1978, p. 293).

Butler and Cantrell (1984) later studied this phenomenon of certain facets of trust carrying greater weight relative to the downward or upward position in the relationship. Following an empirical study, Butler and Cantrell concluded, "there were no differences in the importance of any of the determinants of trust in one's subordinates versus one's superiors" (p. 19). It is noteworthy that the value of honesty in both downward and upward relationships is confirmed in both studies and among triangulating sources (Athos & Gabarro, 1978; Butler & Cantrell, 1984; Hoy & Tschannen-Moran, 2003).

The tension between the findings of Athos and Gabarro, and Butler and Cantrell, are informative to the current study. Though this study does not attempt to answer questions of the contributions of the *individual facets to overall trust*, similar questions arise concerning the differential contributions of the *individual facets to PSE*. Some facets of trust may exert greater influence on self-efficacy, and the facets' effects may also vary by the direction of the relationship—upward or downward.

The model of the downward principal-HRAP relationship is shown in Figure 2.2. The model specifically addresses each of the research questions related to HRAPs:

- the influence of HRAP trust on PSE (question 1)

- comparison of the relative influences of HRAP trust and COS trust on PSE (question 3)

- the extent to which the five facets contribute differently to PSE in relationships with the HRAP (question 4)

Figure 2.2

Highest-Ranking Assistant Principal Trust Model
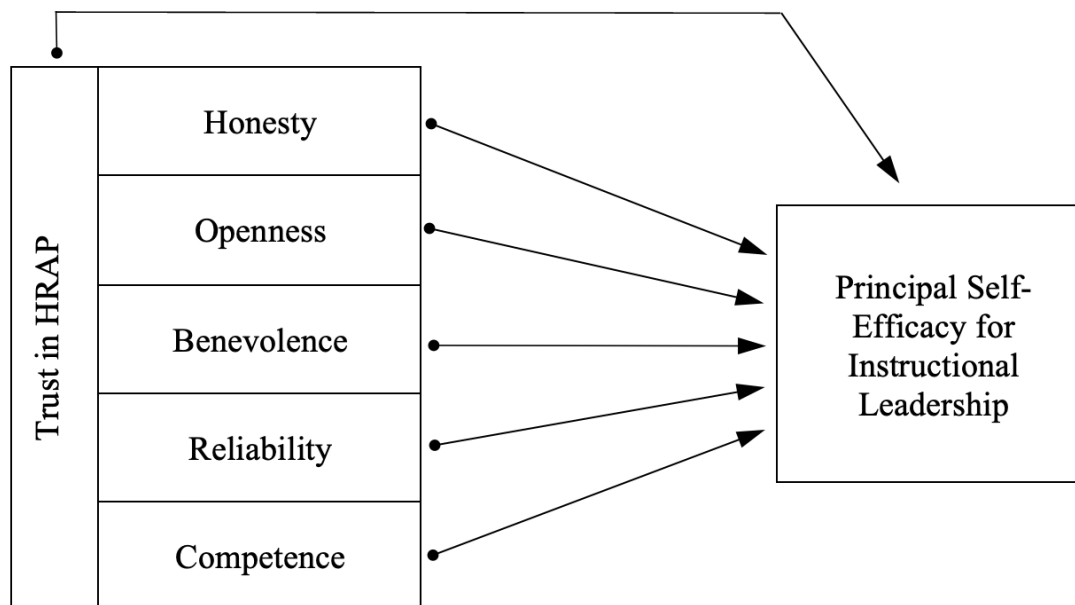
A significant relationship is expected between PSE and principals' trust perceptions of their HRAP. The relationship between trust in the HRAP and PSE is assessed separately from the relationships between the five respective facets and PSE. The facets of honesty, reliability, and competence are expected to be most correlated with self-efficacy in these (downward) relationships.

Figure 2.3 models the upward principal-COS relationship. Following the format of the HRAP trust model, each of the research questions related to the principal-COS relationship are diagrammed:

- the influence of COS trust on principal PSE (question 2)
- comparison of the relative influences of HRAP trust and COS trust on PSE

- (question 3) the extent to which the five facets contribute differently to

- PSE in relationships with the HRAP (question 4)

Figure 2.3

Central Office Supervisor Trust Model

A significant relationship is expected between PSE and principals' trust in their

COS. The relationship between trust in the COS and PSE is, again, evaluated

independently from the relationships between the five respective facets and PSE. Self-

efficacy in upward relationships is expected to be most correlated with perceptions of

honesty, openness, and benevolence.

CHAPTER 3: METHODOLOGY

The current study seeks to replicate much of the design of the study conducted by

Hoy and Tschannen-Moran (1999), which analyzed teacher self-efficacy in upward and

downward relationships. Whereas their research analyzed teachers as the unit of study,

the current study will analyze principals. To form the analysis of upward and downward

relationships (Athos & Gabarro, 1978; Butler & Cantrell, 1984; Hoy & Tschannen-

Moran, 2003), principals will be substituted for teachers, central office supervisors for

principals, and highest-ranking assistant principals for clients. Central office supervisors

are defined as the primary supervisor of the principal. The highest-ranking assistant

principal is defined as the assistant principal the principal would appoint as acting

principal in their absence.

Research Design

To investigate the relationships between facets of principals' perceived trust and

principals' perceptions of self-efficacy for instructional leadership, a survey of structured

questions was used to obtain principals' perceptions (Vogt et al., 2012). Quantitative

methods were employed to conduct a cross-sectional and correlational analysis of the

results. Qualitative methods were utilized to analyze the specific behaviors of assistant

principals and central office supervisors that enhance secondary principals' perceptions

of respective trust and self-efficacy for performing in their roles. Prior to the study, a

pilot phase was utilized to assure clarity of instructions and efficiency of participation for

the purpose of increasing participation rates, and to provide a practice data sample to test

the data analysis plan. The pilot study participants included elementary principals with

assistant principals or interns. This group of participants was selected to maintain the pool of potential secondary principal participants for the full study while still meeting the purposes of the pilot study. Following participation, pilot participants were asked to provide feedback on the clarity of instructions and survey questions, and any logistical considerations relating to survey access and completion.

<div align="center">**Context**</div>

The context for this study is secondary schools in the state of Utah. Private and charter schools were not included because of the varying leadership structures within. The leadership structures in traditional public secondary schools are generally standardized, with the hierarchy between assistant principals, principals, and central office supervisors consistently intact and clearly defined (Alpine School District, 2022; Juab School District, 2022). Charter and private school principals are often the highest-ranking official in the organization or have limited organizational support personnel at the levels immediately above principals (American Heritage School, 2022; InTech Collegiate Academy, 2022). Though some leadership structure differences exist in traditional districts, the hierarchy almost always includes the downward and upward relationships in a consistent form. The variability in charter and private schools could obscure the context that characterizes the precise relationships attempting to be investigated.

To be included, each school must have had a position titled principal and a position titled assistant principal, as opposed to position titles of "director," "coordinator," or "administrator." This criterion eliminated schools that do not contain

the precise positions of the relationship under investigation. Schools that housed a narrow range of course offerings, such as technical centers, were also excluded from participation as this had the potential to introduce variance threatening the contextual parameters of the intended school setting.

As an additional inclusion criterion, secondary schools had to exist independently from elementary schools. To create defined contextual conditions, secondary schools that operated with elementary grades, such as K-12 schools, were not eligible for participation. For the purposes of this study, elementary grades were defined as 5th grade or lower (Utah State Board of Education, 2022).

According to the inclusion criteria, there were 258 traditional public secondary schools with principals eligible for study participation. There were 147 eligible middle school principals and 111 high school principals. Principals meeting the inclusion criteria in the district of the researcher were included as results were secure and no information identifying the individual was gathered. This ensured minimal risk of these participants having their responses exposed.

<center>**Sample**</center>

The current study seeks to understand the perceptions of secondary principals with at least one assistant principal within the state of Utah. Secondary principals were targeted for study because of the presence of assistant principals, which is less commonly found in elementary schools. Participants were invited by sending an email to all eligible principals in Utah. Email addresses were collected from the Utah State Board of Education directory.

An a priori power analysis was performed, given the feasible sample size of 52 participants, to determine the smallest detectable effect size. According to the analysis, correlations of 0.27 or larger can be detected with a total sample size of 52, with an α level of .05, and power of 80%. Beneficially, studies of similar constructs and variables have reported correlations of 0.27 (Kosar, 2015), 0.46 (Hoy & Tschannen-Moran, 1999), and 0.81 (Gray, 2016); all equal to or larger than the detectable correlation of 0.27 with a sample of 52. With a total of 258 eligible principals, 52 participants would produce a 20% return rate. This number of participants also represented the minimum required to achieve adequate statistical power. Under the current pandemic recovery conditions, this rate is entirely feasible. As such, it was expected this study would have adequate statistical power. The margin of error for the expected sample was calculated using a 90% confidence interval. For a population of 258 principals, a sample size of 52 participants yields a 10.2% margin of error.

Data Collection

This study seeks to investigate principals' perceptions of trust and self-efficacy. No personally identifying information was gathered, so informed consent was not needed. Electronic Qualtrics surveys were distributed by email. Participation took place via internet connection to digital surveys and participation was voluntary. Given the number of questions, survey participation was expected to take 15 minutes or less. Two follow-up emails requesting participation were sent at intervals of five business days. Any questions about prospective participation were answered by email. Results were gathered, scored, and aggregated electronically using Qualtrics. All procedures were approved by the Utah State University IRB (Appendix D).

Instrumentation

Trust was measured using a modified version of the "trust in principal" subscale of the Omnibus Trust Scale developed and validated by Hoy and Tschannen-Moran (2003). This scale was designed to measure willingness to be vulnerable and five facets of trust: benevolence, reliability, competence, honesty, and openness. Content analysis confirms that these five facets and willingness to be vulnerable are represented. A scale reliability of .98 was reported for the "trust in principal" subscale using Cronbach's alpha, while factor loading for the items ranged from .44 to .94. This indicates a high level of reliability, well exceeding the generally accepted value of .80 (Field, 2013). The original form is a 10-item Likert scale measuring faculty members' trust in their principal. The modified version for use in this study employed the same scale items but with phrasing modifications to assess principals' perceived trust in their HRAP and COS. The 10-item survey was be completed twice; once for each of the two relationships under investigation. This resulted in a total of 20 trust scale items.

The original Omnibus Trust Scale: Trust in Principal subscale (Hoy & Tschannen-Moran, 2003) is shown in Appendix A. The original scale includes questions designed for teacher perspectives, such as:

1. Teachers in this school can rely on the principal.

2. Teachers in this school trust the principal.

The scale utilized a six-point scale anchored at: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree.

The modified Principal Trust in the HRAP or COS Scale (Appendix B), used in this study, employed the same questions with language modifications to investigate trust

perceptions of principals in HRAP's and COS's. Questions are phrased as below:

1. I can rely on my assistant principal [central office supervisor].

2. I trust my assistant principal [central office supervisor].

To gain the greatest level of resolution, the specific principal leadership domain of instructional leadership was measured, as self-efficacy perceptions were recognized to be tightly coupled to specialized domains (Bandura, 1997; Hannah et al., 2008; Schwarzer, 1992). For the measurement of PSE for instructional leadership (PSE-IL), the study employed the Principal Sense of Efficacy Scale (PSES). The PSES is an adaptation of a measure of teacher efficacy originally developed by Tschannen-Moran and Hoy (2001). This scale has been used in similar studies to measure principal self-efficacy for instructional leadership (Leithwood & Jantzi, 2008; Tschannen-Moran & Gareis, 2007). The full PSES scale includes sections for the measurement of PSE for instructional leadership, PSE for management, and PSE for moral leadership. Only the section including the six-item scale for measuring PSE for instructional leadership was used for this study. Factor loading for the items on the "PSE for instructional leadership" subscale range from .45 to .81, with a scale reliability of .86 (Tschannen-Moran & Gareis, 2007).

The Principal Self-Efficacy for Instructional Leadership Subscale (Tschannen-Moran & Gareis, 2004) includes questions designed to probe principals' feelings about their abilities to motivate teachers, develop a shared vision, manage change, cultivate a productive learning environment, facilitate learning, and influence student achievement (Appendix C). A nine-point scale is utilized, anchored at: 1 = none at all, 3 = very little, 5 = some degree, 7 = quite a bit, and 9 = a great deal.

To begin to understand the why behind the quantitative responses provided by

study participants, four open-ended questions were posed:

1. Briefly list a few of the most notable behaviors of your assistant principal that enhance your trust in them.

2. How do these behaviors, if they do, enhance your own confidence for performing your job?

3. Briefly list a few of the most notable behaviors of your central office supervisor that enhance your trust in them.

4. How do these behaviors, if they do, enhance your own confidence for performing your job?

Select demographic characteristics were gathered to control for potentially confounding variables. District size and school size were collected to control for the potential influence on results (Leithwood & Jantzi, 2008). As principal age, race, gender, years of principal experience, and socio-economic status of students served are not significantly related to PSE, these demographic questions were not necessary to be included (Dimmock & Hattie, 1996; Leithwood & Jantzi, 2008; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2004, 2007), yet as a measure to ensure representativeness, principal gender and years of experience were collected. Evidence concerning the influence of the school level is mixed and was therefore included as a demographic variable (Leithwood & Jantzi, 2008; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2007).

Though there is no specific evidence indicating the following factors as confounding variables, it is conceptually feasible that they could obscure the relationship between the variables under investigation. The number of assistant principals in the

building could influence the measured level of trust by the simple limit on the number of options among the assistant principals. Where there is only one assistant principal, choosing the highest-ranking assistant principal is inherently limited to the single option. Whereas, a school with multiple assistant principals offers a higher probability that the principal can select a highest-ranking assistant principal with whom they have a greater level of trust. This could distort the level of trust between schools on a dimension outside of the variables of interest.

Another variable that could have confounding effects is the number of principals supervised by the COS. The time and attention necessary to develop relationships of trust could be reduced under conditions where a COS has many more principals which whom to connect. This may bias trust levels in favor of principals served by a COS with a smaller supervisory load. This is a confounding variable that could distract from the variables of current interest.

The amount of time in which the principal and their assistant principal, or COS, have had to develop the relationship is another factor that could influence levels of trust. The interactions involved in assessing and establishing trust points to the possibility that relationships of greater length may hold an advantage over those in the earliest stages of development.

For the reasons outlined above, the number of assistant principals in the building, the number of principals supervised by the COS, and number of years in the relationship with the selected assistant principal and COS (in which both are in the current positions) were included as demographic variables at the conclusion of the survey.

The complete survey included 35 total questions; 10 questions assessing trust in

the HRAP, 10 questions assessing trust in the COS, six questions assessing PSE-IL, and nine demographic questions.

Data Analysis & Procedures

Data used in this analysis were the result of principal responses to subscales on trust in HRAP, trust in COS, PSE-IL, and demographics. The demographic characteristics of participants are described by a table including frequency, mean, standard deviation, and percentage make-up. R was employed to calculate means, standard deviations, and reliabilities (Cronbach's alpha) for the items embedded in each scale (R Core Team, 2020). Demographic variable data was statistically controlled to enable analysis of the influences on the relationships in question. To address volunteer bias, participant gender and years of experience were considered to ensure an acceptable range of participants.

Assumptions that accompany correlations and linear regression were tested to include normality of regression residuals, homoscedasticity of residuals, and the absence of extreme cases for the distributions of all variables prior to analysis (Field, 2013; Tabachnick & Fidell, 2007). In cases of missing data, unless the missing response seems to be missing not at random, the case was included in the analysis. Analysis included a search for any patterns of missing response data. In the absence of a recognizable pattern, missing data was assumed to be missing at complete random (Field, 2013). If more than one response was missing in any single subscale, the case will be excluded entirely. The demographic question of the number of assistant principals excluded participants selecting zero assistant principals. Those making this selection were directed to a message indicating the end of the survey.

The analysis plan proceeded to address each of the research questions. Post-hoc power analysis was conducted on the regression models to determine if enough statistical power was present to appropriately reject the null hypotheses. Each analysis was conducted with demographic variables statistically controlled. To answer question one, multiple regression analysis and the Pearson product correlation between the composite trust in HRAP and composite PSE-IL were calculated to assess the strength of the relationship between the variables (Field, 2013; Tabachnick & Fidell, 2007). Statistical significance of the relationship was determined using the threshold of $p < .05$ level. Question two was answered following the same procedure with trust in COS inserted for trust in HRAP. Composite scores for subscales were calculated by averaging the values of each case's responses.

Standard multiple regression was used to investigate question three by contrasting the respective influence of composite trust in HRAP and composite trust in COS on composite PSE-IL (Tabachnick & Fidell, 2007). In the final step of analysis for question four, correlations between the individual facets of trust (HRAP and COS respectively) and PSE-IL were calculated. The influence of each of the facets of trust, within trust in HRAP and trust in COS, on PSE-IL were compared by considering the proportion of explained variance using multiple regression analysis. To address concerns of multicollinearity, the following were calculated for HRAP and COS:

- correlation between each of the items in the scale

- correlation between each of the facets and PSE-IL

- correlation between the composite score and PSE-IL

- individual regression for each of the facets while controlling for the demographic

variables

To contribute to greater depth in understanding behaviors that principals perceive to enhance their perceptions of trust and self-efficacy, the qualitative textual responses were analyzed to identify response patterns. A combination of open, axial, and In Vivo coding were employed to complete the analysis. Open coding was the initial process for considering all possible meanings in the data and identifying possible patterns or themes. Axial coding was then completed to create groups of codes that formed the beginnings of making meaning from the findings within the open coding process (Merriam & Tisdell, 2016). In Vivo coding was then utilized to recognize, "phrases that are used repeatedly by participants" (Miles et al., 1994, p. 74). To strengthen reliability and trustworthiness within this study, investigator triangulation included a peer researcher to confirm theme and pattern categories (Merriam & Tisdell, 2016).

Following completion of the above analysis plan, each of the stated research questions of the current study was adequately informed to offer a discussion of implications for research and practice.

CHAPTER 4: RESULTS

This study asserts that additional research is needed relating to the personal antecedents of leadership (Hallinger et al., 2018), particularly the self-efficacy of school principals. Principal leadership is an aspect of productive schools and self-efficacy is powerful as an influence on human behavior. Existing research offers insight into the relationship between self-efficacy and trust, however, this phenomenon has not been applied to principals. The purpose of this study was to inform school district leaders, principal supervisors, and principal preparation programs concerning the constructs of trust and principal self-efficacy. This study was designed to investigate the relationships between PSE and perceived trust in assistant principals and principal supervisors. As an initial attempt to uncover a link, PSE was narrowed to the specific aspect of instructional leadership. The study was formulated to answer the following questions:

1. Does secondary school principals' perceived trust in their highest-ranking assistant principal correlate with their own self-efficacy for instructional leadership?

2. Does secondary school principals' perceived trust in their central office supervisor correlate with their own self-efficacy for instructional leadership?

3. Does the perceived trust of assistant principals or the perceived trust of central office supervisors have a greater correlation with secondary school principals' self-efficacy for instructional leadership?

4. Do the five facets of trust correlate with secondary school principals' self-efficacy differently for upward and downward relationships?

In each of the four research questions, PSE-IL is the dependent variable of the

regression analyses employed in this study. PSE-IL was measured by the Principal Self-Efficacy for Instructional Leadership Subscale (Tschannen-Moran & Gareis, 2004). Trust was measured using the original Omnibus Trust Scale: Trust in Principal subscale (Hoy & Tschannen-Moran, 2003). Simple word substitutions were utilized to adapt the scale to assess trust in the HRAP and COS. Trust in HRAP, trust in COS, and the five facets of trust were the independent variables. The variables comprising the facets of trust were represented by the composite score of the items in the scale corresponding to each respective facet.

Understanding the association between trust and PSE-IL is important to the design, development, and allocation of efforts to support principals. As a result of the findings in this study, researchers, school district leaders, principal supervisors, and principal preparation programs will be equipped with greater knowledge of the factors associated with PSE-IL.

Demographic Results

A survey return rate of 31% was achieved in receiving 80 completed surveys of the 258 sent. The responses to nine demographic questions were collected at the conclusion of the survey. The demographic characteristics are summarized in Table 4.1. A majority of participants were male, composing 71 percent of the responses collected. The average number of years serving as a head principal was 8.4 with a standard deviation of 5.5 years. Middle/junior high schools were slightly overrepresented at 53 percent. The most common number of assistant principals is two, which represents 44 percent of participant schools.

Table 4.1

Demographic Summary

Demographic Categories	N	%	M	SD
Gender				
Male	57	0.71		
Female	23	0.29		
School Level				
Middle School/Junior High	42	0.53		
High School	35	0.44		
Middle/High School Combined	3	0.04		
Assistant Principals				
1	21	0.26		
1.5	1	0.01		
2	35	0.44		
2.5	1	0.01		
3	13	0.16		
4	8	0.10		
5	1	0.01		
Years as Principal	80		8.4	5.5
Student Enrollment - School	80		1159.8	582.4
Student Enrollment - District	80		35284.7	25505.7
Years with Current Assistant Principal	80		2.5	1.7
Years with Current Central Office Supervisor	80		3.7	3.5
Principals Supervised by Central Office Supervisor	80		8.4	3.7
Total	80	100		

No cases had more than one missing response on any given scale which allowed all cases to be included according to the missing data exclusion criteria. Post-hoc power analysis, with 80 completed surveys, indicates adequate statistical power to reject the null hypotheses, when, in fact, it is false, under the conditions of an effect size as small as 0.17. The margin of error is 7.7% with the collected sample of 80 in a population of 258 principals, using a 90% confidence interval.

Scale Summaries

The mean and standard deviation of each item are shown in Table 4.2. A composite mean and standard deviation was calculated for each scale. This was calculated by finding the combined average of the participants ratings for each scale item. The mean and standard deviations of these combined averages were then calculated. In the two trust scales, the facet of trust to which each item corresponds is also noted next to each item. The reliability of each scale used within the survey is summarized in Table 4.3. The internal consistency and reliability statistic is represented by Cronbach's alpha (α).

Research Question One

The first step in the analysis of the relationship between trust in the HRAP and PSE-IL is to test the assumptions of normality and homoscedasticity of residuals, and to check for the presence of extreme cases. Figures 4.1 and 4.2 illustrate that neither the assumption of normality nor the assumption of homoscedasticity of residuals are violated. Three cases were noted as potential outliers in the normality of residuals, though after running the analyses with these cases removed, it was discovered that they had minimal influence on the model.

To answer research question one, multiple regression analysis and the Pearson product correlation between the composite trust in HRAP and composite PSE-IL are calculated. Using the statistical significance threshold of $p < .05$ level, the relationship between HRAP and PSE-IL is not significant. The scatterplot in Figure 4.3 illustrates this relationship. Because the scales for measuring trust and PSE have different values, the values for each variable are standardized. Multiple regression analysis reveals that, while

controlling for all nine demographic variables, Composite Assistant Principal Trust B =

.132 (p = .737) does not significantly influence Composite Principal Self-Efficacy at the

.05 level (df = 68, F = .683, p = .737). This model has a Multiple R-squared of .091 and

an Adjusted R-squared of -.042. The Pearson product correlation between these variables

is .031 (p = .783). Table 4.4 summarizes the model for research question one.

Table 4.2

Scale Summaries

Scale Item	Mean	SD
Trust in Assistant Principal	*1-6 scale*	
AP 1 – reliability	5.33	1.36
AP 2 – vulnerability	5.24	1.42
AP 3 – reliability	5.30	1.32
AP 4 – benevolence	5.34	1.36
AP 5 – openness	5.34	1.11
AP 6 – honesty	5.53	0.90
AP 7 – honesty	5.53	1.15
AP 8 – vulnerability	5.78	0.67
AP 9 – competence	5.45	0.93
AP 10 – openness	4.94	0.91
AP Composite	5.38	0.78
Trust in Central Office Supervisor	*1-6 scale*	
COS 1 – reliability	5.23	1.01
COS 2 – vulnerability	5.19	1.02
COS 3 – reliability	5.09	0.94
COS 4 – benevolence	5.26	0.82
COS 5 – openness	4.66	1.15
COS 6 – honesty	5.30	0.70
COS 7 – honesty	5.39	0.74
COS 8 – vulnerability	5.21	0.90
COS 9 – competence	5.23	1.09
COS 10 – openness	4.34	1.21
COS Composite	5.09	0.74

Principal Self-Efficacy for Instructional Leadership	*1, 3, 5, 7, 9 scale*	
PSE-IL 1	7.25	1.47
PSE-IL 2	7.50	1.41
PSE-IL 3	7.45	1.35
PSE-IL 4	7.88	1.27
PSE-IL 5	7.38	1.24
PSE-IL 6	6.45	1.42
PSE-IL Composite	7.31	0.98

Table 4.3

Scale Reliabilities

Scale	α
Trust in Assistant Principal	0.88
Trust in Central Office Supervisor	0.95
Principal Self-Efficacy for Instructional Leadership	0.82

Figure 4.1

Distribution of Residuals for Question One
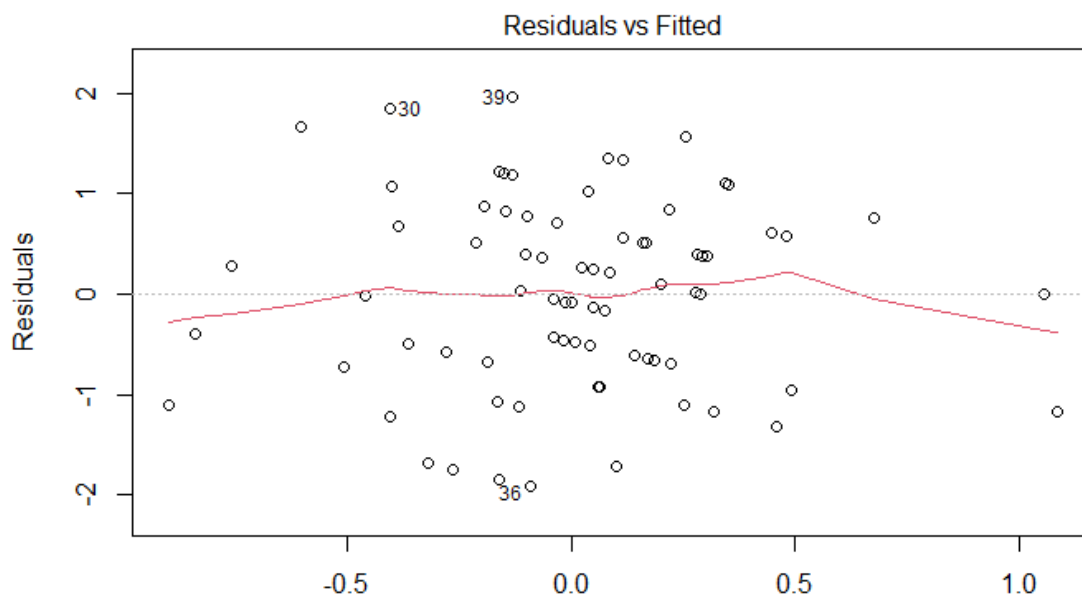
Figure 4.2

Plot of Residuals for Question One

Normal Q-Q
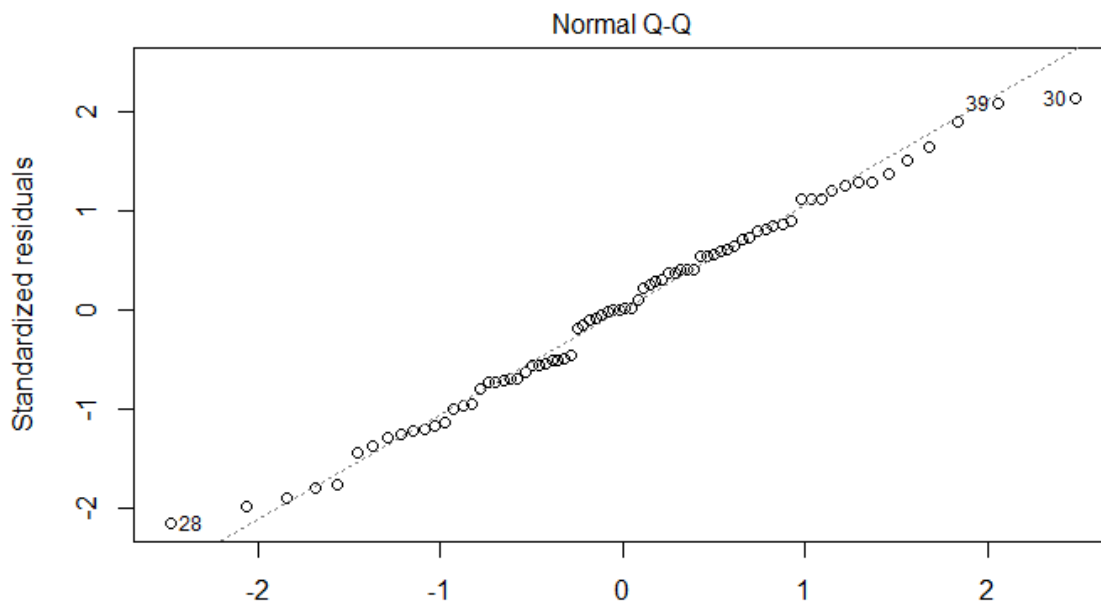
Figure 4.3

Scatterplot of Research Question One Variables
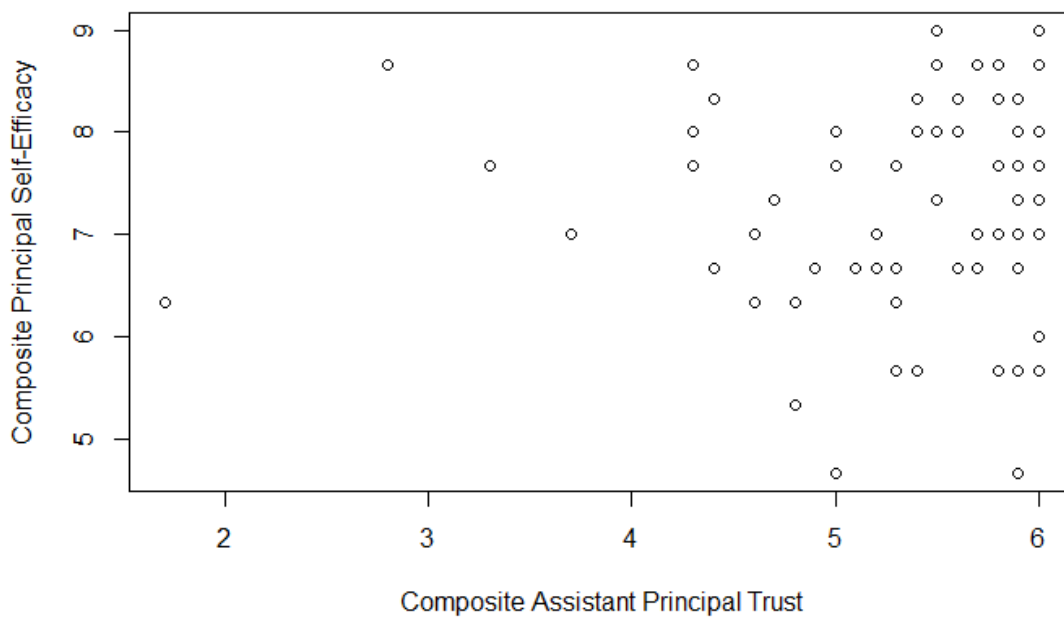
Table 4.4

Research Question One Model Summary

Model	R-squared	Adjusted R-squared	F-statistic	DF	B	P-value
1	.091	.042	.683	68	.132	.737

Research Question Two

To begin the analysis of the relationship between trust in the HRAP and PSE-IL, the presence of extreme cases was considered. As with research question one, no extreme cases were found to have an outsized effect on the model. The assumptions of normality and homoscedasticity of residuals were not found to be violated. Figures 4.4 and 4.5 illustrate the data related to these assumptions.

Figure 4.4

Distribution of Residuals for Question Two
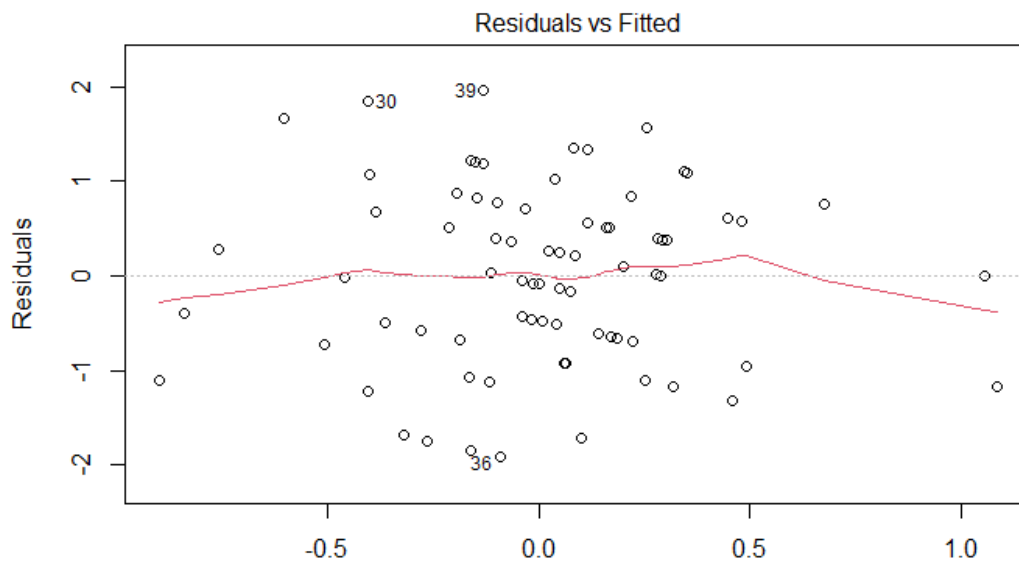
Figure 4.5

Plot of Residuals for Question Two
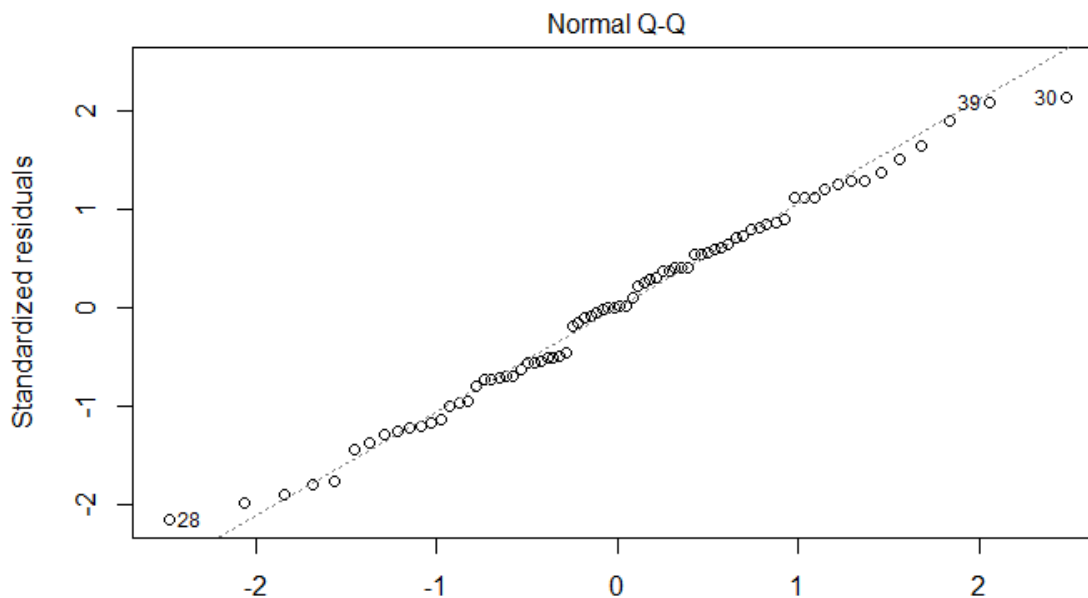
Question two is analyzed following the same procedure with trust in COS inserted for trust in HRAP. Multiple regression analysis and the Pearson product correlation between the composite trust in COS and composite PSE-IL are utilized. Figure 4.6 illustrates the relationship between COS and PSE-IL. The variable values are again standardized to account for the difference in scale values. Multiple regression analysis reveals that, while controlling for all nine demographic variables, Composite Central Office Supervisor Trust B = .091 (p = .788) is not significantly related to Composite Principal Self-Efficacy at the .05 level (df = 68, F = .624, p = .788). This model has a Multiple R-squared of .084 and an Adjusted R-squared of -.051. The Pearson product correlation between these variables is -.056 (p = .621). Table 4.5 summarizes the model for research question two.

Figure 4.6

Scatterplot of Research Question Two Variables
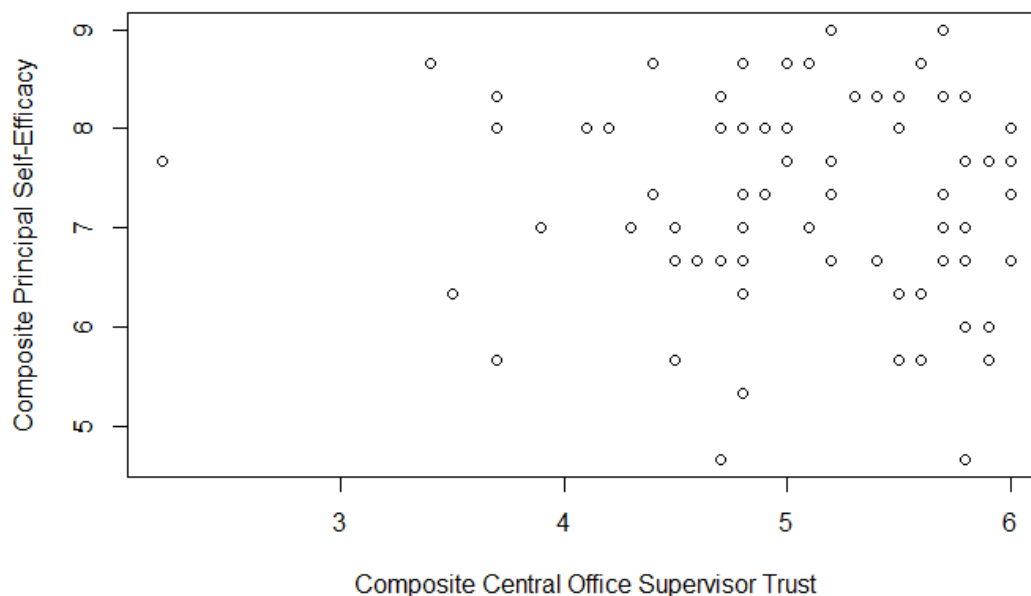
Table 4.5

Research Question Two Model Summary

Model	R-squared	Adjusted R-squared	F-statistic	DF	B	P-value
2	.084	.051	.624	68	.091	.788

Research Question Three

Research question three attempts to compare the relative influence of principals'
perceived trust in their assistant principal and their central office supervisor on PSE. It
was planned to employ multiple regression to compare the relative influence of
composite trust in HRAP and composite trust in COS on composite PSE-IL. Due to the
non-significant result of either relationship to PSE-IL as outlined in questions one and

two, this analysis would not provide meaningful information and is therefore not reported. It does not appear that either is significantly associated with PSE-IL.

Research Question Four

The initial consideration in determining if the five facets of trust correlate with secondary school principals' self-efficacy differently for downward (HRAP) and upward (COS) relationships is to address concerns of multicollinearity. To investigate multicollinearity, the following are calculated for HRAP and COS:

- correlations between the items in the scale (predictors)

- correlations between each of the facets and PSE-IL

- individual regression for each of the facets while controlling for the demographic variables

The Pearson correlation between each of the items on the trust in assistant principal scale is displayed in Table 4.6. There are three values exceeding the commonly cited multicollinearity correlation threshold of .80 and none exceeding the .90 threshold (Field, 2013). The values exceeding .80 are relationships between AP1 and AP2, AP2 and AP3, and AP6 and AP7. AP1 and AP3 are both designed to assess the trust facet of reliability. AP6 and AP7 assess the facet of honesty. The similarities in the precise constructs being assessed create conditions more likely to result in multicollinearity.

The same values for trust in central office supervisor are shown in Table 4.7. COS1 and COS2, COS1 and COS3, and COS2 and COS3 exceed the .80 threshold indicating possible concerns with multicollinearity. As referenced in the assistant principal trust scale, COS1 and COS3 assess the same facet: reliability.

Table 4.6

Pearson Correlations Between Assistant Principal Trust Scale Items

	AP1	AP2	AP3	AP4	AP5	AP6	AP7	AP8	AP9	AP10
AP1	1.000									
AP2	0.802 (<.001)	1.000								
AP3	0.696 (<.001)	0.892 (<.001)	1.000							
AP4	0.159 (0.158)	0.379 (<.001)	0.452 (<.001)	1.000						
AP5	0.295 (0.008)	0.398 (<.001)	0.440 (<.001)	0.560 (<.001)	1.000					
AP6	0.294 (0.008)	0.368 (<.001)	0.432 (<.001)	0.153 (0.174)	0.288 (0.009)	1.000				
AP7	0.239 (0.033)	0.514 (<.001)	0.574 (<.001)	0.388 (<.001)	0.286 (0.01)	0.809 (<.001)	1.000			
AP8	0.330 (0.003)	0.428 (<.001)	0.334 (0.002)	0.457 (<.001)	0.591 (<.001)	0.260 (0.02)	0.400 (<.001)	1.000		
AP9	0.426 (<.001)	0.496 (<.001)	0.521 (<.001)	0.320 (0.004)	0.514 (<.001)	0.715 (<.001)	0.633 (<.001)	0.610 (<.001)	1.000	
AP10	0.259 (0.021)	0.372 (<.001)	0.308 (0.005)	0.197 (0.079)	0.266 (0.017)	0.264 (0.018)	0.376 (<.001)	0.352 (0.001)	0.446 (<.001)	1.000

Table 4.8 displays the mean values and standard deviations of the combined facets of trust. According to the mean values, principals view assistant principals' honesty and vulnerability most favorably, while perceiving honesty and benevolence most favorably for central office supervisors. The values of each of the facets is rated lower for central office supervisors than assistant principals, whereas the standard deviation is lower for central office supervisors in all but openness and competence. None of the facets of trust are significantly correlated with PSE-IL (Table 4.9). The proportion of variance explained in the model is also not significant for each of the facets (Table 4.10).

Table 4.7

Pearson Correlations Between Central Office Supervisor Trust Scale Items

	COS1	COS2	COS3	COS4	COS5	COS6	COS7	COS8	COS9	COS10
COS1	1.000									
COS2	0.847 (<.001)	1.000								
COS3	0.832 (<.001)	0.811 (<.001)	1.000							
COS4	0.539 (<.001)	0.574 (<.001)	0.589 (<.001)	1.000						
COS5	0.538 (<.001)	0.553 (<.001)	0.566 (<.001)	0.752 (<.001)	1.000					
COS6	0.561 (<.001)	0.605 (<.001)	0.587 (<.001)	0.687 (<.001)	0.775 (<.001)	1.000				
COS7	0.529 (<.001)	0.575 (<.001)	0.514 (<.001)	0.644 (<.001)	0.591 (<.001)	0.665 (<.001)	1.000			
COS8	0.635 (<.001)	0.635 (<.001)	0.592 (<.001)	0.765 (<.001)	0.724 (<.001)	0.696 (<.001)	0.774 (<.001)	1.000		
COS9	0.461 (<.001)	0.405 (<.001)	0.423 (<.001)	0.554 (<.001)	0.446 (<.001)	0.435 (<.001)	0.504 (<.001)	0.508 (<.001)	1.000	
COS10	0.388 (<.001)	0.394 (<.001)	0.436 (<.001)	0.512 (<.001)	0.498 (<.001)	0.369 (<.001)	0.477 (<.001)	0.499 (<.001)	0.282 (0.011)	1.000

Table 4.8

Facet Summaries

	Assistant Principal		Central Office Supervisor	
Facet	Mean	SD	Mean	SD
Reliability	5.31	1.23	5.16	0.93
Vulnerability	5.51	0.91	5.20	0.87
Benevolence	5.34	1.36	5.26	0.82
Openness	5.14	0.81	4.50	1.02
Honesty	5.53	0.97	5.34	0.66
Competence	5.45	0.93	5.23	1.09

Table 4.9

Facet Correlations with Composite PSE-IL

Facet	Assistant Principal		Central Office Supervisor	
	Correlation	P-Value	Correlation	P-Value
Reliability	-0.242	0.31	0.010	0.93
Vulnerability	-0.256	0.22	0.009	0.93
Benevolence	-0.037	0.75	0.011	0.93
Openness	0.051	0.65	0.137	0.23
Honesty	-0.059	0.60	0.048	0.67
Competence	0.032	0.78	-0.079	0.49

To offer greater clarity into each scale question related to each facet, the Pearson correlation between each of the scale items and PSE-IL is displayed in Table 4.11. One item has a significant relationship with PSE-IL. AP5, which measures openness of the assistant principal, has a correlation of .252 and is significant at the .02 level. The same correlation and significance for openness is not present on the other openness item on the assistant principal scale (AP10). The openness items on the COS scale also do not exhibit the strength of correlation nor significance level, which is confirmed by the analysis of facets which combine questions of the same facet. The remainder of items are not significant at the $p < .05$ level. The variability present in the correlation and significance values offer evidence that multicollinearity is a minimal concern.

The primary objective of question four is to determine if specific facets of trust are more strongly associated with the outcome of PSE-IL in trust in the assistant principal (downward) or trust in the central office supervisor (upward). This is accomplished by first calculating the proportion of variance explained for each scale item in a regression

Table 4.10

Proportion of Variance Explained by Each Facet

Facet	Assistant Principal		Central Office Supervisor	
	Adjusted R-Squared	P-Value	Adjusted R-Squared	P-Value
Reliability	-0.007	0.50	-0.045	0.75
Vulnerability	0.014	0.37	-0.045	0.75
Benevolence	-0.053	0.80	-0.059	0.83
Openness	-0.043	0.74	-0.029	0.65
Honesty	-0.045	0.75	-0.045	0.76
Competence	-0.050	0.78	-0.051	0.79

model predicting PSE-IL. These values are then compared to detect differences in the influence of each facet between the assistant principal scale and the central office supervisor scale. If any facets are found to have a greater influence on one relationship than the other, this indicates that some facets correlate differently with downward and upward relationships. Table 4.12 illustrates the proportion explained by each scale item as the adjusted R-squared value. Though differences do exist, none of the items meet the $p < .05$ significance threshold which prevents further meaningful analysis. From these data, the variable influence of the facets of trust on downward and upward relationships relating to PSE-IL is inconclusive as p-values do not support the presence of a significant relationship.

Qualitative Follow-Up

To contribute to greater depth in understanding behaviors that principals perceive to enhance their perceptions of trust and self-efficacy, the following open-ended prompts were given:

- Briefly list a few of the most notable behaviors of your assistant principal that enhance your trust in them.

- How do these behaviors, if they do, enhance your own confidence for performing your job?

- Briefly list a few of the most notable behaviors of your central office

- supervisor that enhances your trust in them.

- How do these behaviors, if they do, enhance your own confidence for performing your job?

Table 4.11

Pearson Correlations Between Trust Scale Items and Composite PSE-IL

Scale Item	Correlation with Composite PSE-IL	P-Value
AP 1 – reliability	-0.129	0.26
AP 2 – vulnerability	-0.064	0.57
AP 3 – reliability	-0.029	0.80
AP 4 – benevolence	-0.037	0.75
AP 5 – openness	0.252	0.02
AP 6 – honesty	0.043	0.70
AP 7 – honesty	0.068	0.55
AP 8 – vulnerability	0.153	0.17
AP 9 – competence	0.032	0.78
AP 10 – openness	0.074	0.51
COS 1 – reliability	-0.073	0.52
COS 2 – vulnerability	-0.165	0.14
COS 3 – reliability	-0.048	0.67
COS 4 – benevolence	0.011	0.93
COS 5 – openness	0.115	0.31
COS 6 – honesty	0.081	0.48
COS 7 – honesty	-0.090	0.43

COS 8 – vulnerability	-0.087	0.44
COS 9 – competence	-0.079	0.49
COS 10 – openness	-0.080	0.48

Table 4.12

Proportion of Variance Explained by Each Scale Item

Scale Item	Adjusted R-Squared	P-Value
AP 1 – reliability	-0.057	0.83
AP 2 – vulnerability	-0.058	0.83
AP 3 – reliability	-0.053	0.80
AP 4 – benevolence	-0.053	0.80
AP 5 – openness	-0.058	0.83
AP 6 – honesty	0.042	0.23
AP 7 – honesty	0.049	0.78
AP 8 – vulnerability	-0.016	0.56
AP 9 – competence	-0.050	0.78
AP 10 – openness	-0.052	0.79
COS 1 – reliability	-0.054	0.81
COS 2 – vulnerability	-0.029	0.65
COS 3 – reliability	-0.056	0.82
COS 4 – benevolence	-0.059	0.83
COS 5 – openness	-0.050	0.78
COS 6 – honesty	-0.054	0.81
COS 7 – honesty	-0.030	0.65
COS 8 – vulnerability	-0.036	0.70
COS 9 – competence	-0.051	0.79
COS 10 – openness	-0.038	0.71

The qualitative textual responses were analyzed to identify response patterns. The process for each set of responses began with open coding to consider all possible meanings while identifying possible patterns. Axial coding was utilized to create groups of codes to make initial meaning. In Vivo coding was employed to uncover phrases that were frequently provided by respondents. To strengthen reliability and trustworthiness, a

second researcher verified the groupings and conclusions created by the primary

researcher.

The first analysis involved principals' responses concerning the most notable trust

enhancing behaviors of their assistant principals. Table 4.13 lists the coded categories

along with the number of responses within the category.

Table 4.13

Assistant Principal Behaviors that Enhance Trust

Coded Category	No. of References	% of Total
Openness	2	0.8%
Regulation of emotions	3	1.2%
Attitude	3	1.2%
Reflective	3	1.2%
Seek understanding	4	1.6%
Thinking	4	1.6%
Candor	6	2.4%
Initiative	7	2.8%
Collaboration	10	4.0%
Growth-oriented	11	4.4%
Student-centered*	12	4.8%
Caring*	14	5.6%
Team player	16	6.5%
Work ethic	19	7.7%
Interpersonal skills	21	8.5%
Competence	24	9.7%
Honesty	27	10.9%
Reliability	30	12.1%
Communication	32	12.9%
Total Responses	248	

It is important to note that where single responses were provided that referenced

different behaviors and ideas, these responses were separated into multiple responses.

This means that the total number of responses is not equal to the number of participants.

As an indicator of magnitude, the percentage that each category accounts for in the total number of responses was also calculated. Though it was not intended to use the five facets of trust as a framework for categorizing responses, these categories naturally formed based on the responses. In some instances, the responses became more specific than a single facet of trust. At which point, additional categories were created. *Communication, reliability, honesty*, and *competence* each accounted for at least 10% of the total responses as the top four referenced ideas. Table 4.14 shows examples of responses assigned to each category.

In describing how these behaviors enhance confidence for performing their job, principals shared 77 responses, which means some principals did not provide a response. Table 4.15 lists the categories of responses. *Frees my time* accounted for over one third of the responses provided. Almost seventy percent of responses were tied to *common purpose/approach, verbal persuasion, or frees my time*. Table 4.16 is provided to illustrate the types of responses characterizing the category headings. The same process of identifying patterns and categories of responses that was used for trust-enhancing behaviors of assistant principals was used for trust-enhancing behaviors of central office supervisors. Table 4.17 lists the coded categories along with the number of responses within the category. As previously noted, single responses referencing multiple behaviors or ideas were broken into multiple responses. This again means that the number of exceeds the number of participants. To illustrate salience, the percentage of each category in relation to the total number of responses is displayed. *Provides support* was clearly the most referenced behavior of central office supervisors that principals perceive to enhance their feelings of trust.

Table 4.14

Examples of Assistant Principals' Trust Enhancing Behaviors

Category	Example Responses
Openness	Openness
Regulation of Emotions	They stay calm under pressure, does not let emotional situations dictate how he responds
Attitude	Enjoys their job, finds joy in the work, happy
Reflective	Practices self-reflection, self-awareness, reflective
Seeks understanding	Seeks clarity of expectations, asking questions to clarify
Thinking	Critical thinker, out of the box thinker, questioning actions before implementing
Candor	Respectfully disagrees at times, candor with me
Initiative	He gets things done, actively take care of issues, fulfilling responsibilities without reminders
Collaboration	We collaborate to solve problems, discussions about what to do next, collaboration
Growth-oriented	Coachable, seeks to grow, desire to grow
Student-centered	Listens to students, dedication to students, makes decisions with students in mind
Caring	Kind, genuine, caring, compassionate, empathetic
Team player	Supports my decisions, has my back, supportive of our collective vision
Work ethic	Dedicated worker, commitment, works hard, work ethic
Interpersonal skills	Works well with stakeholders, approachable, strong presence
Competence	Knowledgeable, intelligence, professional skills, experience
Honesty	Integrity, forthright, honesty
Reliability	Follow through, dependable, consistent, reliability
Communication	Keeps me informed, proactive discussions, constant communication

Table 4.15

How Assistant Principal Behaviors Enhance Principal Self-Efficacy

Coded Category	No. of References	% of Total
Affective states/moods	6	7.8%
Vicarious experience	8	10.4%
Trust	10	13.0%
Common purpose/approach	11	14.3%
Verbal persuasion	15	19.5%
Frees my time	27	35.1%
Total Responses	77	

Dependability, reliable communication, and *competence* round out the top group of behaviors, with each accounting for at least 9% of the total responses offered. To provide clarity, Table 4.18 describes the types of responses grouped in each category. When prompted to describe how central office supervisors enhance their self- efficacy, principals offered responses that fit into a wider range of categories than when asked about their assistant principals. Assistant principals' self-efficacy enhancing behaviors grouped into six categories, while central office supervisors grouped into *they support my decision making*. A large gap is present between these two and the remaining categories. Table 4.20 describes the responses characterizing these categories.

Summary of Results

Quantitative results revealed that no statistically significant relationship is present between trust perceptions in the highest-ranking assistant principal and principals' self-efficacy for instructional leadership. The same result was discovered between trust in central office supervisors and principals' self-efficacy for instructional leadership.

Table 4.16

Examples of How Assistant Principals Enhance Principal Self-Efficacy

Category	Example Responses
Affective states/moods	I like working with people who enjoy their jobs, these behaviors reduce my anxiety with the assurance that everything is being addressed, they all enhance how I feel about doing my job
Vicarious experience	They provide and additional example to me on what I can continue to do to improve as a leader, I have complete confidence in his ability to run the school, inspire me to show the same characteristics
Trust	I know I can trust them, I helps me trust them and know they are reliable, I know I can count on him always
Common purpose/approach	We work as one and have each other's backs, we share very similar core beliefs, they understand the team approach, they believe in our common vision
Verbal persuasion	He pushes me to be better, I know I am supported, they reassure me they agree in the vision and direction that the school is headed, I know my assistant principal will support me and my decisions
Frees my time	It allows me to focus on what I need to, I do not have to spend time with a lot of follow up because I know things will be completed, it allows me to accomplish the things I need to, I trust her completely which allows me to function at near 100%, I can be more bold and innovative because I know they can hold down the fort

Because of these non-significant relationships, an analysis of the comparison in the relative influence of principals' perceived trust in their assistant principal and their central office supervisor on PSE became irrelevant. The analysis of variability in the magnitude of the five facets of trust in contributing differently to principal self-efficacy indicates that none of the facets are significantly related to principal self-efficacy for instructional leadership. Open-ended responses indicate that principals most frequently cite communication and reliability as assistant principal behaviors contributing to perceptions of trust, while behaviors that free principals' time and verbal persuasion were

most frequently cited as sources of self-efficacy. Among the responses describing central office supervisors, principals reference providing support and dependability most often as trust building behaviors. The most noted supervisor behaviors as sources of self-efficacy are supporting decision making and engaging in support behaviors.

Table 4.17

Central Office Supervisor Behaviors that Enhance Trust

Coded Category	No. of References	% of Total
Dedication	6	2.8%
Trust in me	6	2.8%
Encouragement	7	3.3%
Advocate	7	3.3%
Concern for my personal life	7	3.3%
Feedback	9	4.2%
Open communication	9	4.2%
Benevolence	10	4.7%
Mentoring	10	4.7%
Integrity	11	5.2%
Interpersonal approach	13	6.1%
Honesty	14	6.6%
Treats as a partner	14	6.6%
Competence	19	9.0%
Reliable communication	19	9.0%
Dependability	20	9.4%
Provides support	30	14.2%
Total Responses	211	

Table 4.18

Examples of Central Office Supervisors' Trust Enhancing Behaviors

Category	Example Responses
Dedication	Passionate, work ethic, energetic, present, hard working
Trust in me	Trust my judgement, they trust my decisions, extending trust, allows me to be the visionary leader of my school
Encouragement	Shares praises, is my champion, positive and supportive comments, expresses confidence in me in front of others
Advocate	Listens to needs, advocates for my school's needs, willing to do the extra things to get us the help we need, advocate
Concern for my personal life	Concerned for my personal well-being, they ask about my health and family, cares about me as a person, talk with me informally
Feedback	Direct and honest feedback, specific feedback on what I am doing well and where I can improve or steps to take, gives examples and ideas of how things can be done without directive
Open communication	Open communication, open dialogue, keeps me in the loop
Benevolence	Always has the best interest of me, students, and staff in mind, has my best interest at heart, dedication to students, genuinely is invested in my school and wants what is best
Mentoring	Mentoring, free with his advice, coaches me, takes time to teach and explain, guidance with difficult situations
Integrity	Keeping confidences, loyalty, I can trust him because of his actions, actions match words, has integrity
Interpersonal approach	Kind, calm, caring, empathetic, patient with me, way of being towards others, doesn't pretend to know everything
Honesty	Transparency, they are honest with me, direct and to the point, shares honest thoughts and feelings
Treats as a partner	They value my opinion, gives me a voice and values my contribution, listens with the intent to help me with issues, collaborative, we collaborate on important decisions
Competence	Super competent at their job, knowledgeable, problem solver, competent, skill set, anticipate our needs, will find out answers
Reliable communication	Communicate frequently, communicates very well, communicate regularly, quick to reply to inquiries, weekly updates, responsive, returns phone calls, check in and follow up with me
Dependability	Available when needed, availability, dependability, consistency in behavior, follow through with commitments/promises
Provides support	Will come and help in an emergency, offers help, has our back, they support us even when we screw up or in a challenging situation, supportive of me and the school as a whole

Table 4.19

How Central Office Supervisor Behaviors Enhance Principal Self-Efficacy

Coded Category	No. of References	% of Total
Vicarious experience	3	3.3%
Communication	4	4.4%
Common vision and goals	4	4.4%
Provides feedback for improvement	5	5.5%
Trust	5	5.5%
Benevolence	7	7.7%
Trust in their competence	7	7.7%
Provides space to learn	7	7.7%
Verbal persuasion	9	9.9%
They engage in support behaviors	15	16.5%
They support my decision making	25	27.5%
Total Responses	91	

Table 4.20

Examples of How Central Office Supervisors Enhance Principal Self-Efficacy

Category	Example Responses
Vicarious experience	I have confidence I can do my best because of their example, their behaviors inspire me to be bold in my school improvement initiatives
Communication	We meet regularly enough that I know their expectations, I know where they stand
Common vision and goals	Instill confidence knowing that we are working toward same vision and goals, we share a common vision and approach
Provides feedback for improvement	Performance feedback allows me to improve, candid feedback helps me to know how to grow and adapt, allows me to see a broader scope of how things shift
Trust	I have more trust, it makes a massive difference to feel supported by the people above you in the hierarchy
Benevolence	I know they are looking out for me, lets me know they are working to help my school, cares about me, there for me
Trust in their competence	Trust that they understand our job, I know I am getting the best information possible, I know that my concerns are being addressed
Provides space to learn	The opportunity to learn is there rather than disdain, always there to build me up and share their confidence in me, allows me to process and learn, I know I have the space to admit mistakes which gives me the space to my job well
Verbal persuasion	Her help and support confirm to me that I am doing the right things and I can tackle any challenges competently, let's me know they are confident in my abilities as a principal, validates my efforts, I feel validated
They engage in support behaviors	I feel supported, I have someone I can confide in if I struggle, is always willing to support me, I can count on them, I have someone I can rely on and ask question and get answers
They support my decision making	They have my back to act without being micromanaged, he knows me and my character so I have confidence that he will support my decisions, give me confidence to do what I need to do and not worry about not having my back, I know I have support and they show trust in me to exercise good judgement

CHAPTER 5: DISCUSSION AND IMPLICATIONS

Study Overview

Principal self-efficacy (PSE) is a powerful personal antecedent to leadership behavior. The primary objective of this study was to test the conceptual and theoretical premise that perceptions of trust are a significant factor in principals' relationships which influences levels of principal self-efficacy. This study was designed to investigate a potential link between secondary school principals' perceived trust in their highest-ranking assistant principal (and central office supervisor) and principals' own self-efficacy for instructional leadership. Given the relevance of instructional leadership for today's principals, in this study, I examined these variables in the context of principals' self-efficacy for instructional leadership (PSE-IL).

Salient Findings

The most salient finding of this study is that no statistically significant relationship between secondary school principals' perceived trust in their highest-ranking assistant principal nor the perceived trust in their central office supervisor and principals' own self-efficacy for instructional leadership were found. This discovery offers evidence counter to the findings of similar studies using teachers as the unit of analysis. There are multiple possible explanations for these results, which will be explored later in this chapter. It is possible that the link between trust and principal self-efficacy is present in other domains of principal self-efficacy, but this study offers early evidence that trust in upward and downward relationships has little association with principals' self-efficacy for instructional leadership.

Another salient finding is the notable absence of instructional leadership in

principals' open-ended responses relating to the self-efficacy enhancing behaviors of assistant principals and central office supervisors. Even with concepts of instructional leadership fresh in their minds from previous survey questions, acknowledgments of instructional leadership are noticeably few. Implications for this salient finding are discussed at length below, as well as all study findings in greater detail.

No Statistical Evidence of The Relationship Between Trust and Principal Self-Efficacy for Instructional Leadership

Regression analysis indicates that the link between trust in the highest-ranking assistant principal and PSE-IL is weak ($B = .132$) and not significant ($p = .737$). A correlation coefficient of .031 ($p = .783$) also indicates a weak relationship. Analogously, the connection between the trust perceived by principals in their central office supervisor and PSE-IL has similar statistical characteristics ($B = .091$, $p = .788$, and $r = -.056$, $p = .621$). According to these statistics, any effect detected between the variables under consideration is likely to be random.

Hoy and Tschannen-Moran (1999) and Kosar (2015) found that secondary and elementary teachers' self-efficacy perceptions are related to their perceptions of trust in upward and downward relationships. This establishes a relationship between trust perceptions and self-efficacy. The current findings question whether this link applies to principals. Using central office supervisors as the upward relationship and assistant principals as the downward relationship, the link between trust and self-efficacy perceptions established with teachers was not able to be replicated in secondary principals as it pertains to their self-efficacy towards *instructional leadership*. This leaves at least two possibilities relating to the findings of the current study. First, that trust is

associated with the broader construct of PSE but not the narrow domain of instructional leadership. Second, that trust is influential for teachers but not principals. The first is more explanatory given the evidence of the value of trust to all educators (Bryk & Schneider, 2002; Gray, 2016; Hoy & Tschannen-Moran, 1999) and the connection between trust and general PSE.

Studies of the relationship between interpersonal constructs such as trust and PSE reveal that trust conditions are connected to PSE in elementary and secondary settings. The number of thoughtful responses offered in the open-ended section of the survey in the current study indicates that principals do recognize a connection between trust-building behaviors and their own efficacy for performing the work. Perceptions of efficacy have been noted to be influenced by the quality of professional relationships principals experience (Messer, 2019; Osterman & Sullivan, 1996). The level of emphasis on teamwork in districts was noted by Leithwood and Jantzi (2008) to contribute to school leader efficacy. Interpersonal support from teachers, central office staff, and the superintendent was also reported by Tschannen-Moran and Gareis (2005) to be significantly related to PSE. Various studies have confirmed that in the absence of trust, interpersonal interactions are severely inhibited (Keyton & Smith, 2009; Rousseau et al., 1998; Tschannen-Moran & Hoy, 2000), thereby inhibiting PSE.

These studies demonstrate a link between self-efficacy and trust in the context of teachers and in constructs similar to trust with principals' self-efficacy. Yet, the findings of the current study suggest that a relationship between PSE-IL and trust is not present. This indicates that a connection between trust and PSE likely lies in the self-efficacy domains other than instructional leadership. While trust may lack the specific behavioral

connections needed to heavily influence PSE for instructional leadership, these specific behavioral connections may exist for PSE in domains such as moral leadership and management. PSE is defined by three domains: moral leadership, management, and instructional leadership. The scale used in this study was adapted from a scale that included sections designed to measure PSE in these domains (Tschannen-Moran & Gareis, 2004). Moral leadership includes items assessing efficacy for promoting acceptable student behavior, promoting school spirit, handling student discipline, and promoting ethical behavior among school personnel. The section on management includes items assessing efficacy for handling the time demands of the job, handling paperwork, controlling your daily schedule, prioritizing demands, coping with stress, and shaping policies and procedures for your school.

In considering the results of the study, there are multiple potential causes for the absence of a statistically significant relationship. The ratings provided by principals demonstrate very little variation. The lack of variation makes discovery of a relationship between variables difficult. It is possible that the instruments are not sensitive enough to detect the extremely small variations between the independent variable and the dependent variable. This limited variation could be the result of a ceiling effect in which all principals perceive high levels of trust and subsequently rate their feelings very high on the respective scales. In this case, the ratings of trust indicated would have small variations which makes the detection of relational changes with self-efficacy difficult to detect. On a 1-6 scale, the average of all trust ratings for assistant principals was 5.38 with a standard deviation of 0.78. Similarly, the average trust ratings for central office supervisors were 5.09 with a standard deviation of 0.74. In both cases, principals clearly

perceive very high levels of trust. Coupled with a small standard deviation of 0.98 in PSE-IL, on a 1-9 scale, the variation available to detect relational changes created a limitation. Even where self-efficacy differences were found, trust perceptions are rated so high with so little variation, a relationship is difficult to discover in the absence of extremely sensitive instrumentation.

Another source of potential noise contributing to the findings of the study is the nature of self-reporting. Principals' reporting of their self-efficacy for instructional leadership assesses their own perceptions, which may be misinformed for myriad reasons. An objective assessment of how efficaciously they act in these realms may be more accurate and insightful. Using more objective measurements of instructional leadership, such as teacher and supervisor ratings of principal instructional leadership, may uncover a relationship between trust perceptions and enacted instructional leadership behavior. PSE-IL is ultimately acting as a proxy for the ultimate goal of enactment of instructional leadership. Studying the relationship directly between trust perceptions and instructional leadership behavior, as opposed to perceptions of self-efficacy for those behaviors, would eliminate potential noise that makes the discovery of a relationship less reliable. This noise *may* be a source for the lack of a relationship found in the current study.

Another possible explanation for the lack of a relationship between trust and PSE-IL is that trust relates more directly to the expedient aspects of principals' jobs such as handling and prioritizing demands, coping with stress, and overseeing the implementation of procedures. Instructional leadership is not characterized by these types of tasks. This explanation is supported by the open-ended responses offered within the survey for this

study. Many of the most often cited HRAP and COS behaviors contributing to confidence for performing principals' jobs are closely related to the dimensions of PSE for management. In reference to HRAP behaviors, the category with the most responses is *frees my time*. This category contains responses characterized by behaviors that allow principals to focus their time and energy on their own responsibilities. The responsibilities described relate closely to management tasks.

As described here, the results of this study could reflect a ceiling in trust, noise in principal perceptions, the obscured connection between trust and instructional leadership activities, or that the relationship between the variables under investigation truly does not exist. Further study is needed to determine the actual cause.

Trust as a Necessary but Insufficient Condition for Principal Self-Efficacy

Though trust was not found to be significantly associated with PSE-IL in the current study, it is worth considering that trust may be critical for producing PSE in some domains but not in instructional leadership. Perhaps, due to the nature of the differences between PSE for instructional leadership and PSE for the other domains, trust is sufficient to enable the other domains of PSE but specific instructional leadership skills are necessary in addition to perceptions of trust for PSE for instructional leadership to be realized. In comparison to instructional leadership, moral leadership and management are associated with traits that are more commonly associated with general leadership (Northouse, 2019). Those with an innate ability to successfully perform tasks such as promoting spirit and ethical behavior, motivating others through social relations, organizing resources, and managing various environments are likely to gravitate to leadership positions. The skills characterizing moral leadership and management are also

more likely to be developed out of necessity. Once in leadership positions, the day-to-day responsibilities require more traditional leadership skills such as working with people to solve general problems and managing various aspects of the organization. If not yet developed, the inherent demands of the position create urgency that they be developed. Whereas instructional leadership skills are not as critical to the standard operations of a school day, they can be subtly avoided or neglected. In comparison to other day-to-day occurrences, instructional leadership is less expedient. Instructional leadership is also more technically based than the other domains of self-efficacy. Instructional leadership is based on a narrow strain of knowledge and skill related to a highly specialized body of knowledge and experience. Other forms of leadership, such as servant, adaptive, and transformational leadership, can be developed in a broad range of settings and are approaches that may be innate for some individuals (Northouse, 2019). Instructional leadership is based in an understanding and ability to apply practical concepts related to curriculum, instruction, and assessment (Bambrick-Santoyo, 2018). Development of these skills requires careful and intentional cultivation in an academic environment (Hoy & Hoy, 2006).

Self-efficacy beliefs are informed by four distinct sources: mastery experiences, vicarious experiences, verbal persuasion, and physiological states, with mastery experiences weighted most influentially (Bandura, 1982, 1997; Tschannen-Moran & Hoy, 2007). A range of studies have demonstrated the link between prior leadership success, which is mastery experience, and PSE (Bandura & Wood, 1989; Machida-Kosug, et al., 2016; Newman, et al., 2019; Paglis & Green, 2002). Applying this link to instructional leadership, in light of the findings of the current study, positive feelings in

interpersonal interactions (such as trust) are not a substitute for instructional leadership knowledge, skills, or experience. Although self-efficacy is domain specific (Bandura, 1997; Hannah, et al., 2008) trust may serve as a foundation and gateway to higher-order priorities in leadership such as instructional leadership. It could be that instructional leadership skill is enabled by interpersonal conditions such as trust, but more is needed. Trust in the principal-central office supervisor relationship is likely to positively influence the work of the principal, though to positively influence *instructional leadership,* activities such as conducting a mock post-observation conversation with a struggling teacher may be necessary. To solidify perceptions of self-efficacy for instructional leadership, mastery experiences or a series of other powerful experiences related to instructional leadership must be present to convert feelings of trust into principals' self-efficacy for instructional leadership.

The Absence of Instructional Leadership

A second salient finding is in the open-ended responses provided by principals to explain the behaviors of their assistant principals and central office supervisors that influence their self-efficacy. There are noticeably few acknowledgments of behaviors related to instructional leadership or technical assistance in the areas of instructional leadership or teaching and learning practices. Of a total of 168 responses shared, four responses referenced anything related to instructional leadership or teaching and learning processes. In the study survey, following the scales of trust in HRAP, trust in COS, and PSE-IL, principals were asked to share notable behaviors of their HRAP and COS (respectively) that enhanced their trust. They were then asked to share how these behaviors enhance their confidence for performing their job. Note that the term

confidence was used rather than self-efficacy due to the more universally understood nature of the construct. Also note that principals were not asked specifically about behaviors related to instructional leadership. In the open-ended responses about HRAP behaviors, four out of a total of 77 were related to instructional leadership. Connections to instructional leadership in describing COS behavior were even less frequent, with zero out of 91 comments relating to instructional leadership. It is clear that principals see the value in trust, as evidenced by the many thoughtful trust-enhancing responses provided, but the behaviors they cite are not linked to self-efficacy for instructional leadership.

Anchoring is a psychological phenomenon in which judgments and thoughts are influenced by exposure to preceding information (Tversky & Kahneman, 1974). Yasseri and Reher (2022) explain that, "the term 'anchoring' can therefore be understood as people's tendency to rely heavily on these prior values (or 'anchors') when making decisions" (p. 1002). This concept is relevant to the limited number of principal responses related to self-efficacy for instructional leadership because the questions immediately preceding these open-ended responses were on the topic of self-efficacy for instructional leadership. Given that this topic was in a position to be anchored in the minds of participants, it would be expected that the topic would be referenced more often than may be typical. That they still made little reference to instructional leadership is further evidence of the distance of instructional leadership from the immediate thoughts of principals in general, and self-efficacy perceptions specifically. It may simply be that principals do not perceive any connection between trust and self-efficacy for instructional leadership. The link between the variables was not found in the quantitative portions of this study, but there are some nuances that can bring more insight to these results.

One possible explanation is that principals were expressing what they value about

the individual or how the individual helps them, with minor consideration for the constructs of trust and confidence. The sequence and structure of the questions was such that the first solicited trust-enhancing behaviors and the second asked how these behaviors contribute to confidence for performing their job. The second question required principals to keep the precise connection between trust-enhancing behaviors and confidence in mind as they responded. While almost all the responses about trust-enhancing behaviors can be reasonably tied to trust, some of the responses seem more closely linked to the general value perceived in the help the individual provides them than trust. Examples of these responses include:

- "enjoys their job and finds joy in the work"

- "he is happy"

- "desire for growth"

- "taking things off my plate"

- "passionate"

- "energetic"

These statements do not fit easily into any of the five facets of trust: reliability, competence, openness, benevolence, or honesty (Tschannen-Moran & Hoy, 2000). This evidence prompts only marginal pause because most responses provided fit well with the construct of trust and the ones that do not are not entirely unrelated. Responses to the second question, requiring one to keep in mind how the trust-enhancing behaviors produce confidence, offer greater cause for concern. In some cases, trust does not seem to be the direct basis of the behavior producing confidence or confidence does not seem to be the outcome of the trust behavior. Some of the responses offering evidence that the

trust-confidence link may not have been in mind are:

- "help me to be punctual"

- "when it is a team effort, the work is more efficient"

- "keeps me committed"

- "I have more trust"

- "He is the kind of administrator I would want to work for"

- "I know that he is trying to do right by the kids"

In other cases, a circular reference is created in citing the term *trust* in the response describing how the trust enhancing behavior produces confidence. This likely indicates that the construct of trust in the previous question is no longer in mind. In the HRAP question, nine responses explicitly cited the term *trust*, while four responses did the same in the COS question. Though this is a seemingly small number of references, this accounts for over 10% of the HRAP responses.

It is also possible that there is a gap between the espoused beliefs of principals and their enacted behaviors. Principals may know the value of instructional leadership and believe that instructional leadership is important but fail to behave congruently with these beliefs. This could occur for myriad reasons:

- they may not have the skills;

- they may not have the time;

- they may be inundated with other more emergent priorities;

- the system may not sufficiently incentive and reward instructional leadership;

- they may have attempted to focus on instructional leadership and failed to achieve
the desired result.

Another possible explanation for these seemingly generic responses is that principals may, as the quantitative evidence suggests, not perceive that the trust enhancing behaviors serve as a source for PSE-IL. If this is the case, principals may default to general responses because they do not have specific information that supports the idea being solicited.

Other Potential Distractions from Instructional Leadership

There are two other potential influences at work in directing principals' focus away from instructional leadership. The onset of the COVID-19 pandemic in the spring of 2020 required an immediate shift in priorities and approaches. The changes necessary to deliver an educational experience remotely, coupled with the unpredictable nature of ongoing guidelines and restrictions, destabilized many of the traditions and assumptions that were previously well established in the educational community. Efforts to continuously understand and adapt to these circumstances rightfully dominated the channels of thinking and communication among school leaders for multiple school years. It is possible that the work of instructional leadership was deprioritized in favor of the most emergent and visible managerial tasks associated with the pandemic, and the effects are still present in the minds of principals even as the pandemic fades.

Another possible distraction from instructional leadership is found in recent changes to Utah compulsory education laws. The data for the current study were collected in December of 2022. Amendments made to Utah Codes § 53G-6-202 and 206 in 2017 severely limited school administrators' mechanisms for compelling students and parents of students outside of grades 1 through 6 to attend school. These changes effectively removed the option to involve local truancy courts in matters of chronically

absent secondary students. This is the grade level range supervised by the principal

participants of this study. The challenges associated with increasingly higher expectations

of student achievement, overcoming learning loss from COVID-19 disruptions, and

attempting to formulate solutions to encourage school attendance looms large in the

world of secondary principals. These concerns pose a potentially significant threat to the

current prioritization of instructional leadership.

Other Findings

To conclude the findings of questions three and four, each is briefly discussed

below. Other considerations related to the findings of this study are also discussed.

Investigating Contributions of Each Facet of Trust

The literature on facets of trust contributing differently to upward and downward

relationships is inconclusive. Athos and Gabarro (1978) report credibility and honesty

were the primary concerns of supervisors in downward relationships. Butler and Cantrell

(1984) find no difference between how the facets were viewed in supervisors'

assessments of subordinates. Blake and MacNeil (1998) confirmed the findings of Athos

and Gabarro (1978) in reporting that subordinates' trust assessments of supervisors

(upward relationships) were most influenced by honesty, openness, and benevolence.

The current study did not attempt to investigate differentiated contributions of the

individual facets to trust. Rather, the possibility of varying contributions of the *individual*

facets to PSE was investigated. It was discovered that the relationship between each of

the facets of trust and PSE-IL, for both HRAP (downward) and COS (upward)

relationships were not significant. As has been described throughout this chapter, the

relationship between trust and PSE-IL is not present in these data. By extension, it is not

surprising that the relationship between each of the facets and PSE-IL is also not significant. With p-values ranging from .23 to .93 (correlations) and .37 to .83 (variance explained), the results of the analysis of contributions of the facets of trust to PSE are inconclusive.

Investigating the Influence of Upward and Downward Relationships

Similarly, because the statistical relationship between trust in HRAP (and COS) is not significant in the results of this study, the analysis of the comparative influence of assistant principals and central office supervisors on PSE-IL is inconclusive. Qualitative evidence from the open-ended responses provides limited evidence that assistant principals are more influential to PSE-IL than supervisors, though this conclusion should be interpreted with extreme care. Though the disparity is slight, and the number of references to instructional leadership in HRAP behaviors is small, this difference between the open-ended comments about HRAP behavior and COS behavior may offer subtle insight. When describing HRAP behaviors, each of the references to *instructional leadership* were tied to the idea of other responsibilities being handled so the principal can narrow their focus to instructional leadership. Perhaps principals perceive less of a need for mentoring and direction in the area of instructional leadership, and more of a need for time and support to be able to prioritize this work. When principals perceive trust in their assistant principals, they are receiving an indication that they are able to prioritize instructional leadership because they can trust their assistant principal to accomplish many of the managerial tasks. Extensive evidence indicates that assistant principals primarily perform managerial tasks (Barnett et al., 2012; Mertz, 2000; Rodrick, 1986). When these tasks are handled well, principals can shift their energy to more

meaningful and higher order work. This is supported by multiple responses in this vein. Principals made comments such as:

- "it allows me to work on my primary responsibility of helping improve teaching and learning in the school"

- "makes my job of instructional leader easier to perform"

- "it allows me to focus on what I need to"

- "I do not have to manage and direct all details of our work"

- "I can be more bold and innovative, because I know they can hold down the fort"

Due to the role of the assistant principal in sharing the daily workload and the sheer amount of time together, the assistant principal occupies a space that positions them to directly influence the tasks the principal has time to prioritize and engage with. This is a link that is easy for principals to notice. Whereas, the COS can provide mentoring, direction, and even permission to maintain this focus, but has limited ability to directly remove managerial issues and responsibilities that compete with instructional leadership tasks. It should be noted that there are behaviors of the COS that do contribute to freeing principal time. These are important in understanding the mechanisms potentially influencing PSE-IL that may not be detected in a broader context. Osterman and Sullivan (1996) discovered that where supervisor communication is direct and personalized, PSE was higher. They also found that higher levels of PSE were associated with clarity in the district's vision and goals. Landy (2013) reported that in districts where the structure enabled principals to efficiently solve problems, PSE was positively influenced. Each of these findings relates to streamlining principals' time and energy, though principals may not recognize these as readily. The connection between their ability to prioritize time for

instructional leadership and these variables is not as obviously apparent. This may explain why principals are able to describe actions of their assistant principals that contribute to their instructional leadership but make no such references to their supervisors.

Concerns with Standardized Assessments

Among the six items on the scale assessing principals' self-efficacy for instructional leadership, all but one of the items had an average rating of higher than seven on a nine-point scale. The six items ask principals to what extent they feel able to:

- motivate teachers (average = 7.25)

- menerate enthusiasm for a shared vision for the school (average = 7.50)

- manage change in your school (average = 7.45)

- create a positive learning environment (average = 7.88)

- facilitate student learning in your school (average = 7.38)

- raise student achievement on standardized tests (average = 6.45)

The last item on the scale, relating to standardized tests, had an average rating of 6.45, with the average rating of the next lowest item (item one) at 7.25. This seems to indicate that principals are much less efficacious about raising student achievement on standardized tests than any other aspect of instructional leadership. There are several possible causes for this perception. The concept of raising student achievement is unique from the other aspects of PSE-IL as it is quantitative and regularly measured. The results of standardized assessments are widely disseminated and often available to the public. The results come from a very limited number of sources and are starkly noted. The metrics are presented in a form that is generally accessible to stakeholders. With some

effort, most stakeholders are able to comprehend the outcomes. The combination of these

characteristics makes the results of standardized assessments difficult to avoid, and

principals are often the first to answer for this information. In comparison, other aspects

of instructional leadership are qualitatively defined and rarely measured or published.

Principals and other stakeholders are exposed to many different sources of information

indicating how well principals are performing in these areas, which makes available a

range of subjective interpretations of how things are going. Regardless of how objective a

principal or other stakeholder is in assessing how effectively the principal is in leading

these other areas, they are exposed to so many sources of feedback that the information

becomes obscured. This allows the benefit of the doubt, possibly tipping the scales in

favor of greater success than is accurate. It may also be that principals have personally

achieved, or witnessed in colleague principals, strides in the other aspects of self-efficacy

for instructional leadership, which certainly makes them feel more attainable.

Study Limitations

A primary limitation of this study is the cross-sectional nature of the data

collected. These data represent a single point in time which creates questions of the

stability of the responses collected. The lack of temporal sequence precludes the

possibility of making causal statements or inferences. The study sample also represents a

narrow population of secondary principals in the state of Utah, creating limitations of

external validity for other groups of principals and educational professionals.

Honorariums represent another limitation of the study. Study participants were offered a

$40 incentive for participation which may have skewed the sample of willing

participants. It is unknown to what extent this response bias is present due to limited

demographic information collected and maintained demographic statistics on principals.

Other sample biases may have been present, but this is also unable to be determined due

to the lack of state level data describing the population of secondary principals. This

information was solicited from the USBE but is not collected nor maintained. National

data on gender representation indicates that approximately 54% of principals are female

(Goldring & Taie, 2018). Females represented only 29% of participants in the current

study. This may be misleading as the population under investigation is only secondary

principals and the national data includes elementary and secondary principals.

Implications for Theory

The conceptual model of this study serves as the basis for how the results inform

the constructs of trust and self-efficacy (Figure 5.1). Trust is associated with myriad

benefits in work relationships, particularly in education (Bryk & Schneider, 2002; Hoy &

Tschannen-Moran, 1999). Trust occupies a pivotal role in the supervisor-subordinate

relationship. Trust is associated with desire for continuous improvement, organizational

citizenship, organizational commitment, job satisfaction, reduced work-related stress, and

overall performance (Butler et al., 1999; Lee, 2004; Liu et al., 2010; Podsakoff et al.,

1990; Rich, 1997; Simon, 1994). Inclusive of this range of benefits, it is reasonable to

expect that trust would have a cascading effect on many personal behaviors and decision-

making processes. Self-efficacy is a powerful internal process affecting the activities in

which individuals choose to engage and the resolve they exhibit in persevering

throughout challenges encountered (Bandura, 1982, 1997; Bandura & Locke, 2003). Self-

efficacy perceptions are formed out of environmental, experiential, and socially cues

(Bandura & Adams, 1977; Schwarzer, 1992), many of which are conceptually tied to

feelings typically associated with trust. Empirical investigation has confirmed the important tie between trust and self-efficacy (Gray, 2016; Hoy & Tschannen-Moran, 1999; Kosar, 2015). The current study sought to build on these findings by investigating three precise aspects of the connection between trust and self-efficacy:

- secondary principals
- trust in assistant principals and central office supervisors
- self-efficacy for instructional leadership

Figure 5.1

Hypothesized Contributions of the Five Facets of Trust to Self-Efficacy Beliefs
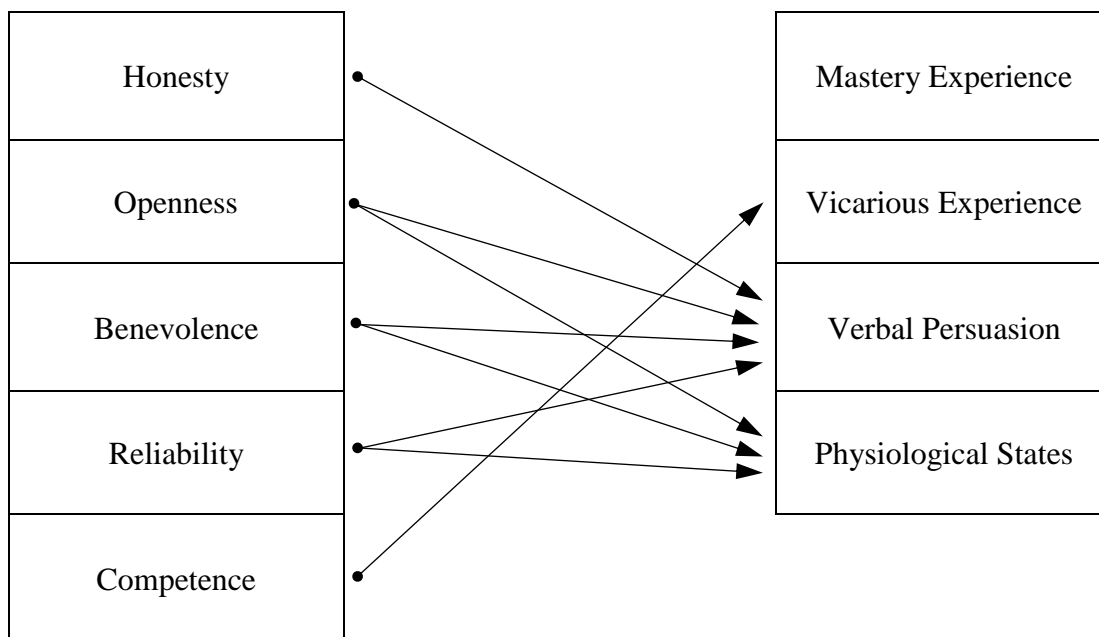

The conceptual model poses a hypothesis about the potential connection between the five facets of trust and the four sources of self-efficacy. It was predicted that the facets would have a significant relationship with PSE-IL and that honesty, reliability, and competence would correlate most with self-efficacy in downward relationships. For upward

relationships, it was expected that honesty, openness, and benevolence would correlate most with PSE-IL. The predicted relationships were not discovered, but the findings inform the theoretical understanding of trust and self-efficacy by narrowing the influence of trust on PSE to the self-efficacy domains of moral leadership and management.

The explanation of the conceptual model for this study connecting each of the facets of trust to the respective sources of general self-efficacy remains valid and relevant. The change informed by the findings of the current study is which domain of PSE is likely to be affected by levels of trust. The findings of this study indicate that the domain of instructional leadership is not significantly related to trust perceptions. Figure 5.2 illustrates a modified conceptualization of which of the facets of trust contribute to which of the domains of PSE. The paragraphs that follow suggest that perceptions of trust are most likely to be strongly associated with principal efficacy for moral leadership due to the interpersonal overlaps between the two constructs, though principal efficacy for management may also account for some of the relationship between trust and general principal self-efficacy.

Figure 5.2

Contributions of the five facets of trust to domains of self-efficacy.
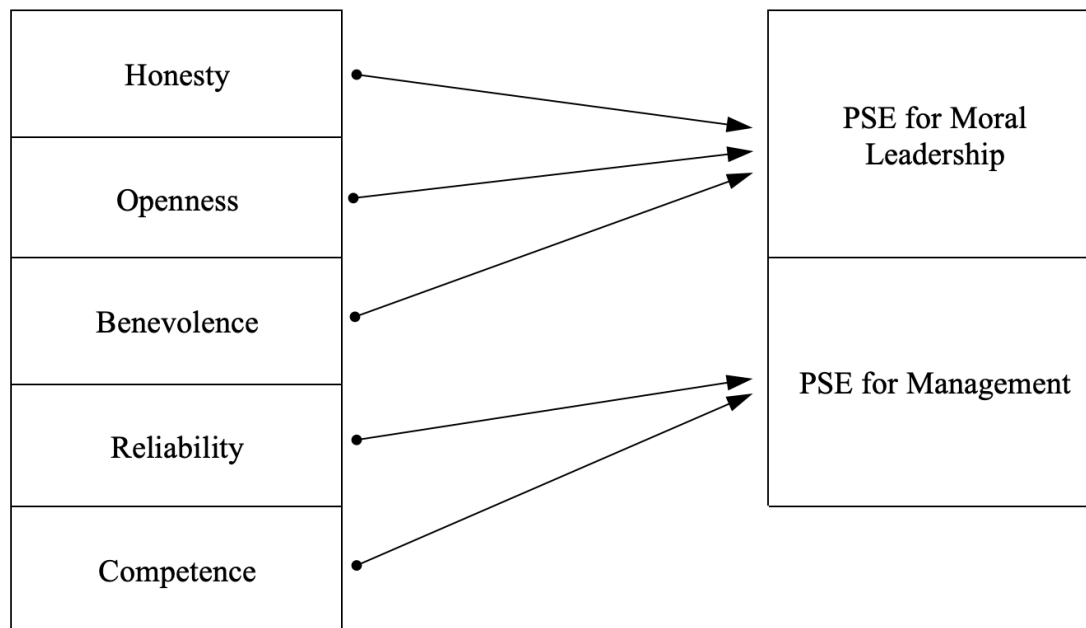
Moral leadership is characterized by promoting acceptable student behavior, promoting school spirit, handling student discipline, and promoting ethical behavior among school personnel. The moral leadership subscale of the PSES includes items related to motivating others to contribute to the organization productively. Success in moral leadership requires a nuanced understanding of interpersonal behavior coupled with an ability to build sustainable and meaningful relationships. The trust facets of honesty, openness, and benevolence have close behavioral connections to the items on the moral leadership subscale of the PSES. Making the connection between enacting these behaviors in leadership and perceived trust requires consideration of what a principal experiences as a result of a relationship high on the scale of trust. This is also where the domain of moral leadership gains the distinction as most likely to be influenced by levels of trust. Because trust is a construct based in interpersonal relations and moral

leadership is heavily interpersonally based, significant overlap between trust perceptions and moral leadership self-efficacy perceptions exists. Self-efficacy beliefs are informed by mastery experiences, vicarious experiences, verbal persuasion, and physiological states (Bandura, 1982, 1997; Tschannen-Moran & Hoy, 2007). As will be explained, when a positive assessment of trust is made, the interpersonal overlap between trust and moral leadership creates conditions in which self-efficacy perceptions are likely produced by all four of sources contributing to efficacy for moral leadership. As the first source, they have almost certainly gained some measure of mastery experience in developing trusting relations with those individuals in honesty, openness, and benevolence. Second, they have likely been exposed to vicarious experience in the form of observing the individual as a successful social model in honesty, openness, and benevolence. They have also, by virtue of the relationship being characterized by perceptions of trust, received verbal persuasion in the form of feedback indicating that they are capable of cultivating and maintaining trusting relationships characterized by honesty, openness, and benevolence. Finally, they have experienced positive physiological states resulting from the relationship in honesty, openness, and benevolence. Having had these experiences, principals are positioned to feel efficacious that they possess the ability to reproduce these qualities—related to moral leadership—in relationships with others in their work environment. The conceptual line is drawn from perceptions of honesty, openness, and benevolence in meaningful relationships to enacting these same facets in their own moral leadership.

The facets of reliability and competence connect most closely to the management domain of PSE. This is evidenced by the theoretical connections of reliability and

competence to the items comprising the management subscale of the PSES. The

management items on the PSES assess efficacy for handling the time demands of the job,

handling paperwork, controlling your daily schedule, prioritizing demands, coping with

stress, and shaping policies and procedures for your school. Though these conceptual

connections exist, the number of self-efficacy sources contributing to PSE for

management are fewer than what has been described for moral leadership. A principal

perceiving reliability and competence in their assistant principal or supervisor has

inherently experienced vicarious experience through this individual, but there is no

inherent connection between mastery experience, verbal persuasion, or physiological

states. While each of these sources *could* be present, there are many scenarios where

perceptions of reliability and competence are *not* accompanied by mastery experience,

verbal persuasion, or physiological states because reliability and competence are less

directly related to interpersonal interactions. As a succinct summary, it is suggested here

that the line from trust to the enactment of moral leadership is much more direct than the

same line to the enactment of management or instructional leadership.

Implications for Research

Leithwood and Jantzi (2008) note that, "future research would do well to inquire

more deeply into the leadership behaviors of district administrators that nurture a sense of

efficacy and confidence on the part of school leaders" (p. 521). The current study took

the approach of confining the study of PSE to the domain of instructional leadership. The

findings ARE of significance because they offer initial evidence to rule out the

relationship between trust and PSE-IL. This evidence is from a single study under highly

contextualized circumstances: secondary principals, traditional public schools, and a

population of principals in the state of Utah. These results should be replicated in a range of contexts to formulate more certain conclusions about this relationship. It is necessary to determine if these results would be different for elementary principals than secondary principals. There are many aspects of the elementary environment that may contribute to different feelings and perception for elementary principals. Broadening the population to other states and non-traditional school formats would also serve to inform generalizability of the results of this study. A logical next step in this line of research is to investigate possible links between trust and PSE in the same upward and downward relationships studied here for other influential aspects of school leadership, such as moral leadership and management. Another corner to the development of this literature is the investigation of how trust in other upward and downward relationships contribute to the domains of PSE. This could include trust in a range of stakeholders including teachers, parents, and support staff. Research value is also contained in various constructs that could be substituted for trust as the independent variable influencing PSE, such as communication, support behaviors, and feedback. It may also be important to attempt an experimental study in which various trust behaviors, such as the open-ended responses collected in this study, are assigned to measure the potential influences on each of the domains of PSE.

Implications for Practice

School leadership literature indicates that instructional leadership is generally considered to be the most effective form of educational leadership (Grissom et al., 2013, 2021; Louis et al., 2010; May & Supovitz, 2011; The Wallace Foundation, 2013). Vast evidence implies that all levels of the system are in agreement with this approach. The

educational community asserts that instructional leadership is the contemporary style of principal leadership (Darling-Hammond et al., 2007; Hallinger, 2010; Murphy et al., 2016; Tan et al., 2021). The hallmark of the work of principal supervisors is described as the cultivation and advancement of instructional leadership (Council of Chief State School Officers, 2015; Corcoran, 2013; Goldring et al., 2020; Honig, 2012; Janovitz, 2018; Marsh et al., 2005; Saltzman, 2016). Among the Utah State Standards for Educational Leadership, three of the seven standards directly relate to concepts of instructional leadership (Utah State Board of Education, 2018). In conjunction with the findings of the current study, this reveals two important implications. First, if instructional leadership is central to the success of principals, and trusting relationships in close professional relationships do not produce self-efficacy for instructional leadership, then principal supports need to be concentrated on areas that do produce self-efficacy for instructional leadership. Second, if the system indicates that instructional leadership is at the heart of the role of the principalship, yet principals fail to reference instructional leadership in describing behaviors in their closest working relationships, something within the system must be adjusted to reorient the minds of principals to instructional leadership.

Instructional leadership is a critical aspect of the work of principals. Relationships of trust are clearly important to creating an environment in which principals can thrive. Trusting relations must continue to be an objective but to reach higher level goals related to student learning and achievement, instructional leadership needs to occupy intentional space at all levels of principal preparation and support. Increasing the self-efficacy of principals for instructional leadership is a productive lever to reaching this outcome.

Future principals would be well served by preparation programs with an earnest focus on the development of instructional leadership skills. Learning experiences should be designed to generate experiences directly connected to each of the sources of self-efficacy. With the development of practical skills as the primary target, aspiring principals can be exposed to a series of experiences progressively building toward solid foundation of competence and accompanying feelings of efficacy. At a basic level, as aspiring principals advance their instructional leadership skills, verbal persuasion opportunities begin to present themselves. Professors and peers can work synergistically to provide positive feedback reinforcing the potential becoming apparent. The value of the capabilities being gained can be noted. These experiences seamlessly produce positive physiological states also reinforcing the behaviors in which they are engaging, possibly resulting in a snowball effect of skill development feeding motivation and success. As these experiences grow in frequency and magnitude, they have to potential to become mastery experience. With learning experiences tailored to subjecting aspiring principals to authentic instructional leadership experiences, powerful mastery experiences can result. Courses of study could also integrate vicarious experiences in which aspiring principals interact with schools and principals that have demonstrated success. Opportunities to hear from principals with tangible success stories could be provided. These vicarious experiences can be enhanced by emphasizing the specific and manageable instructional leadership behaviors and processes employed by every day principals applying the same concepts being cultivated in their preparation program. The likely outcome of this deliberate chain of events is a significantly increased sense of self-efficacy for instructional leadership bolstered by true competence.

The implications for district supports and central office supervisors is much the same as preparation programs. Recognizing that trusting relationships are essential, yet insufficient to produce PSE for instructional leadership, support for principals should maintain an ever-present emphasis on instructional leadership skills. Principal supervisor and other district leaders may need to clearly partition significant time, effort, and institutional bandwidth devoted to the mentoring of these skills. Though the expedient events and distractions of the day-to-day operations of schools can easily garner all the attention of principals, the principal supervisor and district level direction must stand firm in insisting that the meaningful work of instructional leadership continues to advance. Keeping in mind the sources contributing to the development of self-efficacy, instructional conversations, initiatives, learning experiences, and directives can be leveraged to continually improve principals' efficacy for instructional leadership.

Assistant principals also play a key role in the development of PSE. As was apparent in the open-ended responses in this study, assistant principals' support clears a path for principals to engage in higher level work. Instructional leadership is time consuming and cognitively intense. Principals require extensive support from assistant principals to be able to engage in these activities. When the managerial tasks and responsibilities of the school are handled well, principals can dedicate larger portions of their effort to instructional leadership. To the extent possible given the expansive work or assistant principals, they can also be influential as instructional leadership models to principals. As colleagues who are similar in many respects to principals, assistants occupy a unique position in the minds of principals as comparable others. This carries the potential to provide vicarious experience as a source of self-efficacy for instructional

leadership. As the principal observes instructional leadership success in the behaviors of their assistant principals, they gain confidence that they too can achieve this type of success. This is powerful as it creates conditions in which principals may be more willing to engage in, and persist through, instructional leadership behaviors. Another key consideration is in the cultivation of trusting relations with the principal. Though trust was not related to PSE for instructional leadership, it is well established that trusting relations are foundational to principals' ability to function effectively in the role. Trust between principal and assistant is a necessary condition for principals to serve as instructional leaders. Assistant principals would be wise to recognize the value in fostering relationships of trust with their principals.

As a second important implication for practice, the absence of instructional leadership references in a large sample of principal responses indicates that some disconnects between the stated ideals of principal leadership and principal practice exist. To bridge this gap, productive actions should be considered. The first question to consider in determining which actions could be productive is, why? Why isn't instructional leadership more prominent in the thoughts of principals? One possible explanation is that they are simply too busy. As explained in the review of literature, the list of roles and responsibilities of principals is extremely extensive (Kafka, 2009; Peck et al., 2013; Sherman, 2000). The pressures exerted on principals may be contributing to the notable rate of turnover among principals (Baker et al., 2010; Gates et al., 2006; Goldring & Taie, 2018; Levin et al., 2019; Papa, 2007). In this case, it is recommended that actions be taken to remove the load of responsibilities not directly associated with the highest-level leadership tasks from principals.

A natural response would be to ask more of assistant principals. This approach is unlikely to be effective as assistant principals already carry a heavy load (Barnett et al., 2012; Mertz, 2000; Reed & Conner, 1982; Rodrick, 1986). Though additional administrative positions could be added, it is unlikely that this will result in greater instructional leadership behaviors from the principal. If the current allocation of administrative support is not resulting in a distribution of tasks allowing principals to focus on instructional leadership, it is foreseeable that with the addition of additional assistant principals, more managerial tasks or magnified managerial emphasis would be the result. A mental shift in the system may be in order. Principal supervisors and other district leaders are well positioned to affect the type of change that could be most meaningful. Strategic reimagination of the principal role, including how the division of labor is approached, is a potentially influential starting point. The type of work that school leaders accept, and the range of roles district leaders expect contributes to the diffusion of principal focus. Schools are continually asked to do more. Stakeholders look to schools as social centers tasked with myriad community roles beyond the purpose teaching and learning. Though resources may or may not accompany these demands, administrators inherently gain administrative tasks in conjunction with these supports and services. Where district leaders and stakeholders desire a more intent focus on instructional leadership, a limiting of distractions outside the scope of teaching and learning processes is recommended. Providing clarity in the division of tasks and responsibilities within administrative teams, with strict adherence to goals of increased instructional leadership, is another potentially productive action.

An additional explanation for the notable absence of instructional leadership in principal responses is that they may lack motivation to engage in instructional leadership behaviors. If so, the next question is again, why? There are at least three possible considerations in response to this question. First, school districts may be failing to sufficiently recognize and promote excellence in instructional leadership. Other leadership behaviors are often noticed and rewarded instead of instructional leadership behaviors. These rewards can come in the form of formal recognition though are often more subtle in the reinforcing comments and praise offered by supervisors and colleagues.

If the promoted leadership approaches embedded in the fabric of a district culture do not privilege instructional leadership, principals are likely to receive mixed signals. This can have the effect of incentivizing principals to engage in other more noticed activities such as program implementation, facility management, extra-curricular development, or public affairs. While each of these activities possesses significant value, each also competes with the quiet and often methodical work of instructional leadership. It takes a distinct and highly intentional district focus on explicitly prioritizing the promotion, recognition, and reward instructional leadership behavior. Making leadership of teaching and learning processes the central theme of principal supervisor visits is one recommended action. Supervisors can tailor their support and direction primarily to the advancement of instructional leadership abilities. Basing promotions plainly on instructional leadership prowess is another method of raising principal awareness of the type of leadership valued by the district and its leadership. Designing formal awards to unambiguously recognize instructional leadership behaviors is another potentially

productive action.

Another possible consideration is regarding standardized assessments. Among the six items relating to principal self-efficacy for instructional leadership, one was rated noticeably lower than the others. The item asked principals to what extent they feel able to raise student achievement on standardized tests. This finding points to the question of whether the standardized assessments in use in the state of Utah have created such unattainable expectations that feel like principals giving up. A broad and noble desire to meet the learning needs of all students has driven a range of stakeholders to demand school accountability. With the onset of school accountability has come the need for efficient measurement of student achievement. The chosen mechanism for gauging student achievement in Utah, which is not unique in the larger context of U.S. policies, has been standardized assessments. Perhaps no educational role feels the weight of the pressure for students to perform on standardized assessments more than the school principal. While accountability through efficient measurement of student learning is warranted and necessary, it is recommended that state and local educational agencies attempt to build accountability measures that also rigorously account for leadership effectiveness in implementing evidence-based *processes* that are known to produce future outcomes. With the array of variables contributing to the level of standardized assessment performance in schools, it would be motivating and affirming to principals to reward the actions directly in their sphere of control. Policies designed for this purpose would incentivize and reinforce instructional leadership behaviors with greater opportunity for mastery experience, ultimately leading to increased principal self-efficacy for instructional leadership.

Conclusion

This study aimed to investigate the relationship between principals' perceptions of trust in their assistant principal and central office supervisor and their self-efficacy for instructional leadership. The results reveal the absence of this relationship. Findings include the absence of differentiation between how the five facets of trust contribute to PSE-IL. It is likely that trust perceptions are associated with PSE domains for management and moral leadership. A primary conclusion of this study is that trust may be a necessary yet insufficient condition for principal self-efficacy in instructional leadership. The absence of instructional leadership in the behaviors of assistant principals and central office supervisors that generate feelings of self-efficacy supported the conclusion that the relationship between trust and efficacy for instructional leadership is weak if existent. This also prompted consideration of the assumptions that instructional leadership truly characterizes principal leadership and the educational system. These conclusions informed an implication for practice that principal preparation programs, principal supervisor, and district designed principal supports elevate the development of practical instructional leadership skills as a central objective.

A second implication as a result of this study is the continued investigation of trust and principal self-efficacy. The results of this study should be replicated in various contexts to confirm the findings here and increase the generalizability. The results of this study also help to advance the investigation of PSE by reducing the likely connections between trust and principal self-efficacy to the domains of management and moral leadership. It is recommended that trust be studied in relation to each of these domains.

References

Aas, M., & Blom, T. (2018). Bench learning as professional development of school

    leaders in Norway and Sweden. *Professional Development in Education*, *44*(1),

    62–75.

Airola, D. T., & Bengston, E. (2014). Principals' sense of efficacy: The influence of the

    Arkansas leadership academy. *Journal of Educational Administration, 52*(6),

    754–774. http://dx.doi.org/10.1108/JEA-08-2013-0089

Alpine School District. (2022, April 10). *District leadership team.* Retrieved June 25,

    2023, from https://alpineschools.org/administration/

Alves, H., & Mainardes, E. W. (2017). Self-efficacy, trust, and perceived benefits in the

    co-creation of value by consumers. *International Journal of Retail & Distribution

    Management, 45*(11), 1159-1180. https://doi.org/10.1108/IJRDM-05-2016-0071

American Heritage School. (2022, April 10). *Administrators.* Retrieved June 25, 2023,

    https://af.americanheritageschool.org/administrators/

Athos, A. G., & Gabarro, J. J. (Eds.). (1978). *Interpersonal behavior: Communication

    and understanding in relationships.* Prentice Hall.

Babaoglan, E. (2016). The predictive power of leadership to the perception of school

    trust. *Universal Journal of Educational Research, 4*(12A), 125–132.

Baier, A. (1986). Trust and antitrust. *Ethics, 96*(2), 231–260.

Baker, B. D., Punswick, E., & Belt, C. (2010). School leadership stability, principal

    moves, and departures: Evidence from Missouri. *Educational Administration

    Quarterly, 46*, 523–557. https://doi.org/10.1177/0013161X10383832

Bambrick-Santoyo, P. (2018). *Leverage leadership 2.0: A practical guide to building exceptional schools*. Jossey-Bass.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122-147.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*(9), 1175–1184.

Bandura, A. (1991). Self-regulation of motivation through anticipatory and self-regulatory mechanisms. In R. A. Dienstbier (Ed.), *Perspectives on motivation: Nebraska symposium on motivation* (Vol. 38, pp. 69–164). University of Nebraska Press.

Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 3–38). Hemisphere Publishing Corp.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, *28*(2), 117–148.

Bandura, A. (1997). *Self-Efficacy: The exercise of control.* W. H. Freeman.

Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research*, *1*(4), 287–310.

Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology, 88*(1), 87-99.

Bandura, A., & Wood, R. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision making. *Journal of Personality and Social Psychology, 56*(5), 805-814.

Barnett, B. G., Shoho, A. R., & Oleszewski, A. M. (2012). The job realities of beginning and experienced assistant principals. *Leadership and Policy in Schools, 11*(1), 92–128.

Barnitz, L., & Conley, S. (2020). Views of psychosocial and organizational dimensions: The case of two elementary school leaders. *International Journal of Educational Leadership and Management*, *8*(1), 2–33.

Baron, L., & Morin, L. (2009). The coach-coachee relationship in executive coaching: A field study. *Human Resource Development Quarterly, 20*(1), 85–106.

Bartanen, B., Rogers, L. K., & Woo, D. S. (2020). Assistant principal mobility and its relationship with principal turnover. *Educational Researcher, 50*(6), 368–380.

Blake, M., & MacNeil, A. J. (1998). *Trust: The quality required for successful management.* In Y. Cano, F. H. Woods, & J. C. Simmons (Eds.), *Creating high functioning schools: Practice and research* (pp. 29–37). Charles C. Thomas.

Blase, J., & Blase, J. (1997). *The fire is back! Principals sharing governance*. Sage Publications.

Bouffard-Bouchard, T., Parent, S., & Larivee, S. (1991). Influence of self-efficacy on self-regulation and performance among junior and senior high-school age students. *International Journal of Behavioral Development, 14,* 153–164.

Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement.* Russell Sage Foundation.

Bush, T. (1981). Key roles in school management in policy-making. *Organization and Leadership in Schools, Milton Keynes, Open University, E323 Management and the School, Block, 4.*

Butler, J. K. (1991). Towards understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management, 17,* 643–663.

Butler, J. K., & Cantrell, R. S. (1984). A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates. *Psychological Reports, 55*(1), 19–28.

Butler, J. K. Jr., Cantrell, R. S., & Flick, R. J. (1999). Transformation leadership behaviors, upward trust, and satisfaction in self-managed work teams. *Organization Development Journal, 17*(1), 13-28.

Calabrese, R. L. (1991). Effective assistant principals: What do they do? *NASSP Bulletin, 75*(533), 51–57.

Cheung, C. K., & Chan, C. M. (2000). Social-cognitive factors of donating money to charity, with special attention to an international relief organization. *Evaluation and Program Planning, 23*(2), 241–253.

Collins, J. L. (1982). *Self-efficacy and ability in achievement behavior* [Paper presentation]. Annual Meeting of the American Educational Research Association, NY, United States.

Connell, J., Ferres, N., & Travaglione, T. (2003). Engendering trust in manager-subordinate relationships: Predictors and outcomes. *Personnel Review*, *32*(5), 569–587.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology, 53*(1), 39–52.

Corcoran, A. (2013). *Rethinking leadership: The changing role of principal supervisors*. Council of Great City Schools.

Coulson, A. A. (1976). Leadership functions in primary schools. *Education Administration, 5*(1), 37–49.

Council of Chief State School Officers. (2015). *Model principal supervisor professional standards 2015.*

Cummings, L. L., & Bromiley, P. (1996). The organizational trust inventory (OTI). *Trust in Organizations: Frontiers of Theory and Research*, *302*(330), 39–52.

Cunningham, G. B., Bruening, J., Sartore, M. L., Sagas, M., & Fink, J. S. (2005). The application of social cognitive career theory to sport and leisure career choices. *Journal of Career Development, 32*, 122–138.

Daly, A. J., Moolenaar, N. M., Liou, Y.-H., Tuytens, M., & del Fresno, M. (2015). Why so difficult? Exploring negative relationships between educational leaders: The role of trust, climate, and efficacy. *American Journal of Education*, *122*(1), 1–38.

Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M. T., & Cohen, C. (2007). *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs. School leadership study. Final report.*

Stanford Educational Leadership Institute.

DeBevoise, W. (1984). Synthesis of research on the principal as instructional

leader. *Educational Leadership, 41*(5), 14–20.

de Haan, E., Culpin, V., & Curd, J. (2011). Executive coaching in practice: What

determines helpfulness for clients of coaching. *Personnel Review, 40*(1), 24–44.

Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution, 2*(4), 265–279.

Dimmock, C., & Hattie, J. (1996). School principals' self-efficacy and its measurement in

a context of restructuring. *School Effectiveness and School Improvement, 7*(1),

62–75.

Federici, R. A., & Skaalvik, E. M. (2011). Principal self-efficacy and work engagement:

Assessing a Norwegian principal self-efficacy scale. *Social Psychology of

Education*, *14*(4), 575–600.

Federici, R. A., & Skaalvik, E. M. (2012). Principal self-efficacy: Relations with burnout,

job satisfaction and motivation to quit. *Social Psychology of Education: An

International Journal*, *15*(3), 295–320.

Federici, R. A. (2013). Principals' self-efficacy: Relations with job autonomy, job

satisfaction, and contextual constraints. *European Journal of Psychology of

Education*, *28*(1), 73–86.

Fisher, Y. (2014). The timeline of self-efficacy: Changes during the professional life

cycle of school principals. *Journal of Educational Administration*, *52*(1), 58–83.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics (4th ed.).* SAGE

Publications.

Ford, T. G., Lavigne, A. L., Fiegener, A. M., & Si, S. (2020). Understanding district support for leader development and success in the accountability era: A review of the literature using social-cognitive theories of motivation. *Review of Educational Research, 90*(2), 264–307.

Forsyth, P. B., Adams, C. M., & Hoy, W. K. (2011). *Collective trust: Why schools can't improve without it.* Teachers College, Columbia University.

Friedman, I. A. (1997). *High and low-burnout principals: What makes a difference?* [Paper presentation]. Annual Meeting of the American Educational Research Association, Chicago, IL, United States.

Gates, S. M., Ringel, J. S., Santibañez, L., Guarino, C., Ghosh-Dastidar, B., & Brown, A. (2006). Mobility and turnover among school principals. *Economics of Education Review, 25*, 289–302. doi.org/10.1016/j.econedurev.2005.01.008

Gilbert, K. A. (2017). Investigating the use and design of immersive simulation to improve self-efficacy for aspiring principals. *Journal of Information Technology Education: Innovations in Practice, 16,* 127–169.

Goldring, R., & Taie, S. (2018). *Principal attrition and mobility: Results from the 2016– 17 principal follow-up survey first look* (NCES 2018-066). National Center for Education Statistics. https://nces.ed.gov/pubsearch

Goldring, E. B., Clark, M. A., Rubin, M., Rogers, L. K., Grissom, J. A., Gill, B., Kautz, T., McCullough, M., Neel, M., & Burnett, A. (2020). *Changing the principal supervisor role to better support principals: Evidence from the principal supervisor initiative*. Mathematica Policy Research.

Gorton, R. A. (1987). Improving the assistant principalship: The principal's contribution.

NASSP Bulletin, 71(501), 1–4.

Gray, J. (2016). Investigating the role of collective trust, collective efficacy, and enabling school structures on overall school effectiveness. *Education Leadership Review, 17*(1), 114–128.

Grissom, J. A., Loeb, S., & Master, B. (2013). Effective instructional time use for school leaders: Longitudinal evidence from observations of principals. *Educational Researcher, 42*(8), 433–444.

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research.* Wallace Foundation. https://www.wallacefoundation.org/knowledge-center/Documents/How-Principals-Affect-Students-and-Schools.pdf

Grodzki, J. S. (2011). Role identity: At the intersection of organizational socialization and individual sensemaking of new principals and vice-principals. *Canadian Journal of Educational Administration and Policy, 127,* 1–47.

Guglielmi, D., Simbula, S., Schaufeli, W. B., & Depolo, M. (2012). Self-efficacy and workaholism as initiators of the job demands-resources model. *Career Development International*, *17*(4), 375–389.

Gulmez, D., & Negis Isik, A. (2020). The correlation between school principals' self-efficacy beliefs and leadership styles. *International Online Journal of Educational Sciences*, *12*(1), 326–337.

Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9*(2), 157–191.

Hallinger, P. (2010). Developing instructional leadership. In B. Davies & M. Brudrett (Eds.), *Developing successful leadership* (pp. 61–76). Springer.

Hallinger, P., Hosseingholizadeh, R., Hashemi, N., & Kouhsari, M. (2018). Do beliefs make a difference? Exploring how principal self-efficacy and instructional leadership impact teacher efficacy and commitment in Iran. *Educational Management Administration & Leadership*, *46*(5), 800–819.

Hannah, S. T., Avolio, B. J., Luthans, F., & Harms, P. D. (2008). Leadership efficacy: Review and future directions. *The Leadership Quarterly, 19*(6), 669–692.

Hartman, R. O., & Betz, N. E. (2007). The five-factor model and career self-efficacy: General and domain-specific relationships. *Journal of Career Assessment, 15*(2), 145–161.

Hartzell, G. N., Williams, R. C., & Nelson, K. T. (1995). *The influential assistant principal: Building influence and a stronger relationship with your principal* [Paper presentation]. Annual Convention and Exhibit of the National Association of Secondary School Principals, San Antonio, TX, United States.

Hartzell, G. N., Williams, R. C., & Nelson, K. T. (1994). *Addressing the problems of first-year assistant principals* [Paper presentation]. Annual Convention of National Association Secondary School Principals, New Orleans, LA, United States.

Heretick, D. M. L. (1981). Gender-specific relationships between trust-suspicion, locus of control, and psychological distress. *Journal of Psychology, 108*(2), 267–274.

Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly, 48*(4), 733–774.

Honig, M. I., & Rainey, L. R. (2019). Supporting principal supervisors: What really matters? *Journal of Educational Administration, 57*(5), 445–462. https://doi.org/10.1108/JEA-05-2019-0089

Hoy, A. W., & Hoy, W. K. (2006). *Instructional leadership: A research-based guide to learning in schools* (2nd ed.). Pearson.

Hoy, W. K., & Kupersmith, W. (1985). The meaning and measure of faculty trust. *Educational and Psychological Research, 5,* 1-10.

Hoy, W. K., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, *9*(3), 184–208.

Hoy, W. K., & Tschannen-Moran, M. (2003). The conceptualization and measurement of faculty trust in schools. In W. Hoy & C. Miskel (Eds.), *Studies in leading and organizing schools* (pp. 181–208). Information Age Publishing.

Hsu, M. H., Ju, T. L., Yen, C. H., & Chang, C. M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-computer Studies*, *65*(2), 153–169.

Hughes, M. (1999). The relationship between the head and the deputy head in primary schools. *School Leadership & Management, 19*(1), 83–95.

InTech Collegiate Academy. (2022, April 10). *Our faculty.* https://intechacademy.org/about-us/our-faculty/

Janovitz, J. B. (2018). *Monkeying in the middle: The role of the principal supervisor* [Doctoral dissertation, University of Pennsylvania]. ProQuest Dissertations and Theses Global.

Juab School District. (2022, April 10). *Departments.* https://www.juabsd.org/departments/administration.html

Kafka, J. (2009). The principalship in historical perspective. *Peabody Journal of Education, 84*(3), 318–330.

Kalkan, F. (2016). Relationship between professional learning community, bureaucratic structure and organisational trust in primary education schools. *Educational Sciences: Theory & Practice, 16*(5), 1619–1637.

Kearney, W. S., Kelsey, C., & Herrington, D. (2013). Mindful leaders in highly effective schools: A mixed-method application of Hoy's M-scale. *Educational Management Administration & Leadership, 41*(3), 316–335.

Keller, F., & Slayton, J. (2016). Fostering and achieving organizational change: A framework for studying the complexities of school leadership. *Journal of School Leadership, 26*(4), 690–715. https://doi.org/10.1177/105268461602600406

Kelloway, E. K., Turner, N., Barling, J., & Loughlin, C. (2012). Transformational leadership and employee psychological well-being: The mediating role of employee trust in leadership. *Work & Stress*, *26*(1), 39–55.

Keyton, J., & Smith, F. L. (2009). Distrust in leaders: Dimensions, patterns, and emotional intensity. *Journal of Leadership & Organizational Studies, 16*(1), 6–18.

Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research, 48*(2), 134-144.

Kosar, S. (2015). Trust in school principal and self-efficacy as predictors of teacher professionalism. *Education and Science, 40*(181), 255-270.

Kramer, R. M., & Tyler, T. R. (Eds.). (1995). *Trust in organizations: Frontiers of theory and research*. Sage Publications.

Landy, K. E. (2013). *Enabling district structure: The relationship between perceived district structure and principal self-efficacy* [Doctoral dissertation, Fordham University]. ProQuest Dissertations and Theses.

Larzelere, R. E., & Huston, T. L. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family, 42,* 595–604.

Lee, H. (2004). The role of competence-based trust and organizational identification in continuous improvement. *Journal of Managerial Psychology, 19*(6), 623–639. https://doi.org/10.1108/02683940410551525

Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. McGraw-Hill Education (UK).

Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration, 44*(4), 496–528.

Levin, S., Bradley, K., & Scott, C. (2019). *Principal turnover: Insights from current principals.* Learning Policy Institute.

Licklider, B. L., & Niska, J. M. (1993). Improving supervision of cooperative learning: A new approach to staff development for principals. *Journal of Personnel Evaluation in Education, 6*(4), 367–378.

Limmerick, D., & Cunnington, B. (1993). *Managing the new organization: A blueprint for networks and strategic alliances.* Jossey Bass.

Liou, Y. H., & Daly, A. J. (2019). The lead igniter: A longitudinal examination of influence and energy through networks, efficacy, and climate. *Educational Administration Quarterly*, *55*(3), 363–403.

Liu, J., Siu, O., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology: An International Review, 59*, 454–479.

Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). *Learning from leadership: Investigating the links to improved student learning: Final report of research to the Wallace Foundation*. https://www.wallacefoundation.org/knowledge-center/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf

Lyons, C. A., & Murphy, M. J. (1994). *Principal self-efficacy and the use of power* [Paper presentation]. Annual Meeting of the American Educational Research Association, New Orleans, LA, United States.

Machida-Kosuga, M. (2017). The interaction of efficacy and leadership competency development. *New Directions for Student Leadership, 156,* 19–30.

Marsh, J. A., Kerr, K. A., Ikemoto, G. S., Darilek, H., Suttorp, M., Zimmer, R. W., & Barney, H. (2005). *The role of districts in fostering instructional improvement*

lessons from three urban districts partnered with the institute for learning. Rand
Corporation.

May, H., & Supovitz, J. A. (2011). The scope of principal efforts to improve instruction.
Educational Administration Quarterly, 47(2), 332–352.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of
organizational trust. *Academy of Management Review, 20*(3), 709–734.

McColl, L. (2020). *The importance of on-going, systematic professional development for
principals* [Doctoral dissertation, University Here]. ProQuest Dissertations and
Theses.

McCormick, M. J., Tanguma, J., & López-Forment, A. S. (2002). Extending self-efficacy
theory to leadership: A review and empirical test. *Journal of Leadership
Education, 1*(2), 34–49.

McElroy, M. W. (2002). Social innovation capital. *Journal of Intellectual Capital, 3*(1),
30–39.

McKnight, D. H., & Chervany, N. L. (2001). Trust and distrust definitions: One bite at a
time. In *Lecture Notes in Computer Science (including subseries Lecture Notes in
Artificial Intelligence and Lecture Notes in Bioinformatics)* (Vol. 2246, pp. 27-
54). (Lecture Notes in Computer Science (including subseries Lecture Notes in
Artificial Intelligence and Lecture Notes in Bioinformatics); Vol. 2246). Springer
Verlag.

Mellor, S., Barclay, L. A., Bulger, C. A., & Kath, L. M. (2006). Augmenting the effect of
verbal persuasion on self-efficacy to serve as a steward: Gender similarity in a

union environment. *Journal of Occupational and Organizational Psychology, 79*(1), 121–129.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). John Wiley & Sons.

Mertz, N. T. (2000). *Contextualizing the position of assistant principal.* [Paper presentation]. Annual Meeting of the University Council for Educational Administration, Albuquerque, NM, United States.

Messer, K. (2019). *A phenomenological investigation into the impact of mentorship on the self-efficacy of novice principals* [Doctoral dissertation, Creighton University]. = ProQuest Dissertations and Theses database.

Meyer, F., Sinnema, C., & Patuawa, J. (2019). Novice principals setting goals for school improvement in New Zealand. *School Leadership & Management*, *39*(2), 198–221.

Miles, M. B., Huberman, A. M., & Saldana, J. (1994). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage Publications.

Moran-Miller, K., & Flores, L. Y. (2011). Where are the women in women's sports? Predictors of women athletes' interest in a coaching career. *Research Quarterly for Exercise and Sport, 82*, 109–117.

Mortimore, P., Sammons, P., Stoll, L., & Ecob, R. (1988). *School matters: The junior years.* University of California Press.

Murphy, S. E., & Ensher, E. A. (1999). The effects of leader and subordinate characteristics in the development of leader–member exchange quality. *Journal of Applied Social Psychology, 29*(7), 1371–1394.

Murphy, J., Neumerski, C. M., Goldring, E., Grissom, J., & Porter, A. (2016). Bottling

    fog? The quest for instructional management. *Cambridge Journal of Education,*

    46(4), 455–471.

National Association of Secondary School Principals. (2021). *NASSP survey signals a*

    looming mass exodus of principals from schools [Press release]. Retrieved from

    https://www.nassp.org/news/nassp-survey-signals-a-looming-mass-exodus-of-

    principals-

    fromschools/#:~:text=Almost%20half%20of%20all%20school,their%20job%20th

    an%20ever%20before

Nelson, J. L., Grissom, J. A., & Cameron, M. L. (2021). Performance, process, and

    interpersonal relationships: Explaining principals' perceptions of principal

    evaluation. *Educational Administration Quarterly, 57*(4), 641–678.

Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019).

    Entrepreneurial self-efficacy: A systematic review of the literature on its

    theoretical foundations, measurement, antecedents, and outcomes, and an agenda

    for future research. *Journal of Vocational Behavior, 110*, 403–419.

Nias, J. (1987). One finger, one thumb: A case study of the deputy head's part in the

    leadership of a nursery/infant school'. In G. Southworth (Ed.), *Readings in*

    primary school management (pp. 30–53). Routledge.

Nielsen, K., Yarker, J., Randall, R., & Munir, F. (2009). The mediating effects of team

    and self-efficacy on the relationship between transformational leadership and job

    satisfaction and psychological well-being in healthcare professionals.

    International Journal of Nursing Studies, 46, 1236–1244.

Northouse, P. G. (2019). *Leadership.* Sage Publications.

Onglatco, M., Yuen, E. C., & Lee, G. (1993). Managerial self-efficacy and managerial success in Singapore. *International Journal of Management, 10*, 14–21.

O'Reilly, C. A. III. (1978). The intentional distortion of information in organizational communication: A laboratory and field investigation. *Human Relations, 31*(2), 173–193.

Osterman, K., & Sullivan, S. (1996). New principals in an urban bureaucracy: A sense of efficacy. *Journal of School Leadership, 6*(6), 661–690.

Paglis, L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior, 23*(2), 215–235.

Pajares, F. (2002). *Overview of social cognitive theory and of self-efficacy.* Retrieved from https://www.uky.edu/~eushe2/Pajares/eff.html

Papa, F., Jr. (2007). Why do principals change schools? A multivariate analysis of principal retention. *Leadership and Policy in Schools, 6*, 267–290. https://doi.org/10.1080/15700760701263725

Pavlou, P. A., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS Quarterly*, *30*(1), 115–143. https://doi.org/10.2307/25148720

Parylo, O., & Zepeda, S. (2014). Describing an effective principal: perceptions of the central office leaders. *School Leadership and Management, 34*(5), 1–20.

Peck, C., Reitzug, U. C., & West, D. L. (2013). Still waiting for "superprincipal": Examining US policymaker expectations for school principals, 2001–2011. *Education Leadership Review, 14*(1), 58–68.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990).
Transformational leader behaviors and their effects on followers' trust in leader,
satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly,
1*(2), 107–142.

R Core Team. (2020). *R: A language and environment for statistical computing. R
Foundation for Statistical Computing, Vienna, Austria*. https://www.R-
Project.org/

Rempel, J. K., Holmes, J. G., & Zanna, M. D. (1985). Trust in close relationships.
Journal of Personality and Social Psychology, 49, 95–112.

Ribbins, P. (1997). Heads on deputy headship: Impossible roles for invisible roleholders,
Educational Management and Administration, 25(3), 295–308.

Rich, G. A. (1997). The sales manager as a role model: Effects on trust, job satisfaction,
and performance of salespeople. *Journal of the Academy of Marketing Science,
25*(4), 319–328.

Robertson, I. T., & Sadri, G. (1993). Managerial self-efficacy and managerial
performance. *British Journal of Management, 4*(1), 37–45.

Rodrick, L. (1986). Working with assistant principals to achieve maximum value. *NASSP
Bulletin, 70*(487), 91–93. https://doi.org/10.1177/019263658607048719

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after
all: A cross-discipline view of trust. *Academy of Management Review, 23*(3),
393–404.

Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of
Personality, 35,* 651–665.

Saltzman, A. (2016). Revising the role of principal supervisor. *Phi Delta Kappan, 98*(2), 52–57. https://doi.org/10.1177/0031721716671909

Scoggins, A., & Bishop, H. L. (1993). *A review of the literature regarding the roles and responsibilities of assistant principals* [Paper presentation]. Annual Meeting of the Mid-South Educational Research Association, New Orleans, LA, United States.

Scott, C. L. III. (1980). Interpersonal trust: A comparison of attitudinal and situational factors. *Human Relations, 33*(11), 805–812.

Shaw, R. B. (1997). *Trust in the balance: Building successful organizations on results, integrity and concern.* Jossey-Bass.

Sherman, L. (2000, Spring). The new principal. *NW Education Magazine, 5*(3), 2.

Schwarzer, R. (1992). *Self-efficacy: Thought control of action.* Routledge.

Simon, L. S. (1994). *Trust in leadership: Its dimensions and mediating role* [Doctoral dissertation, University Name]. ProQuest Dissertations and Theses.

Southworth, G. (1994). *Readings in primary school development.* The Falmer Press.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics.* Allyn & Bacon.

Tan, C. Y., Dimmock, C., & Walker, A. (2021). How school leadership practices relate to student outcomes: Insights from a three-level meta-analysis. *Educational Management Administration & Leadership*, 0(0). https://doi.org/10.1177/17411432211061445

Ter Huurne, E. F., & Gutteling, J. M. (2009). How to trust? The importance of self-efficacy and social trust in public responses to industrial risks. *Journal of Risk Research, 12*(6), 809–824.

The Wallace Foundation. (2013). *The school principal as leader: Guiding schools to better teaching and leading.* https://www.wallacefoundation.org/knowledge-center/Documents/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning-2nd-Ed.pdf

Thessin, R. A. (2019). Establishing productive principal/principal supervisor partnerships for instructional leadership. *Journal of Educational Administration, 57*(5), 463–483. https://doi.org/10.1108/JEA-09-2018-0184

Thessin, R. A., & Louis, K. S. (2019). Supervising school leaders in a rapidly changing world. *Journal of Educational Administration, 57*(5), 434–444. https://doi.org/10.1108/JEA-09-2019-228

Tracey, H. T., & Morrow, L. M. (2017). *Lenses on reading: An introduction to theories and models.* The Guilford Press.

Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, *70*(4), 547–593.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783–805.

Tschannen-Moran, M., & Gareis, C. (2004). Principals' sense of efficacy: Assessing a promising construct. *Journal of Educational Administration, 42*(5), 573–585.

Tschannen-Moran, M., & Gareis, C. R. (2007). Cultivating principals' self-efficacy: Supports that matter. *Journal of School Leadership, 17*(1), 89–114.

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23*(6), 944–956.

Tversky, A., & Kahneman, D. (1974). Judgement under uncertainty: Heuristics and biases. *Science, 185*, 1124–1131.

U.S. Department of Education. (2002). *No Child Left Behind Act of 2001.* http://www.2.ed.gov/nclb/overview/intro/execsumm.pdf

U.S. Department of Education. (2009). *Race to the Top program: Executive summary.* http://www.2.edgov/policy/elsec/leg/blueprint/blueprint.pdf

U.S. Department of Education. (2015). *Every Student Succeeds Act.* https://www.ed.gov/essa?src=rn

Utah State Board of Education. (2018, May). *Utah state standards for educational leadership.* https://www.schools.utah.gov/file/888a20c7-60f1-40d5-bc86-a7d2952a10bc

Utah State Board of Education. (2022, April 10). *Educator licensing overview.* Educator licensing. https://www.schools.utah.gov/licensing/program/overview?mid=5284&tid=1

Vanhoof, J., Vanlommel, K., Thijs, S., & Vanderlocht, H. (2014). Data use by Flemish school principals: Impact of attitude, self-efficacy and external expectations. *Educational Studies*, *40*(1), 48–62.

Versland, T. M. (2016). Exploring self-efficacy in education leadership programs: What makes the difference? *Journal of Research on Leadership Education*, *11*(3), 298–320.

Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). *When to use what research design.* Guilford Press.

Vulliamy, G., & Webb, R. (1995). The changing role of the primary school deputy headteacher. *School Organisation, 15*(1), 53–63.

Wells, Z., Rinehart, J. S., & Scollay, S. J. (1999). *Kentucky's induction-model intern assistant principals: Players or designated hitters in high-stakes accountability?* [Paper presentation]. Annual Meeting of the University Council for Educational Administration, Minneapolis, MN.

Yasseri, T., & Reher, J. (2022). Fooled by facts: Quantifying anchoring bias through a large-scale experiment. *Journal of Computational Science,* 5, 1001–1021. https://doi.org/10.1007/s42001-021-00158-0

Appendix A

Original Omnibus Trust Scale: Trust in Principal Subscale

1. Teachers in this school can rely on the principal.

2. Teachers in this school trust the principal.

3. The principal in this school typically acts with the best interests of the teachers in mind.

4. The principal of this school does not show concern for the teachers.

5. The principal doesn't really tell teachers what is going on.

6. The principal in this school keeps his or her word.

7. The teachers in this school have faith in the integrity of the principal.

8. The teachers in this school are suspicious of most of the principal's actions.

9. The principal in this school is competent in doing his or her job.

10. The principal openly shares personal information with teachers.

Six-point scale anchored at: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree (Hoy & Tschannen-Moran, 2003).

Appendix B

The Modified Principal Trust in the HRAP or COS Scale

1. I can rely on my assistant principal [central office supervisor].

2. I trust my assistant principal [central office supervisor].

3. My assistant principal [central office supervisor] typically acts with my best interest in mind.

4. My assistant principal [central office supervisor] does not show concern for me.

5. My assistant principal [central office supervisor] doesn't tell me what is really going on.

6. My assistant principal [central office supervisor] keeps his or her word.

7. I have faith in the integrity of my assistant principal [central office supervisor].

8. I am suspicious of most of my assistant principal's [central office supervisor] actions.

9. My assistant principal [central office supervisor] is competent in doing his or her job.

10. My assistant principal [central office supervisor] openly shares personal information with me.

Six-point scale anchored at: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree (Hoy & Tschannen-Moran, 2003).

Appendix C

Principal Self-Efficacy for Instructional Leadership Subscale

Please respond to each of the questions by considering the combination of your *current*

ability, resources, and opportunity to do each of the following in your present position.

In your current role as principal, to what extent do you feel able to…

1. Motivate teachers?

2. Generate enthusiasm for a shared vision for the school?

3. Manage change in your school?

4. Create a positive learning environment in your school?

5. Facilitate student learning in your school?

6. Raise student achievement on standardized tests?

Nine-point scale anchored at: 1 = none at all, 3 = very little, 5 = some degree, 7 = quite a

bit, and 9 = a great deal (Tschannen-Moran & Gareis, 2004).

Appendix D

IRB Approval Letter

Institutional Review Board

Research UtahStateUniversity

Exemption #2
Certificate of Exemption

From: Melanie Domenech Rodriguez, IRB Chair

Nicole Vouvalis, IRB Director

To: **Alyson Lavigne**

Date: **November 16, 2022**

Protocol #: **12943**

Title: **The Influence of Secondary Principals' Perceived Trust of Assistant Principals and Central Office Supervisors on Principal Self-Efficacy**

The Institutional Review Board has determined that the above-referenced study is exempt from review under federal guidelines 45 CFR Part 46.104(d) category #2:

Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subject; (ii) Any disclosure of the responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation, or (iii) the information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and the IRB conducts a limited IRB review to make required determinations.

This exemption is valid for five years from the date of this correspondence, after which the study will be closed. If the research will extend beyond five years, it is your responsibility as the Principal Investigator to notify the IRB **before** the study's expiration date and submit a new application to continue the research. Research activities that continue beyond the expiration date without new certification of exempt status will be in violation of those federal guidelines which permit the exempt status.

If this project involves Non-USU personnel, they may not begin work on it (regardless of the approval status at USU) until a Reliance Agreement, External Research Agreement, or separate protocol review has been completed with the appropriate external entity. Many schools will not engage in a Reliance Agreement for Exempt protocols, so the research team must determine what the appropriate approval mechanism is for their Non-USU colleagues. As part of the IRB's quality assurance procedures, this research may be randomly selected for audit during the five-year period of exemption. If so, you will receive a request for completion of an Audit Report form during the month of the anniversary date of this certification.

In all cases, it is your responsibility to notify the IRB **prior** to making any changes to the study by submitting an Amendment request. This will document whether or not the study still meets the requirements for exempt status under federal regulations.

Upon receipt of this memo, you may begin your research. If you have questions, please call the IRB office at (435) 797-1821 or email to irb@usu.edu.

The IRB wishes you success with your research.

435.797.1821 | 1450 Old Main Hill | Logan, UT 84322 | MAIN 155 | irb@usu.edu | FWA#00003308

CURRICULUM VITAE

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RESEARCH INTERESTS

Educational Leadership	Program Evaluation
Self-Efficacy	Principals
Instructional Leadership	Educational Psychology

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July 2020 – June 2021 Tooele County School District, Tooele, UT
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September 2018 – June 2020, Tooele County School District, Tooele, UT

Principal of Old Mill Elementary

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Assistant Principal at Stansbury High School (2017-2018)

July 2015 – June 2017, Uintah School District, Vernal, UT
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PUBLICATIONS

Reutzel, C. J. (2018). Targeted reading intervention: An intervention program for struggling secondary students. *Impact: Journal for Utah Association of Secondary School Principals*, Winter Edition 2018.

Reutzel, C. J. (2018). Targeted math intervention: An intervention program for struggling secondary students. *Utah Mathematics Teacher Journal, 10*, Fall/Winter 2017-2018.

CONFERENCE PRESENTATIONS

Reutzel, C. J., Lavigne, A. L. (2021). Career stages of the principalship: A review of the research. American Educational Research Association (AERA) annual conference, Orlando, FL (virtual).

Reutzel, C. J., Stewardson, G. A. (2009). Best practices of project lead the way (PLTW) partnership teams. International Technology Education Association (ITEA) annual conference, Louisville, KY.