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An Exploration of the Impact of Mentoring Upon Job Satisfaction for New Elementary Principals in Washington State

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AN EXPLORATION OF THE IMPACT OF MENTORING UPON JOB SATISFACTION FOR NEW ELEMENTARY PRINCIPALS IN WASHINGTON STATE

by

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ABSTRACT

This study sought to examine the mentoring experiences of new principals in Washington State and its impact on their job satisfaction. This quantitative study employed the Principal Induction and Mentoring Survey (PIMS) to 496 Washington State public elementary school principals who were serving in their first five years of their principalship. Using a correlational design, this study explored (1) the impact mentoring had on job satisfaction for elementary school principals, (2) the relationship between job satisfaction and gender, (3) the relationship between job satisfaction and teaching experience, and (4) the underlying structure of the PIMS. Results from this study suggest the overall job satisfaction of mentored principals is higher than those who were not mentored. However, job satisfaction did not differ between genders or years of teaching experience. The data indicated mentoring as a strong system of support for new principals, and it is a practice increasingly implemented across the state. The scale analyses of the PIMS suggest the need for retooling to better measure and understand job satisfaction of new school principals. This study may be used to inform future research regarding implications of mentoring new principals, as well as efforts to increase the effectiveness with interested stakeholders of their mentoring programs.

Keywords: mentoring, job satisfaction, gender, teaching experience, Principal Induction and Mentoring Survey

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CHAPTER 1

Headlines like the 2014 Seattle Times article, “Halt turnover in school administration to improve education” have spotlighted a major challenge in Washington schools and are echoed by papers across the country. Principal turnover has been garnering more attention recently in educational leadership literature (Boyce & Bowers, 2016), as well as with state and local policymakers (Bush Institute, 2015; Gates et al., 2006; Mendels, 2012a). In the United States, approximately one in five public school principals leave their position every year (Miller, 2013). A similar retention rate exists and has remained constant over time among Washington State principals (Plecki, Elfers, & Willis, 2017). Aycock (2006) revealed that over half of the principals in her study self-reported that they consider leaving the principalship “at least sometimes” (p. 132). The impact of excessive principal turnover includes higher staff cynicism regarding commitment from leaders, inability to sustain school improvement reforms (Fink & Brayman, 2006), lower student learning outcomes, and a greater likelihood of higher teacher turnover rates (Beteille, Kalogrides, & Loeb, 2012). Gates et al. (2006) suggest high levels of principal turnover deny schools the stability in leadership required for success.

Over the last 20 years, research has identified the need to better support principals (Augustine-Shaw, 2015b; Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen, 2007; Hertling, 2001; Jackson, 2010; NAESP, 2003; Wells-Frazier, 2016). Saffle (2016) reports that there are perceived positive implications on retention rates when new principals, as protégés, are mentored. Spiro, Mattis, & Mitgang (2007) reported the positive impacts that supporting principals had upon their schools, including stability in school reform initiatives and increased student learning outcomes. Perhaps the time has come to recognize that “the absence of [mentoring] means we leave the development of leadership to chance” (Gardner, 2016, p. 195).

Our 21st Century educational system and the students we serve can no longer afford to take that risk.

The 21st Century Principalship

Principals today face challenges their predecessors did not (Bryant, King, & Wilson, 2016; Daresh, 2007; Wells-Frazier, 2016). They no longer serve in a traditional supervisory role (Levine, 2005; Zeller et al., 2002). The procedural, managerial, and technical roles and responsibilities include a wide range of tasks and competencies (Augustine-Shaw, 2015a; Boerema, 2011; Bryant et al., 2016; Darling-Hammond et al., 2007; Davis, Darling-Hammond, LaPointe, & Meyerson, 2005; Schechter, 2014), including redesigning schools and systems (Levine, 2005; Miller, 2013), providing instructional leadership (Augustine-Shaw, 2015a; Darling-Hammond et al., 2007; Davis et al., 2005; Levine, 2005; Mendels, 2012b; Mendels & Mitgang, 2013; Miller, 2013; Schechter, 2014), analyzing data (Mendels & Mitgang, 2013; Schechter, 2014), building community (Bryant et al., 2016; Davis et al., 2005; Levine, 2005; Mendels & Mitgang, 2013; Miller, 2013), serving as disciplinarians, maintaining relations with the public, overseeing facility and grounds maintenance (Bryant et al., 2016; Davis et al., 2005; Miller, 2013), balancing budgets (Augustine-Shaw, 2015b; Bryant, et al., 2016; Davis, et al., 2005), and stewards of legal and contractual matters, as well as district policies (Bryant et al., 2016; Davis et al., 2005).

Additionally, principals assist in the recruitment and induction of new staff members, annually evaluating all staff, retaining talent (Augustine-Shaw, 2015b; Bryant et al., 2016; Levine, 2005; Miller, 2013), and ushering transformations at a tolerable level for staff in a system undergoing continuous change (Augustine-Shaw, 2015b; Bryant et al., 2016; Levine, 2005). As the roles and responsibilities of the principalship have grown in complexity (Cortes,

Nava, Barker, & Davalos, 2017; Knapp, Copland, & Talbert, 2003; NAESP, 2003; Plecki et al., 2017; Schechter, 2014), research has defined the most critical role of the principal as an instructional leader (Cortes et al., 2017; Crow, 2006; Darling-Hammond et al., 2007; Davis et al., 2005; Gardner, 2016; Knapp et al., 2003; Mendels, 2012a; Mendels & Mitgang, 2013; Seashore Louis, Leithwood, Wahlstrom, & Anderson, 2010; Wallace Foundation, 2013).

The impact the principalship has on the student has been validated in the literature (Seashore Louis et al., 2010; Stewart & Matthews, 2015); school leaders have a significant effect on student learning outcomes (Augustine-Shaw, 2015a; Davis et al., 2005; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004; Mendels, 2012b; Sebastian & Allensworth, 2012; Stewart & Matthews, 2015). Principal-student impact was presented in a 2004 seminal study, *How Leadership Influences Student Learning.* In the study, Leithwood et al., (2004) stated leadership was the second most important school-based factor in student learning outcomes and the number of cases of successful turnaround schools without effective school leadership was few, if any. A five-year study done by Leithwood & Seashore Louis (2012) reaffirmed this claim with more confidence, stating they "have not found a single documented case of a school improving its student achievement record in the absence of talented leadership" (p. 3).

The responsibilities and challenges of the 21st Century principalship generate stress upon school leaders as they fulfill many duties and obligations. The complexity of the task principals undertake, especially in larger schools, exceeds the capacity of one individual (Darling-Hammond et al., 2007; Davis et al., 2005; Johnson, 2005; Norton, 2002; Plecki et al., 2017). The accountability of schools in the 21st Century demand principals be courageous in emphasizing growth in the measurable learning of every student (Augustine-Shaw, 2015b; Bryant et al., 2016) and challenging traditions (Augustine-Shaw, 2015b). The stakes are historically high for

principals (Bryant et al., 2016), resulting in increased stress and feelings of isolation (Augustine-Shaw, 2013; Augustine-Shaw & Liang, 2016; Bradley, 2006; Bryant et al., 2016; Killion, 2012; MetLife Inc., 2013; Weingartner, 2009; Zeller et al., 2002). This ultimately leads principals to vacate their school leadership positions (Hill, Ottem, & DeRoche, 2016; Johnson, 2005).

Developing effective school leaders has become critically important to school districts (Cortes, et al. 2017). Once districts hire new principals, they have the responsibility to provide support that will develop successful, highly competent leaders (Bryant et al., 2016; Davis et al., 2005; Mendels & Mitgang, 2013). Awareness of this growing need is emerging among policymakers (Bush Institute, 2015; Gates et al., 2006; Mendels, 2012a). States have enacted laws and policies to support new principals, of which Daresh (2004) identified 32 states with legislation supporting this movement. The University Council for Educational Administration continues to call on states and agencies to design programs for new principals to shape leadership behaviors to support needed changes in school culture and instructional practice (Browne-Ferrigno, 2014). Mentoring has been identified as an effective, and perhaps imperative, form of professional development to cultivate effective school leaders (Augustine-Shaw, 2015a; NAESP, 2003).

The concept of "mentoring" has ancient roots (Aycock, 2006; Buckey, 2014; Daresh, 2004; Jackson, 2010; Remy, 2009; Walters-Brazile, 2012; Zellmer, 2003). It dates back at least to Homer's *Odyssey*, in which Ulysses entrusts his son, Telemachus, to his wise friend, named Mentor, before he departs for Troy (Daresh, 2004; NAESP, 2003). During his 20-year absence, Mentor teaches, guards, and guides Telemachus. In fields such as medicine, law, and architecture, it is common practice to support new professionals, the protégé, with an experienced mentor (Saban & Wolfe, 2009; Schechter, 2014). However, within the field of

educational administration, many new principals enter the profession without mentoring support (Schechter, 2014). A successful transition into the principalship, as well as a continuity of success in the first months to years of the career of a principal, demands a strong form of support; an effective and experienced mentor can serve this purpose (Augustine-Shaw, 2015a; Jackson, 2010; NAESP, 2003). The benefits for the protégé include increased confidence and professional competence, transferring theory into practice, building a network of support with colleagues, and feeling like one belongs among the cohort (Jones, 2014; NAESP, 2003; Saffle, 2016). Schools also benefit as mentored principals report more success increasing test scores, aligning instructional practices with research-based best practices, and improving school climate (Sciarappa & Mason, 2014) Yet, researchers like Washington-Bass (2013) and Bryant, King, & Wilson (2016) suggest there is limited research regarding principal mentoring to aide new principals in navigating the challenges of leadership and its impact on their job satisfaction.

Problem Statement

Being a new principal is challenging. Administrative licensure programs delivered by graduate schools do not always adequately prepare candidates for the principalship (Burkhauser, Gates, Hamilton, & Ikemoto, 2012; Darling-Hammond et al., 2007; Orr, 2006; Superville, 2017; Washington-Bass, 2013). Then, new principals step into leadership positions and are challenged by working conditions with high expectations, a minimal amount of support, and extraordinarily high stress (Burkhauser et al., 2012; Darling-Hammond et al., 2007; Gates et al., 2006; Weingartner, 2009). Principals are often thrown into their new roles and expected to "sink or swim" (Augustine-Shaw & Liang, 2016; Bradley, 2006; Mendels & Mitgang, 2013; NAESP, 2003). This often results in new principals struggling to lead reforms (Seashore Louis et al., 2010; Weingartner, 2009) and increase student learning outcomes. While there has been much

more attention given to the induction of beginning teachers, the needs of principal induction are less attended to (Aycock, 2006; Bryant et al., 2016). The literature regarding the benefits of mentoring new principals is growing (Stewart & Matthews, 2015), but the research in this area is thin.

With multiple initiatives in recent years to improve instruction and accountability in Washington State, Plecki et al. (2017) identified the lion's share of the workload from these initiatives would be assigned to school principals, leading them to examine the demographics of all principals in the state. They found 81% of principals in Washington State remained in their school from one year to the next, with no significant differences between elementary and secondary school principals. Additionally, a timely urgency is developing concerning principals as a sharp increase in retirements across the state looms. Washington State needs to be ready to successfully bring a significant number of new principals into the system.

Purpose of Research

The 21st Century principalship has undergone an evolution in roles and responsibilities, which emphasizes the importance of principals as instructional leaders and their impact on student learning outcomes. At the same time many retirements loom, which will lead to an increase of newly hired principals. Therefore, addressing new principal readiness and support are particularly timely. By using the Principal Induction and Mentoring Survey (PIMS), I aim to better understand the mentoring experience for new principals in Washington State. This work can aid school districts in improving their induction practices, so that those new principals feel supported and satisfied in their work.

This study explored the potential impact mentoring has on job satisfaction for Washington State public elementary school principals within their first five years in a

principalship. The study measured differences in satisfaction levels among elementary school principals who participated in both formal and informal mentoring programs, and those who did not participate in any form of mentorship. The relationship between job satisfaction and gender, as well as years of teaching experience was also explored. Additionally, I worked to understand the underlying structure of the PIMS.

Research Questions

The research study addressed the following research questions:

1. What types of mentoring experiences do new principals report as measured by the Principal Induction and Mentoring Survey (PIMS) (Aycock, 2006; Washington-Bass, 2013)?
2. Is there a statistically significant difference in job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?
3. Is there a statistically significant relationship between job satisfaction by the gender of new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?
4. Is there a statistically significant relationship between years of teaching experience and job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?
5. What is the underlying structure of the Principal Induction and Mentoring Survey (PIMS)?

Definition of Terms

Elementary school principal: Person vested with the executive authority over a school serving children enrolled in kindergarten through fifth, sixth, or eighth grades.

Informal Mentoring: A mentoring experience with little or no structure, organization or assistance around established guidelines; commonplace for the experience to be initiated by either the mentor (desiring to impart knowledge) or protégé (seeking experience). Mentors generally have a professional association with their protégé, such as a district colleague (Aycock, 2006; Washington-Bass, 2013).

Job Satisfaction: An employee's positive or negative evaluative judgments made about their employment (Skaalvik & Skaalvik, 2015).

Formal Mentoring: A structured support system designed to provide planned, organized training and assistance, around established guidelines, to a beginning principal for a minimum of one full school year (Aycock, 2006; Washington-Bass, 2013).

Mentor: An experienced principal who provides technical and adaptive support to a protégé (Daresh, 2007).

Protégé: A principal in the first year(s) of their role, who receives technical and adaptive support from a mentor (Daresh, 2007).

Limitations and Delimitations

This study has several limitations and delimitations. The first limitation is that the study solely relies on the self-reported perceptions of new principals via a survey instrument. A weakness of self-reporting on survey is the inaccuracy of the items. Furthermore, self-reported data on surveys are vulnerable to lying, misunderstanding posed questions, or guessing (Privitera, 2017). The PIMS tool collects data that is a representation of one aspect of mentoring

that took place as there is no data collected from other individuals, such as mentors, program administrators, or direct supervisors, who were involved with new principals.

A second limitation of this study relates to any long-term implications. As a one-time cross-sectional study, any impact of mentoring cannot be extended longitudinally. This is a shared limitation among this methodological approach with regards to mentoring. Spiro et al. (2007) made note of this limitation as data about its efficacy is rare, especially with regards to retention or student learning outcomes.

Not controlling for differences in geographic regions, district sizes, or school populations is a third limitation of this study. The invitation to participate in the survey was sent to all principals with five or less years of experience in Washington State. However, the collected responses were not representative of the entire new principal population in the state.

The first delimitation is focused around the sampling frame. First, the population was limited to only principals in Washington State. Futhermore, the study examined the mentoring experiences of elementary principals only. Lastly, the principals included in the sampling frame began as a principal within the last five years, from 2013-14 school year to 2017-18 school year. Any generalizations beyond this population will be limited and should be made cautiously.

Another delimitation of this study relates to the partnership with the Association of Washington School Principals (AWSP). In an effort to draw the attention of more principals, and thus acquire a stronger sample, AWSP distributed the survey electronically to principals. However, the AWSP database set parameters that may include errors. There was no full guarantee all principals who should be included in the sampling frame were included. In addition, there may have been principals included in the frame with more than five years of

experience. An effort to control for the inclusion of principals with more than five years was made in the first question of the survey.

Summary

There is a wide range of responsibilities and competencies a 21st Century principal must fulfill (Augustine-Shaw, 2015a; Bryant et al., 2016; Darling-Hammond et al., 2007; Davis et al., 2005), but the most vital to school success is instructional leadership (Cortes et al., 2017; Crow, 2006; Darling-Hammond et al., 2007; Davis et al., 2005; Gardner, 2016; Knapp et al., 2003; Mendels, 2012a; Mendels & Mitgang, 2013; Seashore Louis et al., 2010; Wallace Foundation, 2013). Research has identified the significant impact instructional leaders have on student learning outcomes (Augustine-Shaw, 2015a; Davis et al., 2005; Mendels, 2012b; Seashore Louis et al., 2010; Sebastian & Allensworth, 2012; Stewart & Matthews, 2015). School districts have also begun to acknowledge the significant impact principals have on sustaining implementation of effective programs and best practices (Strickland-Cohen, McIntosh, & Horner, 2014). In the 2012 report, *Survey of the American Teacher: Challenges for School Leadership*, three out of every four principals identified the principalship as complex and stressful. With the stakes at historical highs (Bryant et al., 2016) "in this era of so many significant changes, principals are feeling more overwhelmed than ever" (Killion, 2012, p. 26).

Mentoring new principals is a strategy that may reduce stress and increase job satisfaction. Washington State is just beginning to explore the implications of mentoring school principals. "Little systematic and statewide knowledge exists about the nature of the school administrator workforce and the career paths of principals in Washington State" (Plecki et al., 2017, p. 1). Implications from the report, *Understanding Principal Retention and Mobility in Washington State*, and a newly formed partnership between AWSP and the Office of the

Superintendent of Public Instruction (OSPI) have raised the urgency to address the challenges of the principalship.

This study explores mentoring as a strategy that may increase job satisfaction among elementary school principals. The research questions focus on mentoring and self-reported job satisfaction among elementary principals across the state of Washington. Additionally, a principal component factor analysis of the Principal Induction and Mentoring Survey (PIMS) tool will be conducted to explore its validity, as well its reliability will be reported through Cronbach's alpha. School districts, AWSP, and OSPI will benefit from this study because the results may contribute to the understanding of the relationship between mentoring and job satisfaction. This research has the potential to influence policy and practice for the support of new principals. The intention of this study is to contribute to the related literature regarding supporting new principals with mentoring and its relationship to job satisfaction.

CHAPTER 2

Literature Review

The purpose of this study is to explore the potential impact mentoring has on job satisfaction for Washington State public elementary school principals serving within their first five years of the role. Chapter 2 presents the research related to the principalship and mentoring. The review of literature considers four variables related to the principalship: mentoring, job satisfaction, gender, and teaching experience. The first section reviews research related to the growing need for the practice of mentoring with school leaders and its effective characteristics. The second section reviews the influence of job satisfaction on school leaders, including how stress and isolation impact job satisfaction. The third section reports on the influence teaching experience has on school principals. The fourth section attends to the similarities and differences between men and women who serve in the principalship. The last section considers the benefits of mentoring school principals, and specifically emphasizes the implications for job satisfaction as ascertained by the Principal Induction and Mentoring Survey (PIMS).

Mentoring New Principals

The assimilation of a new school principal occurs at an accelerated pace (Jackson, 2010). Paired with the challenges of the 21st Century principalship, it is imperative that school districts identify what is most important regarding the induction and on-going support of new principals (Boris-Schachter & Vonasek, 2009; Gardner, 2016). In 2012, Mitgang concluded "the quality of training and support principals receive matter[s] a great deal and deserves serious investment" (p. 25). Districts have a responsibility to cultivate the skills of their newly hired principals (Gardner, 2016; Mendels & Mitgang, 2013). Mentoring is an approach that many districts have explored; it appears to hold promise for developing effective school leaders (Boris-Schachter &

Vonasek, 2009; Browne-Ferrigno & Muth, 2006; Gardner, 2016; Hall, 2008; Mitgang, 2012; Spiro et al., 2007).

From a historical perspective in education, mentoring has not been a high priority for school leaders. The long-held and deeply embedded attitude in school culture was "sink-or-swim" (Bradley, 2006; Gray, Fry, Bottoms, & O'Neill, 2007; Mendels & Mitgang, 2013). Yet the concept of apprenticeship in education is not unfamiliar. The most common pathway to employment as a classroom teacher is by beginning as a student teacher, studying in a university-sanctioned, unpaid student-teaching experience in the classroom of a master teacher (Hall, 2008), followed by a year or more of job-embedded mentoring upon hiring.

Throughout the first year of a school principalship there are many complex challenges presented (Augustine-Shaw, 2015b). Mentoring closes the gap between the independent problem-solving capacity of a new school principal and their potential developmental level of achievement with guidance from an expert (Davis et al., 2005). Lavigne, Shakman, Zweig, & Greller (2016) studied the amount of time, type of tasks, and forms of professional development principals experienced. The self-reported data was collected from 6,360 principals during the 2011-12 school year who completed the Principal and School Questionnaire on the Schools and Staffing Survey conducted by the National Center for Education Statistics. They found that only half of the respondents reported being mentored.

Current mentoring practices have shifted from acquiring knowledge to facilitating learning, in which it is "a process-oriented relationship involving knowledge acquisition, application, and critical reflection" (Gardner, 2016, p. 51). A mentor supports the protégé with technical challenges, such as budgeting, scheduling, and parental involvement; which reduces anxiety and insecurity during the first year (Daresh, 2010). Mentors provide strategies to resolve

dilemmas, provide feedback, and build up a broad repertoire of leadership skills in the protégé (Augustine-Shaw & Liang, 2016; Davis et al., 2005; Holloway, 2004; Peluchette & Jeanquart, 2000). However, shepherding a protégé through the adaptive challenges can be difficult (Burk, 2012).

Parylo, Zepeda, & Bengtson (2012) interviewed 16 principals across four school districts in the state of Georgia. Over the course of four semi-structured interviews, participants were asked about four topics related to mentoring: principal socialization, supervision and evaluation, professional development, and succession. The researchers identified five major themes: mentoring as recruitment, mentoring as socialization, mentoring as support, mentoring as professional development, and mentoring as reciprocal learning. They concluded new principals who received mentoring saw it as the most effective professional development that they experienced. This was, generally, described by participants "as the 'best' system of support" (p. 128). Additionally, a strong desire to be mentored was expressed by principals who had not been mentored.

A quality mentor is indispensable to the successful development of an educational leader (Fernandez, Bustamante, Combs, & Martinez-Garcia, 2015). The effectiveness of a mentor is dependent upon their understanding of the emergent nature of a new principal: the protégé does not come equipped with all the skills and knowledge required to be proficient as a school manager or instructional leader (Daresh, 2007). In establishing and maintaining a successful mentoring relationship, there are certain components required, such as, there must be authenticity (Hall, 2008; NAESP, 2003), in that the mentor is credible and qualified, and the protégé is willing and able to receive feedback from the mentor, as well as incorporating it into their practice (NAESP, 2003).

In an era of student learning outcomes and accountability for all educators, the need to develop principals as effective managers and instructional leaders is urgent (Hall, 2008). Mentoring is proving to be an effective tool to support new principals in meeting the demands of the principalship (Washington-Bass, 2013), which includes "bridging the important relationship between understanding the local district context and pathways to increase student achievement" (Augustine-Shaw, 2015a, p. 1). The increasing number of new principal mentoring programs across the country is encouraging (NAESP, 2003) as more than 50% of states have adopted requirements for mentoring new principals (Spiro et al., 2007). Recent literature has established the critical role of principals as instructional leaders and led to an expanding willingness of school districts to invest in the professional development of their leaders (Mendels & Mitgang, 2013). Sciarappa & Mason (2014) identified the costs of mentoring as low. In the state of Washington, it would cost approximately $4.20 per pupil, which is a similar amount to other comparable programs in the state (Plecki et al., 2017).

Characteristics of effective principal mentoring. "Very little in our lives is more important and more ubiquitous than our relationships with those we are about and with whom we work" (Saban & Wolfe, 2009, p. 5). In mentoring relationships, the protégé is aided in translating theory to practice (Augustine-Shaw & Liang, 2016; Boerema, 2011; Ferrandino, 2006; Wells-Frazier, 2016) and developing personal beliefs that positively impact teaching and learning (Augustine-Shaw & Liang, 2016).

The highest priority in a mentoring relationship is developing, establishing, and maintaining trust (Bakioglu et al., 2010; Bradley, 2006; Gardner, 2016; Schechter, 2014). The responsibility of establishing trust belongs to the mentor, as a protégé must believe their mentor acts and speaks in a manner aligned with their best interests (Bradley, 2006). Trust is rooted in

the assurances of confidentiality in the mentoring relationship (Bakioglu et al., 2010; Gardner, 2016; Sciarappa & Mason, 2014), establishing a level of security (Bakioglu et al., 2010; Gardner, 2016; Schechter, 2014), and trustworthiness (Bakioglu et al., 2010; Schechter, 2014). The ultimate goal within the relationship is to learn from one another (Bakioglu et al., 2010; Saban & Wolfe, 2009; Schechter, 2014) through reflection (Gardner, 2016; Schechter, 2014).

Schechter (2014) studied a cadre of 18 candidates who were to begin their positions as a principal within the next year and six mentor principals in New York City. Semi-structured interviews and written reports were submitted by the participants to examine the factors influencing a relationship between a mentor and protégé. The analysis identified three themes in a productive mentoring relationship: personal characteristics, professional discourse, and time and frequency of communication. Eight percent of mentors and 70% of protégés identified six essential components for a successful mentorship: respect, admiration, openness, honesty, trust, and sincerity. Moreover, mentors and protégés stressed that the exchange of ideas, insights, and experiences elevated mentoring "into a significant professional learning experience for both parties" (p. 59). Productive mentoring relationships included open communication, which was constant and ultimately created a sense of comfort in protégés to the extent that there was no hesitation on their part to contact mentors for assistance. The perception of face-to-face communication between the mentor and protégé is of significant influence upon mentoring. The researcher concluded an effective mentoring relationship addresses the needs of the protégé. It is built on a match of personal and professional characteristics that are shared between the mentor and protégé, as well as considering their goals and school demographics (Mendels, 2012a; Schechter, 2014).

In the 2003 report, *Making the Case for Principal Mentoring*, the National Association of Elementary School Principals (NAESP) outlined five traits in successful mentorships, which Peggy Hopkins-Thompkins, a consultant and former director of the Wake Leadership Academy in Raleigh, North Carolina, describes as:

1. Organizational support: When mentors know the value a school district places on mentoring, there is a higher likelihood of scheduling time with protégés.
2. Clearly defined outcomes: The mentoring experience needs specific content and skills to be acquired.
3. Screening, selection, and pairing: The compatibility of the mentor and protégé is critical. Communication skills, providing feedback, analysis, and negotiation are competencies desired in mentors.
4. Training mentors and protégés: Mentors should be provided training in the areas of communication, needs assessment, and providing feedback. Protégés should be provided professional development in the areas of analyzing needs, utilizing an individual growth plan for self-development, and reflective practices.
5. A learner-centered focus: Reflective feedback is timely, within the locus of control of the protégé, and confidential.

In the years following the 2003 report, principal mentoring literature has affirmed these five characteristics as effective (Bradley, 2006; Darling-Hammond et al., 2007; Gettys, Martin, & Bigby, 2010; Hall, 2008), while concurrently defining and contributing additional factors. Mentoring must also facilitate the transition from the role of classroom teacher to school leadership (Gray et al., 2007; Schechter, 2014). The mentor must accept and acknowledge that a protégé comes prepared and capable to serve in the role of the principalship (Bradley, 2006;

Saban & Wolfe, 2009). The relationship must evolve as a protégé develops self-confidence, knowledge, and skills, which requires mentors to be flexible and responsive (Lochmiller, 2014). There is a required investment of time, which can be challenging to allocate with practicing school administrators (Schechter, 2014; Sciarappa & Mason, 2014). However, considerations for incentives, such as monetary rewards, make the time commitment more enticing (Hall, 2008).

Mentors must have experience and demonstrated proficiency in their own practice (Boerema, 2011; Bradley, 2006; Darling-Hammond et al., 2007; Sciarappa & Mason, 2014). A critical skill of mentors is the ability to listen (Alsbury & Hackmann, 2006; Boerema, 2011; Schechter, 2014; Sciarappa & Mason, 2014), as protégés most value this trait (Alsbury & Hackmann, 2006). Furthermore, protégés want to experience caring, affirmation, and encouragement in the relationship (Boerema, 2011). The conversations a mentor facilitates must be reflective in order to yield results of professional growth in protégés (Cortes et al., 2017; Schechter, 2014).

Informal mentoring. Informal mentoring has been a common practice in education through the first decade of the 21st Century (Aycock, 2006; Bynum, 2015; Gardner, 2016) and long before the formation of formal mentoring programs (Barnett, 2013). There are significant variances in the formats of informal mentoring, which have little or no structure, few established guidelines (Aycock, 2006; Washington-Bass, 2013), and often a lack of systematic implementation (Malone, 2002). Informal mentoring is often facilitated through phone calls (Aycock, 2006; Boerema, 2011; Remy, 2009; Russo, 2013; Waido, 2013), emails (Aycock, 2006; Buckey, 2014; Remy, 2009; Waido, 2013), book clubs (Darling-Hammond et al., 2007), conversations at conferences (Boerema, 2011) or over a meal (Waido, 2013), and during a visit to the school of a colleague (Aycock, 2006; Darling-Hammond et al., 2007). Frequently self-

initiated, informal mentoring begins with colleague interactions (Aycock, 2006; Buckey, 2014; Duncan & Stock, 2010; Hall, 2008; Remy, 2009; Washington-Bass, 2013) and develop from an acknowledgement of a shared connection (Peters, 2010). Protégés may seek out a mentor who is trusted and perceived to have knowledge or expertise (Buckey, 2014; Saffle, 2016). Peters (2010) defined informal mentoring relationships as forming "independently of any organizational program" (p. 114). Generally, informal mentorships develop in the absence of a formal program (Buckey, 2014) and monies are not allocated to support informal mentoring (Duncan & Stock, 2010).

Over the last decade, principals who have been informally mentored have been studied. Aycock's (2006) research identified informal mentoring as the modal response amongst principals in Kansas, in which protégés received mentoring from colleagues or friends. In 2010, Duncan & Stock reported 67.7% of Wyoming principals were informally mentored. In the same year, 88% of principals in three districts in the suburban Washington, D.C. had been informally mentored (Jackson, 2010). A dramatic reduction of principals (32.2%) stating they had been informally mentored was reported by Washington-Bass (2013) in seventeen schools districts serving the greater-metro Atlanta, Georgia region.

Informal mentoring is perceived by new principals to be a positive and valuable experience (Buckey, 2014). Many school principals credit an informal mentoring relationship to their 'survival' (Bakioglu et al., 2010; Bloom, Castagna, & Warren, 2003) during the early years of their career. Bynum (2015) reported that an informal mentor "can assist the protégé with more significant and current issues related to the workplace without fear of judgment or disappointment than with a traditionally assigned mentor" (p. 70). Developing a sense of belonging, safe environment, and higher trust are credited to informal mentorships (Duncan &

Stock, 2010). The effectiveness of informal mentoring relationships is equivalent to more formal programs for personal and professional improvement (Bynum, 2015).

Research has identified there are criticisms around the lack of focus, structure, and haphazard implementation of informal mentoring (Aycock, 2006; Gardner, 2016). Gardner (2016) studied 40 school principals in an urban school district in North Carolina. Through a Q-methodology design, a set of 20 educational leaders reduced a set of 85 statements to 42 statements that aligned with their opinions of effective mentoring support. Then, the 42 statements were given to the 40 participants to rank on a Q-sort grid, ranging from -4 to +4. Post-sort, participants were interviewed to gain a better understanding of the perceptions, opinions, and viewpoints of the principals. The researcher identified critiques of mentoring through consensus statements.

An incoherent progression during a series of mentoring sessions is also a possible outcome with untrained mentors (Bloom et al., 2003; Hill, 2016). Informal mentors may not possess the skills or training to implement highly effective mentoring practices and support of a new principal. Furthermore, informal mentoring frequently lacks expectations or focus around a set of standards (Hall, 2008).

There are also formal programs, which upon completion encourage a more informal mentoring process to continue afterwards (Russo, 2013; Weingartner, 2009). Jackson (2010) identified these programs as generally having two stages. The first is short-term, in which a more formal mentoring program is associated with accomplishments, predetermined tasks and activities, or time, such as a one-year commitment. The longer-term, second stage is informal, in which the established relationship between the mentor and protégé continues as two professionals engaging in collegial discourse on an “as needed” basis. Utilizing both formal and

informal mentoring is a method to improve school leadership (Boerema, 2011). There are also greater benefits for protégés when they participate in both formal and informal mentoring, rather than just a single experience of either formal or informal mentoring (Saffle, 2016).

Job Satisfaction of School Principals

It is important for new school principals to be satisfied with their work because they perform at higher levels than those who are not (Chambers, 1999; Saari & Judge, 2004). Futhermore, "job satisfaction is very important for principals' motivation to stay in the position" (Federici & Skaalvik, 2012, p. 312). Job satisfaction can be measured globally, as a single attitude towards the entirety of one's work, or separated among various aspects of the job (Federici & Skaalvik, 2012), such as self-belief of acting in a valued role, happiness with the school district, and zeal for principal tasks (Tekleselassie & Villarreal, 2011). Job satisfaction is also linked to intrinsic motivation (Edmond, 2015).

Sodoma & Else (2009) compared job satisfaction of Iowa public school principals from 1999 to 2005. A 20-question survey was developed in 1999 from surveys across several disciplines, including education and management, as well as a separate set of job categories related to daily activities associated with the principalship. The Cronbach's alpha for the survey was reported as .89 for all job satisfaction questions. In 1999, all principals in Iowa were mailed a survey, but the 2005 replication asked 300 Iowa principals to complete the survey electronically. Principals were found to be more satisfied in 2005, as in 1999, 76% of principals were "moderately satisfied" (M = 2.04, SD = 0.8) and six years later, the mean of the respondents were "very satisfied" (M = 1.05, SD = 0.7).

There are variances in levels of job satisfaction among demographic variables (Chang, Leach, & Anderman, 2015). Eckman (2004) reported job satisfaction among male and female

principals as similar. Principals who work in mid-sized schools experience higher job satisfaction (Graham & Messner, 1998). Lower job satisfaction exists among middle school and less experienced principals (Sodoma & Else, 2009). Higher job satisfaction is expressed by principals who are provided more autonomy and support from their school district leaders (Chang et al., 2015; Gross & Shapiro, 2004). Principals who report spending more time on leadership activities, rather than administrative tasks, also experience higher job satisfaction (Sodoma & Else, 2009). This is particularly the case with principals who work on the issues of teacher capacity and staff cohesiveness (Burkhauser et al., 2012).

Federici & Skaalvik (2012) examined the relationships between self-efficacy, burnout, job satisfaction, and motivation to quit among 1,818 Norwegian principals. The participants completed the Norwegian Principal Self-Efficacy Survey, a modified version of the Maslach Burnout Inventory, and two surveys created by the researchers for the study; a five-item survey measuring job satisfaction and two statements related to burnout. The study identified a strong correlation between self-efficacy and job satisfaction ($r = .588$, $p < .001$), as well as a strong relationship between burnout and job satisfaction ($r = -.852$, $p < .001$).

A low level of job satisfaction is a leading indicator of withdrawal and retention (Saari & Judge, 2004). However, many school principals do not identify exiting a principalship as a strategy to increase job satisfaction (Aycock, 2006). Gross & Shapiro (2004) found the most important factor in high job satisfaction among principals to be mentoring. Yet, there remains a need to identify mentoring programs that are successful in cultivating high job satisfaction for principals (Jackson, 2010).

The impact of stress on job satisfaction. Increasing demands and responsibilities on the principalship (Gill & Arnold, 2015; NAESP, 2003; Sogunro, 2012) have caused a dramatic

increase in stress, which are trending at new, all-time highs (Boyland, 2011; Killion, 2012; Sogunro, 2012). This new reality for principals is alarming as "stress can become a nonentity and disruptive to optimal performance" (Sogunro, 2012, p. 666). New principals experience even more stress (Daresh, 2007; Gardner, 2016; Holloway, 2004; Saban & Wolfe, 2009), stemming from task overload (Burkhauser et al., 2012; Daresh, 2007; Killion, 2012; Saban & Wolfe, 2009; Sogunro, 2012; Stephenson & Bauer, 2010; West, Peck, Reitzug, & Crane, 2014) as they are responsible for operating a safe, secure, efficient, and highly effective school (Daresh, 2007; Holloway, 2004).

Stress is cultivated by role responsibility ambiguities (Norton, 2002; Stephenson & Bauer, 2010) as there are multiple conflicting or competing priorities for principals (Holloway, 2004; Killion, 2012; Stephenson & Bauer, 2010). Further compounding stress is student enrollment, in which larger student populations add complexities with the increased magnitude of management issues which the presence of more students, parents, and staff necessarily creates (Eckman & Kelber, 2010).

Sogunro (2012) interviewed 52 principals in Connecticut to study stressors for school principals. More than 96% of the principals expressed experiencing levels of stress at work that negatively impact their health, work habits, and productivity. The researcher identified stressors as unpleasant relationships and people conflicts, time constraints, crises in the school, budgetary constraints, and challenging policy demands and overwhelming mandates.

Every principal Sogunro (2012) interviewed identified relationships, especially those which are strained or unpleasant, as the greatest sources of stress. There are many stakeholders in which a principal must maintain a relationship. Conflicts amongst staff members, or between staff and the administrator were identified by 92% of principals as the greatest relationship

stressor. The second most stressful relationship for principals are exchanges with difficult parents, of which half of principals identified special education families as most dreaded. Unproductive mentoring relationships can also contribute to principal stress (Schechter, 2014).

Sogunro (2012) reported 98% of principals identified time constraints as a stressor. Principals also work long hours (Holloway, 2004) and experience time constraints which negatively impact their decision-making, interpersonal communication, and follow-through (Wells-Frazier, 2016). "As everyone seems to be in demand of a part of the principal's time, principals are left with less time to perform their duties" (Sogunro, 2012, p. 679).

A third stressor named by 96% of principals are crises (Sogunro, 2012). A crisis can lead to panic, confusion, and dramatic increases in stress, especially for inexperienced or ill-prepared principals. Stress levels in the principalship are influenced by perception of control, especially in difficult situations (Edmond, 2015). Historically, staffing reductions due to budget cuts are one form of a crises which stresses school administrators (Sogunro, 2012; West et al., 2014)

Sogunro, (2012) found "90% of the principals claimed to feel pressured in dealing with internal and external demands" (p. 680). Additionally, more than 7 out of 10 principals expressed experiencing unrealistic deadlines imposed by the central office. There are many expectations from various stakeholders on principals, which are often immediate (Holloway, 2004), accompanied by an increase in paperwork (West et al., 2014), and are centrally focused on increasing student learning outcomes (Wells-Frazier, 2016). The evaluation and supervision of staff also contribute to principal stress levels (Holloway, 2004; Wells-Frazier, 2016).

Stress undermines job satisfaction and can lead to low self-efficacy (Federici & Skaalvik, 2012), burnout (Federici & Skaalvik, 2012; Sogunro, 2012), and retention (Sogunro, 2012). Chronic high stress levels negatively impact the effectiveness of a principal (Boyland, 2011;

Sogunro, 2012). Sustaining of higher stress can also adversely affect physical and mental health (Boyland, 2011; Sogunro, 2012; West et al., 2014), including lack of sleep, not exercising, poor nutrition, accelerated physical ageing (West et al., 2014), and suicide or untimely death (Sogunro, 2012). Although there is little or nothing done to educate principals about stress and its effects (Sogunro, 2012), "school leaders need to develop a repertory of stress-management techniques and understand the importance of taking care of themselves" (Boyland, 2011, p. 7).

The impact of isolation on job satisfaction. Isolation is experienced by many new principals (Jackson, 2010; Lochmiller, 2014; Weingartner, 2009) and can result in feelings of loneliness (Boerema, 2011; Gill & Arnold, 2015; Weingartner, 2009). "It almost seems to be endemic to the office school administrator, especially in small schools" (Boerema, 2011, p. 564). Stephenson & Bauer (2010) studied 113 first and second year principals in Louisiana. The participants completed five survey scales. Their findings suggest high levels of stress are associated with greater isolation, as role ambiguity (ß = .16, $p < .05$) and overload (ß = .20, $p < .01$) are statistically significant predictors of isolation.

Stephenson & Bauer (2010) also reported an aspect of the principalship which promotes isolation is managerial duties. New principals "spend a significant amount of time learning the administrative ropes" (p. 13). These tasks separate principals from the teaching and learning occurring in their schools; yielding negative impacts on their instructional leadership. The new roles and responsibilities of the 21st Century principalship may even further compound and exacerbate the isolation of principals.

Although it is a dominant trait of the school principalship, research has given isolation little attention (Stephenson & Bauer, 2010). Presently, questions remain unanswered as to whether isolation occurs because of the type of people that are attracted to the principalship

prefer to work alone or if the responsibilities and role of a school principal yield isolating conditions (Boerema, 2011). Isolation influences outcomes such as principal burnout and turnover (Stephenson & Bauer, 2010).

Gender Differences Among Principals

Gill & Arnold (2015) traced the origin of research questioning and examining differences between genders in school leadership to the second feminist movement in the 1970s and 1980s. Prior to this time, the division of labor was stereotypical: men as leaders and having positions of authority, while women were to be led, follow orders, and conform to the rules established by men. "Research suggest that the gender order of the old system continues to permeate the new schooling situation" (p. 22)

The principalship has historically lacked gender diversity, and was most commonly filled by a middle-aged, white man (Blackman & Fenwick, 2000). Yet, among public educators women outnumber men 4:1 (Blackman & Fenwick, 2000; Davis, Gooden, & Bowers, 2017). There has been a new trend in the demographic data with regards to the proportion of women serving in school administrator roles increasing (Plecki et al., 2017). In 1987, only 25% of principals were women (Hill et al., 2016). At the beginning of the 21st Century, 40% of principals were female (Plecki et al., 2017). By 2010, half of all principalships were filled by women (Campbell & DeArmond, 2010; Hill et al., 2016; Plecki et al., 2017). Opportunities for more women to serve in school administrative roles holds promise (Gill & Arnold, 2015; Plecki et al., 2017), as 63% of assistant principals are female (Plecki et al., 2017), and female pre-service program graduates outnumber male graduates nearly 2:1 (Darling-Hammond et al., 2007).

Perspectives of male and female principals. Gill & Arnold (2015) examined the principalship through the lenses of masculinity and emotion through conducting recursive interviews with 17 experienced male elementary principals in Australia. They sought to understand the persistence in some school systems of the role of the principal being dominantly filled by men. Their research discovered there was acknowledgement from male principals of their male privilege, and how it positively influenced all stages of their career in education. Additionally, the study identified a shift in school leadership to a more democratic style, which was viewed as more caring and sensitive, as well as a betrayal of masculinity. Men identified the emotional dimension of the principalship as the most challenging aspect. There is a recognition for a need in the principalship for more openness from male principals, rather than remaining too distant or not sympathetic enough with stakeholders. This change has led to internal struggles with societal expectations for male behavior and what is being demanded in their role as principal. Masculinity views emotions as potentially threatening and a sign of weakness. Men frequently feel the need to bury self-perceived excesses of emotional expression because the self-understood expectations include men to not respond in that manner. Male principals develop strategies to reserve what is believed as unacceptable expressions of emotion. Men speculate female principals would be less hindered by these concerns as it is socially more acceptable for women to be emotionally expressive and model empathy.

Women perceive the pathway to the principalship as less favorable than men (Davis et al., 2017). Furthermore, women remain underrepresented in principalships (Eckman & Kelber, 2010; Guramatunhu-Mudiwa & Bolt, 2012). Although the trend is increasing in the number of hires of women to the principalship (Campbell & DeArmond, 2010; Gill & Arnold, 2015; Hill et al., 2016; Plecki et al., 2017), there remains a belief among female principals that gender

influences hiring decisions and hinders their promotion to school leadership roles (Fernandez et al., 2015).

The principalship is approached by women through relationships and collaboration, "not to abuse their power but instead use it to empower those who surround them" (Sherman & Wrushen, 2009. p. 184). The leadership style of nurturing relationships among female principals yield a small, but statistically significant, positive effect on instructional leadership (Guramatunhu-Mudiwa & Bolt, 2012; Hallinger, Dongyu, & Wang, 2016). Women, as compared to their male colleagues, express a higher need for professional development (Duncan, 2013), especially in areas of special education, curriculum and instruction, and finances (Moore, 2013). This female experience is accompanied by feeling pressure to demonstrate their competency, especially with regards to decision-making and student discipline (Fernandez et al., 2015).

Similarities and differences among male and female principals. There are commonalities for male and female principals. Men and women serve successfully as school principals (Guramatunhu-Mudiwa & Bolt, 2012). Although job satisfaction is reported at moderate levels, they are similar for men and women (Eckman, 2004). The retention rates for male and female principals are not statistically different (Gates et al., 2006; Tekleselassie & Villarreal, 2011). Regarding compensation, men and women have no notable differences (Plecki et al., 2017). Research suggests the shifts occurring in the 21st Century principalship may be leading to an adoption of more androgynous characteristics (Guramatunhu-Mudiwa & Bolt, 2012).

Despite principalship becoming more equal in terms of gender diversity, there remain contrasts among characteristics and experiences of male and female principals. There are

significant differences with consideration to the age when men and women first become principal, marital status (Eckman, 2004; Friedman et al., 2008), teaching experience (Duncan, 2013; Eckman, 2004; Friedman et al., 2008), and retirement age (Gates et al., 2006). Male principals also self-report higher autonomy support (Chang et al., 2015). Eckman (2004) suggests possible explanations for the differences may be due to the "glass elevator" effect, in which men climb the career ladder at a more accelerated rate than women, or perhaps role expectations perpetuate a mindset that women teach and men lead.

Guramatunhu-Mudiwa & Bolt (2012) reported research has identified the leadership style of female principals was more transformational, leading them to be better managers, and promote more effective instructional practices. Sherman & Wrushen (2009) conducted open-ended interviews with eight female secondary principals across three areas of the eastern United States. Participants were asked to discuss how they experienced the principalship, their approach to leading, and to identify obstacles which had to be overcome. The researchers reported female principals define effective leadership through service and view their role as a school leader as just one member of a greater, collective whole. The majority of the women also self-reported being faith-based, which the researchers suggest may provide them a coping mechanism.

Regarding familiarity with state standards, women were more familiar with teaching and leadership standards than their male peers (Stewart & Matthews, 2015). Perhaps differences in teaching experience (Duncan, 2013; Eckman, 2004; Friedman et al., 2008) can be attributed to any gaps among male and female principals and effective instructional leadership. Eckman (2004) reported a significant difference in the number of years of teaching experience between genders ($t = 2.49$, $df = 335$, $p = .014$, effect size = .26), of which the average number of years of teaching experience for men was 11.37 years and women had 13.11 years.

Female principals perceive higher opportunity costs with regards to leaving or changing schools (Tekleselassie & Villarreal, 2011). Chang et al., (2015) reported men have lower affective commitment ($F(1, 1{,}494) = 6.01$, $p < .05$) compared to their female colleagues. When women reported lower job satisfaction, the likelihood for their departure still remained less likely than men (Tekleselassie & Villarreal, 2011). However, in a 2014 qualitative study, West, Peck, Reitzug, & Crane noted female principals experienced stress at such high levels "many threatened to leave their position due to stress" (p. 383). Two years after their initial phase of their study, only 35.3% of the women remained in their positions.

In 2003, Zellmer called for more equity in principal mentoring practices, of which the practices need to be more cognizant and sensitive to gender needs. Research has cited the lack of female mentors in the field as one reason for slow progress in facilitating more women into school leadership (Bynum, 2015). Yet, things are changing as with Felicello (2014) reporting more female principals are mentored than their male peers. There is also a statistical significance between men and women around the self-perceived impact of the mentoring, of which women identify the experience as "very significant" and men viewed the experience as "somewhat significant." With a specific emphasis regarding women in leadership positions, Bynum (2015) reported mentoring increases the likelihood of success. Two important characteristics of women mentoring women is the strength created in the relationship when two women are paired together and the increased ability to operationalize the learning they experienced in the relationship (Sherman & Wrushen, 2009).

The Influence of Teaching Experience on the Principalship

"The principalship is not necessarily an extension of teaching" (Portin, Schneider, DeArmond, & Gundlach, 2003, p. 46). However, a lack of teaching experience in the

principalship undermines instructional leadership, including supervising and evaluating instruction (Paul, 2015; Portin et al., 2003). A MetLife (2013) study surveyed 1,000 teachers, 500 principals and 5 "educational thought leaders" from across the United States to identify current challenges for school leaders. Ninety-seven percent of teachers and principals agreed, in order to be an effective school leader, a principal must have teaching experience. Schools are at greater risk when being led by school leaders with little or no teaching experience as the potential to wreak havoc is higher (DeWitt, 2015).

There have been multiple studies since 2000 that have reported on the teaching experience of school principals. Hill et al., (2016) reported the average years of teaching experience among new principals from the 1987-88 school year and 2011-12 school year did not significantly differ. In 2003, Camburn, Rowan, & Taylor reported the average was 17 years. Three years later, 80% of principals stated that they had six or more years of teaching experience (Aycock, 2006). In 2011, the average years of teaching experience with principals was 13.5 years (Cieminski, 2015) and in the following year, Huang et al., (2012) reported 15 years as the average number of years of teaching experience. Of 1,501 principals surveyed in 2015, Chang et al., identified 83.2% had six or more years of experience, with an average of 12.2 years of teaching experience.

A better understanding of the impact of the teaching experience on principalships may lead to developing better supports for beginning principals (Crow, 2006). In a synthesis of the literature, Washington-Bass (2013) concluded regardless of teaching experience, "new principals may unexpectedly encounter experiences for which they are unprepared" (p. 33). The type of school, area(s) of content taught, and demographic groups during a teaching career of principal are all factors which influence how they fulfill their duties and responsibilities (Crow, 2006).

Teaching experience may not be the only required prerequisite before entering the principalship (Dawkins, 2015; Paul, 2015), but it is necessary (Borba, 2009; Bush, 2009; Dawkins, 2015; DeWitt, 2015; Paul, 2015). This mandatory qualification of new principals stems from the increased focus on principals as instructional leaders (Borba, 2009; Bush, 2009; DeWitt, 2015). It is incredibly challenging, if not impossible, to supervise and evaluate that which you cannot or have not done (Paul, 2015). Principals should "have a good idea of what kids should be able to do and what sort of level of expectations" (Cieminski, 2015, p. 157) are to be made of teaching and learning in classrooms.

Benefits of Principal Mentoring

Over the last fifteen years, research has identified many benefits of a mentoring experience for a new principal (Schechter, 2014). Daresh (2004) synthesized the implementation of mentoring programs as preparation, induction, and professional development for new principals. Research has identified the confidence of new principals who are mentored increases over the duration of a school year (Alsbury & Hackmann, 2006; Daresh, 2004; Ehrich et al., 2004; Remy, 2009) as the mentoring experience sends a message to protégés that the district is committed to their long-term success and values their potential as great (Daresh, 2004). Felicello (2014) identified a self-reported positive relationship between principal morale and mentoring. Mentoring also creates a sense of worthiness in the protégé (Daresh, 2004). There are early indications in the literature that higher district support yields lower principal turnover rates (Mitgang, 2012).

The translation of education and leadership theory into field application is facilitated in a mentoring experience (Alsbury & Hackmann, 2006; Bloom & Moir, 2003; Daresh, 2004; Ehrich et al., 2004; Grissom & Harrington, 2010; Schechter, 2014). A mentor assists with converting

the theory and learning from preparatory coursework to practical application with real-world problems with parents, students, and staff (Daresh, 2004; Grissom & Harrington, 2010). Relatedly, mentors teach "tricks of the trade" to protégés (Alsbury & Hackmann, 2006; Bloom & Moir, 2003; Daresh, 2004; Ehrich et al., 2004; Schechter, 2014), which develops the leadership skills of the protégé. This aides a new principal in avoiding pitfalls and stumbling blocks as they navigate through their first year (Daresh, 2004).

Mentoring also develops a sense of belonging in the protégé (Alsbury & Hackmann, 2006; Daresh, 2004; Ehrich et al., 2004). An engaged mentor signals a level of caring about the professional well-being and success of their protégé (Daresh, 2004; Schechter, 2014; Spiro et al., 2007). The relationship shared between the mentor and protégé supports new principals emotionally (Alsbury & Hackmann, 2006; Daresh, 2004; Felicello, 2014; Hansford & Ehrich, 2006), as well as in their work to develop relationships with stakeholders (Augustine-Shaw & Liang, 2016; Duncan & Stock, 2010; Sciarappa & Mason, 2014). A mentor provides "assistance in understanding and responding to novel, complex situations" (Felicello, 2014, p. 84) to the protégé. The fruition of belonging and support leads to greater success and lower stress (Bradley, 2006), higher motivation (Bloom & Moir, 2003; Daresh, 2004; Gardner, 2016; Spiro et al., 2007), and increased job satisfaction in new principals (Bloom & Moir, 2003; Daresh, 2004).

A professional mentorship is often the first collegial relationship a new principal establishes in a new school district and serves as a catalyst for the building of a network of professional relationships with school district staff at all levels (Bloom & Moir, 2003; Burk, 2012). One essential component for new principals is to develop a network of professional relationships with other beginning principals (Jones, 2014). Networking accumulates anecdotes and proof, which support a new principal as they can deduce and conclude that they are not the

only school principal dealing with certain issues in their school (Burk, 2012), decreasing the feelings of isolation, which are commonly associated with school leadership (Bloom & Moir, 2003; Burk, 2012; Remy, 2009).

In contrast, Hall (2008) presents how an ineffective relationship between a mentor and protégé has destructive consequences for a new principal. Whether it is a lack of skills, willingness, or compatibility, a poor match in the mentoring relationship stunts growth. A regularly identified drawback in the literature regarding principal mentoring is lack of time (Bradley, 2006; Hall, 2008; Malone, 2002). With all the demands on the time of school principals, there is a natural obstacle created as two school leaders attempt to schedule and sustain quality time to meet, discuss, share ideas, and ask questions (Hall, 2008; Malone, 2002). The mentoring relationship is also dependent upon the commitment of the mentor and protégé to willingly engage as interactive partners (Daresh, 2004). The suitability of the match between personal characteristics is also essential to a successful mentoring relationship (Hall, 2008; Malone, 2002; Schechter, 2014).

Association with job satisfaction. An examination of the effects of principal mentoring on job satisfaction has only occurred more recently. Aycock (2006) developed a new measurement tool, the Principal Induction and Mentoring Survey (PIMS), to quantify characteristics of mentoring, the relationship between mentors and protégés, and any benefits (Jackson, 2010) of increased job satisfaction and retention that can be obtained from the mentoring experience. The mixed methods study surveyed 135 second- and third-year principals across the state of Kansas during the 2005-06 school year. Aycock (2006) reported 63 principals (47%) responded, of which 48% indicated they have been mentored during their first year of their principalship. The demographics shared in the study showed a majority of the responses

(60%) were from men, and only 13% of the responses came from elementary school principals. Aycock (2006) reported there was no statistically significant relationship ($r = .086$, $p = .531$) between new school principals who participated in mentoring programs and job satisfaction. Yet, through her qualitative analysis, concluded the "more support they received made them more satisfied in the principalship" (p. 190). The evidence she cited included all the interviewees providing favorable responses regarding their participation in induction and mentoring programs and experiencing increased job satisfaction. Additionally, she noted the responses provided on PIMS items 10.5, 10.7-10.14 were suggestive of the relationship between the variables.

A replication of the quantitative methodology of the Aycock (2006) study was conducted in 2010. The correlational quantitative study surveyed 100 principals from three Virginia school districts neighboring Washington, D.C., during the 2009-10 school year. Jackson (2010) reported 55 completed the survey, and 45% indicated receiving mentoring during their first year as principal. Of the 55 responses, 54.5% were from women, and 47.3% of the respondents led elementary school. The study concluded mentoring had no significant effects on job satisfaction ($U(99) = 854$, $Z = -3.034$, $p = .002$). However, the researcher suggested "the more support new and novice principals received during their first year, the more satisfied they were in the principalship" (p. 104) based on the results from the PIMS items 9.5, 9.7, and 9.14.

Washington-Bass (2013) conducted a second replication of the quantitative methodology from the Aycock (2006) study during the 2012-13 school year with 340 principals with five or less years of experience who were employed in one of seventeen 'Race to the Top' school districts around the metro-region of Atlanta, Georgia. There were 131 (38%) surveys returned to the researcher, of which 90.8% reported participating in mentoring as a first-year school

principal. Women made up 55% of the responses collected; 61% were elementary principals. Washington-Bass (2013) identified a statistically significant difference with job satisfaction among mentored principals and those principals who were not mentored ($U(130) = 901.5$, $Z = -4.70$, $p < .001$).

Aycock, (2006), Jackson (2010), and Washington-Bass (2013) have all made recommendations for further research and study regarding the effects of principal mentoring. Additionally, a need to understand the implications in multiple geographical locations across the nation have been made in the literature (Bryant et al., 2016; Washington-Bass, 2013).

Summary

This review of the literature describes the redefined role of a school principal and identifies a growing acknowledgment from school districts of the value of mentoring new principals. The literature indicates when mentors are provided to new principals there are positive implications for increasing job satisfaction which may lead to higher employment retention rates, and more positive learning outcomes. With consideration to this current state of the literature, there is a need to establish the effective traits of principal mentoring models that increase job satisfaction.

New principals need the supports provided through mentoring to address the stress created by the many responsibilities of the role. Mentors support protégés in addressing adaptive and technical challenges. Beginning with the 2003 NAESP report *Making the Case for Principal Mentoring*, followed up in subsequent years by additional researchers, there has been set of traits identified as foundational to a successful principal mentoring experience. Trust has the highest priority in the mentoring relationship, as without it the relationship is undermined. A mentor

must be credible, qualified and authentic, but it remains paramount as the responsibility of the mentor to establish trust within the relationship.

Understanding the need to increase job satisfaction of school principals is important as higher satisfaction lead to increased work performance. Principals report all-time highs in stress experienced in their profession. New principals' stress is exacerbated by entering a new environment with a significant number of responsibilities and transitioning into a school role which is more isolated. School districts can act to increase job satisfaction among their school principals by providing them more autonomy, support, and reducing stress.

The public education system began to attend to the gaps and disparities between male and female principals some 30 to 40 years ago, but only recently has literature identified gains in closing gaps between the genders. Although the percentage of women in principalships has increased to half of all positions, the ratio of women remains underrepresented in leadership positions. Both genders experience similar success, job satisfaction, and are retained at similar rates. Men perceive the principalship to be evolving into a more caring and sensitive practice, which presents them challenges. Yet, in the principalship, women thrive in developing relationships, facilitating collaboration, and more effectively lead instruction. As more women become school principals, the system has been strained to match them with female mentors. The positive impact of pairing two women in a mentoring relationship increases their success.

The years of teaching experience of principals has remained consistent over the last fifteen years, but research has not established many, if any, implications of teaching experience for the principalship. The literature does recognize it as an important prerequisite to the principalship and a better understanding of the impact teaching experience has on principals could lead to developing better support systems for new principals.

The research has identified several benefits in mentoring new school principals. The mentoring experience aids new principals by influencing their formation of their leadership style in the field, as they are aided in the translation of theory into practice. Mentors also teach protégés 'tricks of the trade' to help navigate the responsibilities of the role. New principals who are mentored report higher confidence and a sense of belonging when compared to their peers who are not mentored. Additionally, new principals who are mentored report lower stress and increased job satisfaction. The PIMS is a measurement tool which quantifies the characteristics and relations of principal mentoring, as well any benefits of increasing job satisfaction and retention rates of new principals. Early conclusions of research utilizing the PIMS indicate principal mentoring correlates with increased job satisfaction for new principals. However, these results are limited, as well as inconsistent, leaving a gap in the literature unaddressed.

CHAPTER 3

Methodology

This chapter discusses the methodology that will be employed in this research study. The following aspects of the design will be discussed: research questions, design, analytical strategy, as well as related ethical considerations. This study examined data collected from the Principal Induction and Mentoring Survey (PIMS) to explore the relationship between the mentoring experiences of new elementary principals and their job satisfaction.

Research Questions

To guide this descriptive and inferential study, five research questions were addressed.

1. What types of mentoring experiences do new principals report as measured by the Principal Induction and Mentoring Survey (PIMS) (Aycock, 2006; Washington-Bass, 2013)?
2. Is there a statistically significant difference in job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?
3. Is there a statistically significant relationship between job satisfaction by the gender of new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?
4. Is there a statistically significant relationship between years of teaching experience and job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?
5. What is the underlying structure of the Principal Induction and Mentoring Survey (PIMS)?

Design

The purpose of this survey study was to explore the potential impact that new elementary principal mentoring experiences have on principal job satisfaction. The study also investigated the relationship in job satisfaction among gender and teaching experience. A correlational design was utilized to measure any difference between principals who have been mentored and those who received no mentoring. Surveys are often used with a correlational research design (Privitera, 2017). The design examined the relationship between two variables and determined the strength and direction of their linear relationship (Laerd, 2013e).

Procedures for Data Collection

The following administrative steps were taken in this study:

1. Permission was obtained on August 27, 2017 from Dr. Aycock to use the PIMS tool via email communication at aycock@naf.org (Appendix A).
2. A partnership with the Association for Washington State Principals (AWSP) was formed on September 26, 2017 for the distribution of the PIMS tool via electronic communication, including their newsletter, *Principal Matters*, and web-based broadcast *AWSP News* (Appendix B and C).
3. The PIMS was uploaded into SurveyMonkey on November 12, 2017, using the same questions and scale that Aycock (2006) used, with appropriate modification for changes in language with regards to acronyms pertaining to Washington State associations.
4. A small group of teacher-leaders piloted the SurveyMonkey format of the PIMS on November 13-15, 2017, to review for functionality and operational errors.
5. IRB approval from was received on November 28, 2017.

6. An invitation to participate in the survey was emailed to the sample on December 1, 2017, which included informed consent.
    a. The window for the survey was open from December 1, 2017 through January 15, 2018. The collection window was 45 days in total, specifically targeting a "lull" period of activity in a principal's yearly calendar, as well a vacation period.
    b. Participants were provided the option to enter a drawing for one of five Amazon $25 gift cards by providing their email address. Ron Sisson, AWSP Director of Principal Support and Elementary Programs, conducted a random drawing on January 22, 2018 to select winners. The winners were notified on the day of selection and e-mailed their gift certificates.
7. Follow-up emails were sent on December 19, 2017 and January 8, 2018 to remind participants to complete the survey.
8. Upon closure of the survey window, data were transferred from SurveyMonkey into SPSS statistical software for analysis.

Sampling Plan

Washington State elementary school principals serving in their first five years of their administrative role were the foci for this study. The selection of the participants was conducted by a convenience sampling, in which all elementary school principals in the state of Washington who are serving in their first five years as principal were invited to participate in the survey. Similarly, the three studies prior using the PIMS all utilized a convenience sampling. In the state of Washington there are 1,117 public elementary schools (AWSP, personal communication, October 18, 2017) organized into 295 public school

districts (OSPI, 2017a). There are currently 1,062 elementary principals, of which 497 meet the criteria of five years or less of experience (AWSP, personal communication, October 18, 2017).

Sampling only elementary principals placed a greater emphasis in this study on the role of instructional leadership. Seashore Louis, et. al (2010) identified that elementary principals interact more with the educational process than their secondary school peers. Futhermore, school learning outcomes are higher in elementary schools run by principals who are engaged in instructional leadership. In contrast to their secondary peers, elementary principals also interrelate differently with their student populations and have more interactions with parents (Dwyer, n.d.).

The inclusion of responses from first-year principals provided data from principals currently experiencing the 2017-2018 academic school year. It is important to note that the contracted year of employment of a Washington State principal is July 1st to June 30th, and a new principal would have completed approximately one-half of their first year when asked to respond to the survey. The PIMS asked all responses to regard experiences in "your first year as a building principal." Since the study was conducted around the midpoint of the contracted year, new principals provided feedback from a perspective of undergoing the experience, which is a perspective worthy of consideration in this research study. Furthermore, in the future, AWSP or OSPI may be interested in studying the impacts of mentoring on school principals longitudinally; the perspectives of first-year principals could provide a helpful baseline in the data for future studies.

Instrument

At the University of Kansas, Aycock (2006) developed the Principal Induction and Mentoring Survey (PIMS) to report on the mentoring experiences of new principals and measure levels of job satisfaction and retention among school principals. The mentoring experiences of principals served as a binary independent variable, in which any arrangement of informal or formal mentoring was categorized as mentoring. The questions within the PIMS were developed from studies by Coleman, Low, Bush, and Chew (1996), Wilmore, McNeil and Townzen (1999), and Elsberry and Bishop (1993) (as cited in Aycock, 2006). However, she only referenced the studies and no questions were taken verbatim. Instead, the researcher followed the eight guidelines Dillman (2000) outlined for survey development (as cited in Aycock, 2006). To measure job satisfaction, she utilized a four-point Likert scale to calculate aggregate scores for each dependent variable.

The measurement scale of the PIMS utilized a set of responses to measure job satisfaction. The reliability of the PIMS tool was established by Aycock (2006) through statistical analyses. She used Cronbach's alpha to establish reliability between principal mentoring and job satisfaction. When considering mentoring and job satisfaction, Aycock (2006) found the Cronbach's alpha coefficient of 0.82, indicating high reliability. No further research has evaluated the PIMS tool since the initial study in 2006. A principal component factor analysis was originally planned for this study to establish the reliability and validity of the PIMS tool to measure job satisfaction. The survey instrument is in Appendix D.

Participants were asked to respond to 14 items throughout the survey to report on their mentoring experiences, which addressed the first research question. These items were questions 14, 15, 16, 17, 18, and 19. To answer the second research question of this study, participants

provided responses to 12 items, embedded in questions 10 and 11 on the survey. Each response for these items was on a four-point Likert scale, ranging from *Absolutely* to *Never*. Question items 6, 10, and 11 addressed research question three of this study. The responses provided by participants on question items 2, 10, and 11 provided data for question four of this study. The fifth research question addressed the structure and validity of the PIMS tool. In relationship to the construct of job satisfaction, a principal component factor analysis determined validity, enabling the researcher to evaluate the cohesive loading of items and identify the possible presence of any latent variables. Items in questions 10 and 11 were used in determining the validity of the measured variables as a construct for job satisfaction. The connections between the research questions, the identified variables, the items on the PIMS, and the associated statistical tests used to explore them are presented in Table 1.

The internal consistency of the PIMS was assessed to determine reliability between multiple items of the PIMS tool. The reliability of the tool was studied using Cronbach's alpha. The correlation between the items are stronger when the values calculated are higher (Privitera, 2017). The items in questions 10 and 11 were analyzed to determine the reliability of PIMS to measure job satisfaction. Table 1 shows how variables of the construct of job satisfaction correspond with survey questions asked on the PIMS.

The PIMS implemented two strategies to address response bias. First, partially open-ended items were provided, in which participants are asked to select one or more answers. When not all possible answers are provided, participants responded in their own words in an "Other" text box option. The second strategy was reverse coding of participant responses on a four-point Likert scale.

Table 1

Relationships of Research Questions, Variables, Measures, and Analytics

RQ	Dependent Variable	Dependent Variable Measure	Independent Variable	Independent Variable Measure	Analytics
1	All Scale Variables	Teaching Experience (item 2) Job Satisfaction (items 10 & 11) Mentoring (item 19)	None	None	Exploratory Data Analysis
2	Job Satisfaction	Commitment to Position (items 10e & 11a-c) Working Conditions (items 10g-j) Feedback (item 10f) Organizational Support (items 10a-d) Compensation (item 11d)	Mentoring	Yes – 1 No – 2	Multiple independent t-test with a Bonferroni adjustment (α=.05/5)
3	Job Satisfaction	Commitment to Position (items 10e & 11a-c) Working Conditions (items 10g-j) Feedback (item 10f) Organizational Support (items 10a-d) Compensation (item 11d)	Gender	Female – 1 Male – 0	Multiple independent t-test with a Bonferroni adjustment (α=.05/5)
4	Job Satisfaction Teaching Experience	Composite Score (items 10 & 11) Number of Years (item 2)	None	None	Multiple one-way between subjects ANOVA with a Bonferroni adjustment (α=.05/5)
5	All Scale Variables	Teaching Experience (item 2) Job Satisfaction (items 10 & 11) Mentoring (item 19)	None	None	Principal component factor analysis

Data Analysis

The data was analyzed using the Statistical Packages for Social Sciences (SPSS). The analysis included procedures for descriptive and inferential statistics.

RQ_1: *What types of mentoring experiences do new principals report as measured by the Principal Induction and Mentoring Survey (PIMS) (Aycock, 2006; Washington-Bass, 2013)?* The mentoring experiences of principals was reported with descriptive statistics. The exploratory descriptive analyses of this data allowed for clarifications of what patterns were observed in the data set at a glance (Privitera, 2017). The focal point of the data presented was percentages or frequencies, which will be presented in tables. This data provided a contextual understanding of the responses provided by new principals by providing a greater awareness of their experiences, backgrounds, and present needs.

RQ_2: *Is there a statistically significant difference in job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?* An inferential analysis began by first calculating a composite score of the questions which cross-referenced with the job satisfaction variable. A second step in the analysis was to calculate a linear regression to determine any relationship between the variables. The data is presented in tables.

RQ_3: *Is there a statistically significant relationship between job satisfaction by the gender of new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?* A multiple regression was used to determine the relationship between job satisfaction between genders. The composite score calculated for job satisfaction in question two was used in the analysis of this question. The analysis was conducted with two independent-sample *t*-tests to determine if any differences exist in levels of

job satisfaction between male and female elementary school principals. The data is presented in tables.

RQ_4: *Is there a statistically significant relationship between years of teaching experience and levels of job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?* A multiple regression was used to examine the relationship between job satisfaction and years of experience. The analytical procedures for this question also utilized the composite score calculated for job satisfaction in question two. A one-way between-subjects ANOVA was performed to determine if any differences were present. If the results indicated differences occurring, a post hoc test would determine any pairwise comparisons. The data is presented in tables.

RQ_5: *What is the underlying structure of the Principal Induction and Mentoring Survey (PIMS)?* The PIMS assumes multiple variables are measuring an underlying construct, job satisfaction. When this assumption is present in a survey, the validity of the measurement tool is dependent on the high correlation between the variables (Laerd, 2013b). A principal component factor analysis was planned to evaluate the correlation of the variables within the construct of job satisfaction in the PIMS tool. The internal consistency would determine the reliability between multiple items of PIMS tool. When multiple items measure a construct on a survey, the reliability is established by Cronbach's alpha (Privitera, 2017). The data is presented in tables.

Role of the Researcher

After nine years as a classroom educator in the public-school setting, in the spring of 2014, the researcher was promoted to an assistant principalship in Renton, Washington. The following year, he was appointed as principal of a public elementary school in Tacoma,

Washington. The researcher is an active member of the Tacoma Principal's Association, AWSP, the National Association of Elementary School Principals (NAESP), and Association of Supervision and Curriculum Development (ASCD). The survey was conducted during the 2017-18 school year, in his third year as principal. Although the researcher is a member of the population that will be studied, he was not a participant. During the first year as a school principal, the researcher was assigned a district colleague as a formal mentor. Additionally, the researcher was provided a contracted leadership coach by his school district for his first two years as principal.

The researcher acknowledges his personal experiences with mentoring as a first-year elementary school principal, as part of what inspired this research. The experience also presented potential biases in this study. A safeguard was to designate impartial, outside experts to review the design, analysis, and interpretations. In this study, a professor from the education department guided the analysis of the data. Additionally, a committee of four professors from the education department at George Fox University served on a doctoral committee and reviewed its design, analysis, and interpretations.

Ethical Considerations

The intent of this research project was to contribute to the current literature related to the induction of new principals and their job satisfaction. The variable under review was examined by maintaining the integrity of the original research tool. Participant participation was voluntary. Participants could stop the survey at any time without penalty. Prior to beginning the survey, the participants signed an informed consent. All responses on the survey were confidential. Data will be stored on a password secured server for three years, at which time it will be deleted. Only the researcher has access to the data on the server. A copy of the

data will also be secured on a flash drive stored in a locked safe at the AWSP offices in Olympia, Washington for seven years, until January 15, 2025, at which time it will be securely deleted. Access to the flash drive includes the researcher, as well as designated personnel at AWSP and OSPI.

The proposed study contributed to the literature regarding mentoring new school principals in several respects. The field of educational leadership lacks a strong research-based tool to measure the impact of mentoring new school principals. The survey item analyses conducted contributed to a better understanding of the reliability and validity of the PIMS.

The findings of this study were shared with AWSP, a state-wide organization which influences state policy regarding principals, and OSPI, a government agency which influences, interprets, and implements Washington state legislation and writes state policy for K-12 education. The results presented in this study may be informative to this organization and agency, as well as to others who are considering implementing mentoring programs to support new public-school principals. Furthermore, there may be opportunities following the conclusion of this research to present the findings of this study, including at the annual AWSP conference. Also, there are considerations for a possible journal publication.

In adherence with university policy and procedures, and to ensure the protection of participants in this study, the researcher submitted the appropriate Institutional Review Board (IRB) form to the committee for review and approval upon acceptance of the research proposal and prior to data collection. The PIMS tool has been used for a little more than a decade without any known harm to participants.

Summary

Chapter 3 outlines the methodological approaches for exploring the relationship between the mentoring experiences of new elementary principals and job satisfaction. The PIMS was utilized to gather data for analyses to explore any relationship in levels of job satisfaction present among new elementary school principals who participate in formal mentoring experiences, informal mentoring experiences, and those who do not participate in a mentoring relationship. Additionally, this study investigated any relationship in levels of job satisfaction among genders and teaching experience. The population studied was created by a convenience sample of Washington state new elementary principals.

A partnership with the Association of Washington State Principals (AWSP) was established for distribution of the surveys. Principals were emailed the survey link via an AWSP publication, and two additional reminders were emailed. New principal mentoring experiences were reported with descriptive statistics. The inferential analyses of the responses included a linear regression, two independent-sample *t*-tests, a one-way between-subjects ANOVA, and a post hoc test. Cronbach's alpha was utilized to determine the reliability and validity of the PIMS tool, as well as determining the internal consistency. All results regarding the findings of this study are presented in Chapter 4.

CHAPTER 4

Results

The purpose of this study was to understand the mentoring experiences of new principals in Washington State and its impact on their job satisfaction. This chapter includes a description of the participants, as well as a comprehensive report of the results yielded from a quantitative analysis of the data collected from the Principal Induction and Mentoring Survey (PIMS) using the Statistical Package for Social Sciences (SPSS).

It is important to note that the survey response rate impacted the analysis plan presented in Chapter 3. Specifically, a factor analysis of the PIMS was not viable due to a response rate of 9.27% that resulted in only 45 complete responses collected. The sample size in this study fails the fourth assumption of a factor analysis, which requires a large sample size for a reliable result; generally, a minimum of 5 to 10 cases per item, with a minimum of 150, are recommended as s sufficient sample size (Laerd, 2013f). In lieu of the factor analysis, an alternative set of scale analysis results are presented in this chapter. However, the first four research questions were examined as planned, including an exploratory descriptive analysis of the data, as well as an examination of the relationship between independent and dependent variables through multiple independent *t*-tests, a multiple one-way between subjects ANOVA, and Cronbach's alpha.

Participants

The PIMS was sent to 496 elementary principals in Washington State. All the principals had been identified by the Association of Washington State Principals (AWSP) as serving within their first five years as principal. The collection window was open from December 1, 2017 to January 15, 2018. An initial invitation was sent to the sample population by AWSP, as well as

two follow-up emails sent on December 18, 2017, and January 8, 2018. Survey data was collected from 46 principals; however, only 45 principals completed the entire survey. One respondent discontinued the survey at some point prior to completion, providing incomplete data.

The demographic data collected with the PIMS provides information about the respondents in the study. It included items related to gender, years of experience as principal, professional memberships, years of teaching experience, subjects taught, configuration of school served, and school and district enrollments.

Table 2 provides the gender distribution of the respondents. Among the respondents, the ratio of women to men was 2:1.

The distribution of the sample with respect to the years of experience as a principal is shown in Table 2. Of the 45 respondents, nearly half (44.4%) of the participants had one year of experience in the position; and few (17.8%) indicated that they were in their fourth or fifth year of a principalship. The mean years of experience was 2.20 (SD = 1.4), with a median of 2 years.

The professional organizations of which the participants had a current membership is presented in Table 2. Organizations at the national and state levels are represented. The respondents had the option to choose multiple organizations. They could also select "Other" and provide in a text box the name of an organization not listed. Only one participant selected "Other," and they identified a membership with the National Council of the Teachers of Mathematics (NCTM). There were two organizations that a majority of the respondents held memberships, as 97.8% are members of the Association of Washington State Principals (AWSP) and 71.1% are members of the National Association of Elementary School Principals (NAESP). Almost half (48.9%) of the principals who responded are also members of the Association of Supervision and Curriculum Development (ASCD).

The majority (93.3%) of respondents had more than five years of teaching experience. The criteria for an initial issuance of a Residency Administrator License from the Office of the Superintendent of Public Instruction (OSPI) in the state of Washington include earning a Master's Degree from an accredited college or university and the verification of three successful years of school-based instructional experience (OSPI, 2017c). Table 2 represents the distribution of the sample across the years of teaching experience prior to becoming a principal.

The majority (64.4%) of respondents had experience teaching in the elementary classroom prior to becoming a principal. Respondents were provided the opportunity to mark multiple options to be inclusive of all and any roles they served in as a teacher. They were also provided an "Other" option, in which they provided additional information in a text box. Additional teaching experiences prior to the principalship that respondents provided included special education, instructional coaching, Learning Assistance Program, and English language development. Table 2 summarizes the types of teaching experience that are represented across the sample. The majority (71.1%) of the respondents were serving in schools in which they did not teach, which is also shown in Table 2.

In Washington State, there are 1,117 schools coded as "elementary," which is defined as a public school serving students in grades kindergarten through sixth grade, of which there are 1,062 principals assigned to these schools and 497 principals have five or less years of experience (AWSP, personal communication, October 18, 2017). Table 2 lists the configurations of the schools and their corresponding frequencies of which the respondents led.

Table 2

Demographic Characteristics of PIMS Respondents

Demographic Characteristic	Frequency	Percent
Gender		
Male	15	33.3
Female	30	66.7
Total	45	100.0
Years of Experience as Principal		
First	20	44.4
Second	9	20.0
Third	8	17.8
Fourth	3	6.7
Fifth	5	11.1
Total	45	100.0
Professional Association Memberships		
AWSP	44	97.8
WASA	5	11.1
WSSDA	0	0.0
NAESP	32	71.1
NASSP	1	2.2
ASCD	22	48.9
Other	1	2.2
Years of Teaching Experience		
Less than 3 years	0	0.0
3-5 years	3	6.7
6-10 years	18	40.0
11-15 years	14	31.1
16+ years	10	22.2
Total	45	100.0

(continued)

Demographic Characteristic	Frequency	Percent
Types of Teaching Experiences		
Elementary-classroom	29	64.4
Elementary-enrichment (PE, Music, Art, etc.)	0	0.0
Secondary-core subject	13	28.9
Secondary-enrichment (PE, Music, Art, etc.)	8	17.8
Other	10	22.2
Total	60	100.0
Experience Teaching in Same School as Principalship		
Yes	13	28.9
No	32	71.1
Total	45	100.0
School Configurations by Grade Level		
Pre-K – 2	1	2.2
Pre-K – 3	1	2.2
Pre-K – 5	11	24.4
Pre-K – 6	4	8.9
Pre-K – 8	2	4.4
K – 2	1	2.2
K – 3	1	2.2
K – 4	1	2.2
K – 5	14	31.1
K – 6	3	6.7
K – 8	2	4.4
1 – 5	1	2.2
3 – 5	1	2.2
Total	45	100.0

(continued)

Demographic Characteristic	Frequency	Percent
School Size by Student Enrollment		
100 or less students	0	0.0
101-200 students	1	2.2
201-300 students	4	8.9
301-400 students	11	24.4
401-500 students	10	22.2
501-1,000 students	19	42.2
1,000+ students	0	0.0
Total	45	100.0
District Size by Student Enrollment		
0-999 students	5	11.1
1,000-4,999 students	14	31.1
5,000-9,999 students	6	13.3
10,000+ students	20	44.4
Total	45	100.0

There were a variety of sizes of schools based on student enrollment represented by the respondents. However, schools with 100 or less students and more than 1,000 students were not represented in the sample. A majority (88.8%) of the respondents led schools in which there are more than 300 and less than 1,000 students enrolled. Table 2 reports the distribution of the sample with respect to the number of students enrolled in the schools that were led by the respondents.

Principals representing all student enrollment categories of school districts responded to the survey. Nearly half (44.4%) of the respondents worked in large school districts serving 10,000 or more students, while almost a third (31.1%) of the respondents worked in much smaller school districts serving between 1,000 and 4,000 students. Table 2 details the representation of respondents based on school district student enrollment.

Descriptive Statistics

The PIMS is a 22-question survey with a composition of 19 single-answer items and 24 four-point Likert scale items. The PIMS was distributed to 496 principals serving within their first five years of practice by the Association of Washington State Principals (AWSP) and 45 surveys were completed. Descriptive statistics describe data to summarize, organize, and make sense of a set of scores (Privitera, 2017). The descriptive statistical analyses applied in this study address the operationalized variables of gender, mentoring experience, and teaching experience. Additionally, the analyses utilized a construct for overall job satisfaction. These analyses provide a contextual understanding of the responses provided by the respondents.

Independent variable: Mentoring experiences. The mentoring experiences variable was measured with nine PIMS items. The association between these items and the mentoring experience variable are displayed in Table 1. PIMS question 14 asked respondents to report on the status of being mentored during their first year in the principalship. If respondents answered "Yes" to the question, they were prompted on to answer the set of items related to their mentoring experience. However, those respondents who answered "No" were directed in a manner that skipped the mentoring experience items, as they had not participated in a mentoring relationship. Respondents on the mentoring experiences items were presented nine statements and asked to rate them on a four-point Likert scale, ranging from "Absolutely" to "Never;" with an additional opt-out option for each item was also provided with "Don't Know." Table 3 provides the frequencies and percentages for the responses of the nine mentoring experience items.

Table 3

Mentoring Experiences of First Year Principals (N=29)

Mentoring Experiences	**Absolutely n (%)**	**Mostly n (%)**	**Sometimes n (%)**	**Never n (%)**	**Don't Know n (%)**
My mentor provided an orientation where information was provided to help me know how to function in the school district.	5 (17.2)	8 (27.6)	5 (17.2)	11 (37.9)	0 (0.0)
My mentor helped me develop strategies to meet my individual strengths/needs.	12 (41.4)	11 (37.9)	5 (17.2)	1 (3.5)	0 (0.0)
At various times throughout my first year, my mentor helped me to reevaluate my changing strengths/needs.	9 (31.01)	11 (37.9)	8 (27.6)	1 (3.5)	0 (0.0)
My mentor observed me interact with teachers and students and offered feedback from the observation.	3 (10.3)	6 (20.7)	7 (24.1)	12 (41.4)	1 (3.5)
My mentor's advice truly helped me as a beginning principal.	17 (58.6)	8 (27.6)	4 (13.8)	00 (0.0)	0 (0.0)
The roles and responsibilities of my mentor were clear to me.	10 (34.5)	12 (41.4)	5 (17.2)	2 (6.9)	0 (0.0)
My mentor and I met on a regularly scheduled basis.	15 (51.7)	5 (17.2)	6 (20.7)	3 (10.3)	0 (0.0)
My mentor helped me gain an understanding of the community and its culture.	6 (20.7)	10 (34.5)	8 (27.6)	5 (17.2)	0 (0.0)
My mentor and I formed a strong, collegial relationship.	15 (51.7)	12 (41.4)	2 (6.9)	0 (0.0)	0 (0.0)

The responses on all nine items were assigned these values (Absolutely = 4, Mostly = 3, Sometimes = 2, Never = 1, and Don't Know = 0). A mentoring experience score was created for each respondent by computing the sum of the nine items for a total of 36. The scale scores for mentoring experiences for all 29 respondents include a maximum of 36 and a minimum of 15 for a range of 21. With respect to the mean (M = 16), the nine items pertaining to mentoring experiences were grouped similarly, as the standard deviation (SD = 5.0) is acceptable.

Dependent variable: Job satisfaction. The construct of job satisfaction in the PIMS is a compilation of five variables: o*rganizational support, feedback, working conditions, compensation,* and *commitment to the position*. The association between the variables and the PIMS items are reported in Table 1. The PIMS asks five items related to *working conditions,* four items each for *organizational support* and *commitment to the position*, and one item each for *feedback* and *compensation*. All responses collected are on a four-point Likert scale, ranging from "Absolutely" to "Never." Table 4 details the frequencies and percentages of responses on the PIMS items for overall job satisfaction by the five variables of the construct.

The responses on all items for the five variables were then assigned values (Absolutely = 4, Mostly = 3, Sometimes = 2, Never = 1, and Don't Know = 0), unless the item was reversed coded, which was the case for one item in *commitment to the position* (item 11c) and *compensation* (item 11d), of which the values were assigned in descending order with "Don't Know" still equaling zero. An overall job satisfaction score to represent the construct was then quantified by calculating the sum of the assigned values to all fifteen items of the five variables on the PIMS, for a maximum total of 60.

Table 4

Frequencies and Percentages for Overall Job Satisfaction by Construct Variable (N = 45)

Construct Variable	**PIMS Item**	**Absolutely** ***n (%)***	**Mostly** ***n (%)***	**Sometimes** ***n (%)***	**Never** ***n (%)***	**Don't Know** ***n (%)***
Organizational Support	I was given the opportunity to observe the practice of highly effective, experienced principals so I could learn from them.	8 (17.8)	4 (8.9)	16 (13.3)	18 (40.0)	0 (0.0)
	I was part of a support group made up of other beginning principals.	8 (17.8)	6 (11.1)	13 (28.9)	19 (42.2)	0 (0.0)
	I received emotional support/ encouragement from colleagues during my first year as a building principal.	19 (42.2)	14 (31.1)	8 (17.8)	4 (8.9)	0 (0.0)
	My support system continued after the first year.	13 (28.9)	12 (26.7)	6 (13.3)	4 (8.9)	10 (22.2)
Feedback	My superintendent/ supervisor offers feedback concerning my professional performance.	19 (42.2)	11 (24.4)	12 (26.7)	3 (6.7)	0 (0.0)
Working Conditions	I believe the parents at my school have confidence in my abilities as a principal.	12 (26.7)	32 (71.1)	0 (0.0)	1 (2.2)	0 (0.0)
	I believe the staff at my school has confidence in my abilities as a principal.	16 (33.3)	28 (62.2)	2 (4.4)	0 (0.0	0 (0.0)
	I like my current school.	33 (73.3)	11 (24.4)	1 (2.2)	0 (0.0)	0 (0.0)
	I like my current school's size.	27 (60.0)	11 (24.4)	6 (13.3)	1 (2.2)	0 (0.0)
	I like the grade configuration/grade levels of the building I serve.	31 (68.9)	10 (22.2)	4 (8.9)	0 (0.0)	0 (0.0)
Compensation	If I could earn as much money in another profession, I would leave the principalship.	2 (4.4)	2 (4.4)	16 (35.6)	20 (44.4)	5 (11.1)

(continued)

Construct Variable	PIMS Item	Absolutely *n (%)*	Mostly *n (%)*	Sometimes *n (%)*	Never *n (%)*	Don't Know *n (%)*
Commitment to the Position	I know I made the right decision to become a principal.	24 (51.1)	16 (35.6)	6 (13.3)	0 (0.0)	0 (0.0)
	I plan to stay at this school, in this administrative position, for the foreseeable future.	26 (55.6)	10 (22.2)	6 (13.3)	1 (2.2)	3 (6.7)
	Thinking five years ahead, I hope to still be serving as a building principal.	27 (60.0)	8 (17.7)	6 (13.3)	1 (2.2)	3 (6.7)
	Thinking five years ahead, I'm planning on moving to a district office position.	3 (6.7)	5 (11.1)	12 (26.7)	18 (40.0)	7 (15.6)

The scale scores for overall job satisfaction for all respondents included a minimum score of 31 and a maximum score of 54 for a scaled score range of 23. With respect to the mean (M = 42.51), items pertaining to overall job satisfaction were grouped similarly, as the standard deviation (SD = 5.3) is not too large.

Dependent variable: Teaching experience. Teaching experience was reported by PIMS question two. Respondents were asked to identify the range which represented their years of teaching experience prior to becoming a principal excluding their years of experience as an administrator. The five ranges of experience provided on the PIMS were: 0-3 years, 3-5 years, 6-10 years, 11-15 years, and 16 or more years of experience. The frequencies and percentages for teaching experience are presented in Table 2.

The responses on question two were assigned values (0-3 years = 0, 3-5 years = 1, 6-10 years = 2, 11-5 years = 3, and 16+ years = 4). The descriptive statistics were calculated based on a single value corresponding to their response on the PIMS. There were no responses for the 0-3 years in the data set. The scores for teaching experience for all 45 respondents included a

maximum of 4 and a minimum of 1 for a range of 3. Table 19 details the descriptive statistical analyses for teaching experience.

Research question one. *What types of mentoring experiences do new principals report as measured by the Principal Induction and Mentoring Survey (PIMS) (Aycock, 2006; Washington-Bass, 2013)?*

This research question was designed to collect information about the mentoring experiences of principals within their first five years of a principalship. In Table 5, 64.4% (n = 29) of respondents indicated that they had been mentored during their first year as a principal.

Table 5

Principals Indicated Mentoring During First Year as Principal

	Frequency	**Percent**
Yes	29	64.4
No	16	35.6
Total	45	100.0

Principals who responded with an affirmation to question 14 on the PIMS were then directed to continue on to a set of questions related to their mentoring experiences. Those who selected "No" did not answer these questions. For the 29 respondents who reported they had been mentored during their first year as principal, they were first asked to identify the format of their mentoring experience. The PIMS provided definitions of formal and informal mentoring to the principals prior to the answer selected regarding the form of mentoring for which they participated. The forms of mentoring were almost equal, with 10.3% (n = 3) more principals identifying informal mentoring. Table 6 presents the forms of mentoring experienced by principals during their first year.

Table 6

Forms of Mentoring Experienced by Principals during First Year as Principal

	Frequency	**Percent**
Formal	13	44.8
Informal	16	55.2
Total	29	100.0

To better understand the mentoring experiences and the support they received, the respondents identified the role their mentor currently serves. The majority (71.4%) of the respondents were mentored by another principal in their district. One respondent selected "Other" and reported their mentor as a former principal during their teaching career who was now serving in a district office role. Table 7 provides the distribution of the roles new principal mentors served in while mentoring new principals.

PIMS question 18 explored methods of support utilized in mentoring and revealed that a variety of methods were employed. Emails (n = 26) and phone calls (n = 26) were the most frequent responses. Personal visits at the workplace of the mentor or at the school of the protégé were also identified by more than half of the respondents. Five respondents selected "Other" in their responses and all identified "texts" as a communication vehicle to connect with their mentor. Table 8 details the methods of support utilized in their mentoring experiences.

Table 7

Professional Roles of Mentors

Roles	Frequency	Percent
A colleague in the district	20	71.4
An administrator from another district assigned to me	3	10.7
An administrator from another district that I knew prior to starting my principalship	2	7.1
A college or university professor	0	0.0
A representative from a professional organization	1	3.6
An employee from an educational service district	1	3.6
Other	1	3.6
Total	28	100.0

Note. Responses were optional.

Table 8

Methods of Support to Facilitate Mentoring

Methods	Frequency	Percent
Visits and meeting at the job site of the mentor	19	65.5
Visits and meetings at the school of the protégé	23	79.3
Visits and meetings at a site off school grounds	14	48.3
Telephone calls	26	89.7
Emails	26	89.7
Other	5	17.2

Note. Respondents could select more than one option.

Inferential Statistics

Inferential statistics evaluate data to describe relationships among the population measured in a sample (Privitera, 2017). The analyses for this study examined the relationship between the variables of mentoring experiences, overall job satisfaction, gender, and teaching experience. Research Question 2 examined the relationship between the reported overall job satisfaction among principals who have been mentored and those who have not. Research Questions 3 and 4 attended to differences in gender and years of teaching experience between

principals and their reported overall job satisfaction between principals who were and were not mentored. The fifth research question examined the underlying construct of the PIMS, in which the relationship between survey items and their relationship with the concept which they work to capture is assessed.

Research question two. *Is there a statistically significant difference in job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?*

The second research question was designed to explore if there is a difference in overall job satisfaction between new elementary school principals who participated in mentoring experiences, and those who did not participate in a mentoring relationship. Data was sorted into two groups. Twenty-nine (n = 29) respondents indicated they have been mentored and 16 respondents identified they had not been mentored.

The inferential analysis began by first calculating a composite score for every scale for each of the five variables included in job satisfaction, as well as a composite score for overall job satisfaction. Table 9 lists the variables of the construct, number of items on the PIMS for each variable, and their correlating scale scores.

Table 9

Overall Job Satisfaction Construct Variables, Number of Survey Items, and Scales

Construct Variable	No. of Survey Items	Scale
Organizational Support	4	0-16
Feedback	1	0-4
Working Conditions	5	0-20
Compensation	1	0-4
Commitment to the Position	4	0-16
Total	15	0-60

Multiple independent *t*-tests with a Bonferroni adjustment ($\alpha = .05/5$) were conducted to determine any relationship between mentoring status and overall job satisfaction, as well as the relationships between mentoring status and each independent variable in the construct for job satisfaction. Table 10 reports the mean, standard deviation, and standard error of the mean for overall job satisfaction and the five variables of the construct.

Table 10

Mean, Standard Deviation, and Standard Error of the Mean for Overall Job Satisfaction

Dependent Variable	**N**	**Mentored Status**	**M ± SD**	**Std. Error Mean**
Job Satisfaction	16	N	39.3 ± 5.2	1.32
	29	Y	44.3 ± 4.5	0.84
Working Conditions	16	N	17.1 ± 2.4	0.59
	29	Y	17.3 ± 1.8	0.33
Organizational Support	16	N	8.0 ± 2.8	0.69
	29	Y	10.3 ± 3.2	0.60
Commitment to the Position	16	N	10.1 ± 2.4	0.07
	29	Y	12.0 ± 1.8	0.33
Feedback	16	N	2.6 ± 1.0	0.26
	29	Y	3.3 ± 0.9	0.16
Compensation	16	N	1.5 ± 1.2	0.29
	29	Y	1.5 ± 0.8	0.15
Job Satisfaction	16	N	39.3 ± 5.3	1.32
	29	Y	44.3 ± 4.5	0.84

An assumption with independent *t*-tests is the variances between the two groups are equal in population, and when not adhered to, Type I error generally increases (Laerd, 2013c). Levene's test for equality of variances formally tests if there are variances in the sample populations. A homogeneity of variances was assumed through Levene's test for equality of

variances for overall job satisfaction (p = .243), as well as for the variables *organizational support* (p = .545*), commitment to the position* (p = .098), *feedback* (p = .353), and *compensation* (p = .219). However, Levene's test for equality of variances for *working conditions* was statistically significant (p = .037), and therefore homogeneity of group variance was not assumed with this variable.

There were 29 responses from new principals who were mentored and 16 responses from new principals who were not mentored. Overall job satisfaction was higher for mentored principals (M = 44.3, SD = 4.5) than those who were not (M = 39.2, SD = 5.3), a statistically significant difference, 99% CI [-9.082, -1.039], $t(43) = -3.391$, p = .002. There was a statistically significant difference between means ($p < .01$) for job satisfaction between principals who were mentored and those who were not, and therefore, the null hypothesis can be rejected.

Among the variables comprising overall job satisfaction, only *commitment to the position* of mentored principals (M = 12.0, SD = 1.8) was higher than principals who were not mentored (M = 10.1, SD = 2.4) and had a statistically significant difference, 99% CI [-3.630, -0.2446], $t(43) = -3.085$, p = .004. The null hypothesis for *commitment to the position* can be rejected as a statistical significant difference between the means is present in the data. The remaining four variables comprising job satisfaction do not have a statistical difference between the means ($p > .01$), and therefore the null hypothesis cannot be rejected with regards to these variables. In other words, overall job satisfaction is higher among new elementary school principals who are mentored. Furthermore, their commitment to the principalship is stronger than those principals who do not participate in a mentoring relationship. Table 11 displays the results for the t-test for equality of means for overall job satisfaction.

Table 11

T-Test for Equity of Means for Overall Job Satisfaction

Dependent Variable	t	df	Sig. (2-tailed)	Std. Error Difference	99 % CI of the Difference Lower, Upper
Job Satisfaction	-3.391	43	0.002	1.49	-0.728, 0.832
Working Conditions*	-0.273	24.7	0.787	0.68	-9.082, -1.309
Organizational Support	-2.385	43	0.022	0.95	-2.078, 1.707
Commitment to the Position	-3.085	43	0.004	0.63	-4.848, 0.296
Feedback	-2.445	43	0.019	0.29	-3.630, -0.025
Compensation	0.179	43	0.859	0.29	-1,500, 0.073

Note. *Homogeneity of group variance was not assumed.

Research question three. *Is there a statistically significant relationship between job satisfaction by the gender of new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?*

Research Question 3 was designed to establish if any differences between genders and overall job satisfaction existed among new elementary school principals who were mentored and those who did not participate in a mentoring relationship. Data was sorted into four groups. Of those who reported being mentored, 21 were women and 8 were men. Nine (n = 9) female respondents and 7 male respondents reported they had not participated in mentoring.

The inferential analysis utilized the composite scale scores for the five variables of job satisfaction, as well as the composite score for overall job satisfaction calculated in Research Question 2 and presented in Table 9.

The first step in the analysis was to split the data file by the self-reporting of being mentored or not. Then, multiple independent *t*-tests with a Bonferroni adjustment (α = .05/5)

were conducted to determine any differences between gender, overall job satisfaction, and mentoring status. Additionally, the researcher performed analyses to determine if any differences occurred between gender on each of the five variables of job satisfaction, and mentoring status. Table 12 shows the mean, standard deviation, and standard error of the mean for gender, job satisfaction and the five variables of the construct across mentoring status.

There were 21 female and eight male elementary principals who participated in a mentoring relationship, and nine female and seven male elementary principals who did not participate in a mentoring relationship. Overall job satisfaction was higher for mentored male principals (M = 46.0, SD = 1.8) than for mentored female principals (M = 43.7, SD = 0.9), but there was not a statistically significant difference, 95% CI [-6.134, -1.467], $t(27) = -1.260$, $p = .219$. Among principals who were not mentored, overall job satisfaction was higher for female principals (M = 40.9, SD = 5.8) than it was for male principals (M = 37.1, SD = 4.0), but there was not a statistically significant difference, 95% CI [-1.763, 9.255], $t(14) = 1.458$, $p = .167$. There is no statistical significant difference between the means ($p > .05$) between genders and overall job satisfaction for mentored principals and those principals who did not participate in mentoring in the data, and therefore, the null hypothesis cannot be rejected. In other words, overall job satisfaction does not differ between men and women, regardless of being mentored or not participating in a mentoring relationship.

Table 12

Mean, Standard Deviation, and Standard Error of the Mean for Gender and Job Satisfaction

Dependent Variable	Mentoring Status	N	Gender	M ± SD	Std. Error Mean
Job Satisfaction	Y	21	F	43.7 ± 4.3	0.93
	Y	8	M	46.0 ± 5.0	1.76
	N	9	F	40.9 ± 5.8	1.93
	N	7	M	37.1 ± 4.0	1.50
Working Conditions	Y	21	F	17.3 ± 1.9	0.41
	Y	8	M	17.3 ± 1.7	0.59
	N	9	F	18.1 ± 2.3	0.77
	N	7	M	15.9 ± 1.9	0.71
Organizational Support	Y	21	F	9.9 ± 3.5	0.77
	Y	8	M	11.3 ± 2.2	0.77
	N	9	F	8.4 ± 2,4	0.78
	N	7	M	7.4 ± 3.3	1.25
Commitment to the Position	Y	21	F	11.9 ± 1.7	0.37
	Y	8	M	12.3 ± 2.0	0.70
	N	9	F	10.1 ± 2.9	0.98
	N	7	M	10.0 ± 1.8	0.69
Feedback	Y	21	F	1.4 ± 0.7	0.16
	Y	8	M	1.6 ± 0.9	0.32
	N	9	F	1.6 ± 1.1	0.38
	N	7	M	1.4 ± 1.3	0.48
Compensation	Y	21	F	3.1 ± 1.0	0.21
	Y	8	M	3.4 ± 0.5	0.18
	N	9	F	2.7 ± 1.1	0.37
	N	7	M	2.4 ± 1.0	0.37

With respect to the five variables of job satisfaction, across all variables among principals who were mentored and those who were not, there is not a statistical significant difference between the gender and any of the job satisfaction variables for principals who were or were not

mentored. Therefore, the null hypothesis cannot be rejected for all variables. In other words, none of the variables differed, regardless of gender with principals and regardless of mentoring status. Table 13 presents the results for the *t*-test for equality of means for gender and job satisfaction.

Table 13

T-Test for Equity of Means for Gender and Job Satisfaction

Dependent Variable	Mentoring Status	t	df	Sig. (2-tailed)	Std. Error Difference	99 % CI of the Difference Lower, Upper
Job Satisfaction	Y	-1.260	27	0.219	1.85	-6.134, 1.467
	N	1.458	14	0.167	2.57	-1.763, 9.255
Working Conditions*	Y	0.110	27	0.913	0.76	-1.475, 1.641
	N	2.096	14	0.055	1.08	-0.052, 4.560
Organizational Support	Y	-1.007	27	0.323	1.37	-4.087, 1.397
	N	0.719	14	0.484	1.41	-2.013, 4.045
Commitment to the Position	Y	-0.467	27	0.644	0.74	-1.861, 1.170
	N	0.087	14	0.932	1.27	-2.612, 2.835
Feedback	Y	1.344	27	0.193	0.36	-1.244, 0.260
	N	0.446	14	0.662	0.53	-0.907, 1.383
Compensation	Y	-0.744	27	0.463	0.33	-0.917, 0.429
	N	0.211	14	0.836	0.60	-1.163, 1.417

Note. *Homogeneity of group variance was not assumed.

Research question four. *Is there a statistically significant relationship between years of teaching experience and levels of job satisfaction between new elementary school principals who participate in mentoring experiences, and those who do not participate in a mentoring relationship?*

Research Question 4 was conceived to explore whether any differences between years of teaching experience and job satisfaction existed among new elementary school principals who were mentored and those who did not participate in a mentoring relationship. Data were sorted into seven groups. Table 14 lists the number of respondents in each group as organized by teaching experience and mentoring status.

Table 14

Number of Respondents for Teaching Experience by Mentoring Status (N = 45)

Years of Teaching Experience	**Mentored**	**Not Mentored**
3-5 years	3	0
6-10 years	14	4
11-15 years	5	9
16+ years	7	3

The inferential analysis utilized the composite scale scores for the five variables of job satisfaction, as well as the composite score for job satisfaction calculated in Research Question 2 and presented in Table 9. The analysis also used the split data file from Research Question 3. A one-way between-subject ANOVA determines any statistically significant differences between the means of two or more independent groups and is most appropriate when no specific hypotheses about the differences between the groups of your independent variable is preconceived before analysis (Laerd, 2013c). Table 15 displays the mean, standard deviation, standard error of the mean, and confidence intervals for teaching experience, overall job satisfaction, and the five variables of the construct across mentoring status.

Table 15

Mean, Standard Deviation, Standard Error of the Mean, and Confidence Intervals for Teaching Experience and Job Satisfaction for New Elementary Principals

Dependent Variable	Teaching Experience	Mentoring Status	N	M ± SD	Std. Error	95% CI for Mean Lower, Upper	Min., Max.
Job Satisfaction	3-5 years	Y	3	44.3 ± 8.4	4.84	23.50, 65.17	39, 54
	6-10 years	Y	14	44.7 ± 4.6	1.22	42.08, 47.35	37, 52
	11-15 years	Y	5	44.8 ± 4.0	1.80	39.80, 49.80	39, 49
	>16 years	Y	7	43.1 ± 3.6	1.37	39.79, 46.50	37, 47
	Total	Y	29	44.3 ± 4.5	0.84	42.60, 46.02	37, 54
	6-10 years	N	4	41.3 ± 6.2	3.09	31.41, 51.09	32, 45
	11-15 years	N	9	39.2 ± 4.5	1.49	35.79, 42.66	31. 44
	>16 years	N	3	36.7 ± 7.4	4.26	18.36, 54.98	31, 45
	Total	N	16	39.3 ± 5.3	1.32	36.43, 42.07	31, 45
Working Conditions	3-5 years	Y	3	18.7 ± 0.6	0.33	17.23, 20.10	18, 19
	6-10 years	Y	14	17.3 ± 2.0	0.53	16.14, 18.43	14. 20
	11-15 years	Y	5	17.8 ± 0.8	0.37	16.76, 18.84	17, 19
	>16 years	Y	7	16.4 ± 2.0	0.75	14.59, 18.27	13, 19
	Total	Y	29	17.3 ± 1.8	0.33	16.63, 17.99	13, 20
	6-10 years	N	4	18.3 ± 2.4	1.18	14.49, 22.01	15,20
	11-15 years	N	9	17.2 ± 2.2	0.74	15.51, 18.93	14,20
	>16 years	N	3	15.3 ± 2.5	1.45	9.08, 21.58	13, 18
	Total	N	16	17.1 ± 2.4	0.59	15.87, 18.38	13, 20
Organizational Support	3-5 years	Y	3	8.0 ± 6.1	3.51	-7.11, 23.11	4, 15
	6-10 years	Y	14	10.9 ± 2.6	0.69	9.44, 12.42	5, 14
	11-15 years	Y	5	11.0 ± 3.9	1.76	6.11, 15.89	7, 16
	>16 years	Y	7	9.4 ± 2.5	0.95	7.11, 11.75	5, 13
	Total	Y	29	10.3 ± 3.2	0.60	9.05, 11.5	4, 16
	6-10 years	N	4	8.0 ± 3.2	1.58	2.97, 13.03	4, 11
	11-15 years	N	9	8.6 ± 2.6	0.85	6.59, 10.52	5, 14
	>16 years	N	3	6.3 ± 3.2	1.86	-1.65, 41.32	4, 10
	Total	N	16	8.0 ± 2.8	0.69	6.53, 9.47	4, 13

(continued)

Dependent Variable	Teaching Experience	Mentoring Status	N	M ± SD	Std. Error	95% CI for Mean	Min., Max.

						Lower, Upper	
Commitment to the Position	3-5 years	Y	3	12.3 ± 1.5	0.88	8.54, 16.13	11, 14
	6-10 years	Y	14	11.7 ± 1.9	0.50	10.64, 12.79	8, 15
	11-15 years	Y	5	12.0 ± 0.7	0.32	11.12, 12.88	11, 13
	>16 years	Y	7	12.4 ± 2.3	0.87	10.30, 14.55	8, 15
	Total	Y	29	12.0 ± 1.8	0.33	11.33, 12.66	8, 15
	6-10 years	N	4	10.8 ± 2.2	1.11	7.22, 14.28	8, 13
	11-15 years	N	9	9.6 ± 2.7	0.92	7.45, 11.66	5, 13
	>16 years	N	3	10.7 ± 2.1	1.22	5.50, 15.84	9, 13
	Total	N	16	10.1 ± 2.4	0.61	8.77, 11.36	5, 13
Compensation	3-5 years	Y	3	1.7 ± 0.6	0.33	0.23, 3.10	1, 2
	6-10 years	Y	14	1.4 ± 0.9	0.25	0.82, 1.89	0, 3
	11-15 years	Y	5	1.2 ± 0.4	0.20	0.64, 1.76	1, 2
	>16 years	Y	7	1.5 ± 0.8	0.29	1.02, 2.41	1, 1
	Total	Y	29	1.3 ± 0.8	0.15	1.15, 1.75	0, 3
	6-10 years	N	4	1.3 ± 0.5	0.25	0.45, 2.05	1, 2
	11-15 years	N	9	1.3 ± 1.2	0.41	0.39, 2.27	0, 4
	>16 years	N	3	2.3 ± 1.5	0.88	-1.46, 6.13	1, 4
	Total	N	16	1.5 ± 1.2	0.29	0.88, 2.12	0, 4
Feedback	3-5 years	Y	3	3.7 ± 0.6	0.33	2.23, 5.10	3, 4
	6-10 years	Y	14	3.4 ± 0.9	0.23	2.94, 3.92	1, 4
	11-15 years	Y	5	2.8 ± 1.1	0.49	1.44, 4.16	2, 4
	>16 years	Y	7	3.1 ± 0.9	0.34	2.31, 3.97	2, 4
	Total	Y	29	3.3 ± 0.8	0.16	2.94, 3.61	1, 4
	6-10 years	N	4	3.0 ± 1.2	0.58	1.16, 4.84	2, 4
	11-15 years	N	9	2.6 ± 0.4	0.38	1.69, 3.41	1, 4
	>16 years	N	3	2.0 ± 0.0	0.00	2.00, 2.00	2, 2
	Total	N	16	2.6 ± 1.0	0.26	2.01, 3.11	1, 4

There was a homogeneity of variances, as assessed by Levene's test for equality of variances for teaching experience and overall job satisfaction for principals who were mentored (p = .160) and for principals who were not (p = .505). The variables for job satisfaction demonstrated equality of group variances with *working conditions* (p = .066), *commitment to the position* (p = .215), *compensation* (p = .131), and *feedback* (p = .412) for principals who were mentored. Among the principals who did not participate in mentoring, the variables for job

satisfaction that demonstrated equality of group variances were *working conditions* (p = .908), *organizational support* (p = .703), *commitment to the position* (p = .730), and *compensation* (p = .342). However, Levene's test for equality of variances with regards to *organizational support* (p = .047) with principals who had been mentored and *feedback* (p = .012) with principals who were not mentored were statistically significant, and therefore, homogeneity of group variance was not assumed with these variables. Table 16 reports the results of the test of homogeneity of variances for teaching experience, job satisfaction and mentoring status.

Table 16

Test of Homogeneity of Variances for Teaching Experience, Job Satisfaction, and Mentoring Status

Dependent Variable	Mentoring Status	Levene Statistic	df1	df2	Sig.
Job Satisfaction	Y	1.873	3	25	0.160
	N	0.720	2	13	0.505
Working Conditions	Y	2.724	3	25	0.066
	N	0.097	2	13	0.908
Organizational Support	Y	3.057	3	25	0.047
	N	0.362	2	13	0.703
Commitment to the Position	Y	1.596	3	25	0.215
	N	0.323	2	13	0.730
Compensation	Y	2.063	3	25	0.131
	N	1.167	2	13	0.342
Feedback	Y	0.994	3	25	0.412
	N	6.345	2	13	0.012

Note. $p \leq 0.05$.

A one-way between-subjects ANOVA was used to examine overall job satisfaction by a quadripartite based on years of teaching experience for principals who had been mentored, $F(3, 25) = 0.196$, p =.898. Overall job satisfaction, as related to years of teaching experience,

did not significantly differ. No variables in the construct of job satisfaction were significantly different either among mentored principals or principals who were not mentored. Table 17 details the ANOVA results for teaching experience, job satisfaction, and mentoring status for principals who were mentored.

Table 17

ANOVA Results for Job Satisfaction by Years of Teaching Experience for Mentored Principals

Dependent Variable		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Job Satisfaction	Between	13.026	3	4.3	0.196	0.898
	Within	555.181	25	22.2		
	Total	568.207	28			
Working Conditions	Between	12.169	3	4.1	1.299	0.297
	Within	78.038	25	3.1		
	Total	90.207	28			
Organizational Support	Between	29.150	3	9.7	0.932	0.440
	Within	260.643	25	10.4		
	Total	289.793	28			
Commitment to the Position	Between	2.762	3	0.9	0.277	0.842
	Within	83.238	25	3.3		
	Total	86.000	28			
Compensation	Between	1.063	3	0.4	0.550	0.653
	Within	16.110	25	0.6		
	Total	17.172	28			
Feedback	Between	2.041	3	0.7	0.861	0.474
	Within	19.752	25	0.8		
	Total	21.793	28			

A second one-way between-subjects ANOVA was utilized to investigate job satisfaction by a trichotomy based on years of teaching experience for principals who had not participated in mentoring, $F(2, 13) = 0.611$, $p = .557$. Again, overall job satisfaction among years of teaching experience did not significantly differ, and none of the five related variables indicated a statistically significant difference. Table 18 provides the ANOVA results for teaching

experience, job satisfaction, and mentoring status for principals who did not participate in mentoring.

Table 18

ANOVA Results for Job Satisfaction by Years of Teaching Experience for Principals who were Not Mentored

Dependent Variable		Sum of Squares	df	Mean Square	F	Sig.
Job Satisfaction	Between	36.028	2	18.0	0.611	0.557
	Within	382.972	13	29.5		
	Total	419.000	15			
Working Conditions	Between	14.778	2	7.4	1.393	0.283
	Within	68.972	13	5.3		
	Total	83.750	15			
Organizational Support	Between	11.111	2	5.6	0.702	0.513
	Within	102.889	13	7.9		
	Total	114.000	15			
Commitment to the Position	Between	5.299	2	2.6	0.412	0.671
	Within	83.639	13	6.4		
	Total	88.938	15			
Compensation	Between	2.583	2	1.3	0.964	0.407
	Within	17.417	13	1.3		
	Total	20.000	15			
Feedback	Between	1.715	2	0.9	0.784	0.477
	Within	14.222	13	1.1		
	Total	15.938	15			

When sample size differs, the one-way ANOVA is sensitive to violating the assumption of homogeneity (Laerd, 2013d). With regards to the Levene's test for equality of variances, the assumption was violated by the *organizational support* (p = .047) variable with mentored principals and *feedback* (p = .012) for principals who did not participate in mentoring relationships. When the assumption of homogeneity has been violated, the Welch and Brown and Forsythe tests are applicable (Laerd, 2013c). The *organizational support* variable for

mentored principals is further supported by Welch, $F(3, 6.423) = 0.612$, $p = .630$ and Brown-Forsthye, $F(3, 4.933) = 0.538$, $p = .677$. It is important to note that the robust test of equality of means cannot be performed for the *feedback* variable with principals not participating in mentoring as one or more groups have zero variance, indicating a limited sample size. The results of the robust tests of equality of means for teaching experience, overall job satisfaction, and mentoring status are shown in Table 19.

There is no statistically significant difference in the means ($p > .05$) between teaching experience and overall job satisfaction for mentored principals and those principals who did not participate in mentoring in the data. Therefore, the null hypothesis cannot be rejected. Additionally, all five variables within the construct of job satisfaction do not have a significant statistical difference between the means ($p > .05$) for principals who have participated in a mentoring relationship and those who have not, and therefore, the null hypothesis cannot be rejected. In other words, teaching experience prior to entering the principalship has no impact on overall job satisfaction or any of its variables, regardless of mentoring status.

Table 19

Robust Tests of Equality of Means for Teaching Experience, Job Satisfaction, and Mentoring Status

Dependent Variable	Test	Mentoring Status	Statistic[a]	df1	df2	Sig.
Job Satisfaction	Welch	N	0.336	2	4.095	0.732
	Brown-Forsythe	N	0.442	2	5.287	0.665
	Welch	Y	0.247	3	6.844	0.861
	Brown-Forsythe	Y	0.134	3	4.591	0.935
Working Conditions	Welch	N	1.068	2	4.694	0.415
	Brown-Forsythe	N	1.285	2	6.719	0.337
	Welch	Y	3.095	3	10.545	0.074
	Brown-Forsythe	Y	2.063	3	17.926	0.141
Organizational Support	Welch	N	0.519	2	4.442	0.627
	Brown-Forsythe	N	0.593	2	6.392	0.581
	Welch	Y	0.612	3	6.423	0.630
	Brown-Forsythe	Y	0.538	3	4.933	0.677
Commitment to the Position	Welch	N	0.399	2	5.576	0.689
	Brown-Forsythe	N	0.505	2	9.125	0.620
	Welch	Y	0.203	3	7.679	0.891
	Brown-Forsythe	Y	0.333	3	13.363	0.802
Compensation	Welch	N	0.614	2	4.868	0.578
	Brown-Forsythe	N	0.943	2	4.029	0.461
	Welch	Y	0.825	3	8.249	0.515
	Brown-Forsythe	Y	0.791	3	18.407	0.514
Feedback[b]	Welch	N	---	---	---	---
	Brown-Forsythe	N	---	---	---	---
	Welch	Y	0.756	3	7.904	0.550
	Brown-Forsythe	Y	0.895	3	14.261	0.468

Note. a. Asymptotically F distributed.
b. Robust tests of equality of means cannot be performed because at least one group has zero variance.

Research question five. *What is the underlying structure of the Principal Induction and Mentoring Survey (PIMS)?*

Research Question 5 examines the reliability and validity of the PIMS as a measurement tool for overall job satisfaction among school principals. The construct of job satisfaction is defined by the PIMS through five variables and measured with 15 survey items. The required

minimum for a factor analysis of job satisfaction with the PIMS would be a minimum of 150 cases, and therefore, this study fails the fourth assumption of a factor analysis. In lieu, an alternative set of scale analyses were performed to examine the PIMS reliability and validity as a measurement of overall job satisfaction and three related variables, *working conditions*, *organizational support*, and *commitment to the position*, which were measured on a scale with multiple survey items. The *feedback* and *compensation* variables were excluded from the scale analysis as there was only a single item for each variable on the PIMS.

There were 45 cases included in the scale analyses and no cases were excluded due to missing values. To ascertain internal reliability of overall job satisfaction and the scales of its related variables, Cronbach's alpha was conducted for the construct and three variable scales. The standards for what makes a "good" alpha coefficient is entirely arbitrary, but many methodologists suggest a minimum alpha coefficient between 0.65 and 0.80, while alpha coefficients less than 0.5 are usually unacceptable (University of Virginia, 2018). Generally, values ranging greater than 0.50 and less than 0.70 indicate fair internal consistency, and values greater than 0.70 are recommended as good (Laerd, 2013a).

Job satisfaction. The 15 survey items for job satisfaction have a fair level of internal consistency, as determined by a Cronbach's alpha of 0.540. Table 20 presents the Cronbach's alpha for job satisfaction and its related variable scales, as well as the number of items on the PIMS for each scale.

Table 20

Cronbach's Alpha for Job Satisfaction and Related Variable Scales

Dependent Variable	**Cronbach's Alpha**	**N**
Job Satisfaction	0.540	15
Working Conditions	0.633	5
Organizational Support	0.586	4
Commitment to the Position	0.097	4

In the Item-Total Statistics chart, the 15 items for overall job satisfaction have Cronbach alpha scores ranging from 0.031 to 0.593, indicating poor reliability when responding to items on this scale. There are four individual items with a Cronbach's alpha value above 0.540, this scale's Cronbach alpha's value, in the deleted item column. This indicates if one or more of these items were to be removed, reliability would increase. Pearson correlation coefficients less than 0.300 indicate an item might not be measuring the same construct (Laerd, 2013a). There are eight individual items with a Corrected-Item Total Correlation less than 0.300. In other words, the PIMS appears to be only a mediocre tool to measure job satisfaction of principals. This is evident as the reliability is fair and more than half of the items on the PIMS do not accurately measure the construct of job satisfaction. These items are either poorly written or do not relate to the construct. The Individual Item Scale Statistics for overall job satisfaction by its related variables are detailed in Table 21. Table 22 reports the Scale Statistics for overall job satisfaction, and Table 23 represents the Inter-Item Correlation for overall job satisfaction by its related variables.

Table 21

Individual Item Scale Statistics for Job Satisfaction by Construct Variables (N = 45)

Construct Variable	PIMS Item #	Mean	Std. Deviation
Organizational Support	10a	2.04	1.107
	10b	2.04	1.127
	10c	3.07	0.986
	10d	2.31	1.535
Commitment to the Position	10e	3.38	0.716
	11a	3.18	1.173
	11b	3.22	1.185
	11c	1.53	1.100
Working Conditions	10g	3.22	0.560
	10h	3.29	0.549
	10i	3.71	0.506
	10j	3.42	0.812
	10k	3.60	0.654
Feedback	10f	3.02	0.988
Compensation	11d	1.47	0.919

Table 22

Scale Statistics for Job Satisfaction and Related Construct Variables (N = 45)

Dependent Variable	Mean	Variance	Std. Deviation	N of Items
Job Satisfaction	42.51	28.437	5.333	15
Working Conditions	17.24	3.962	1.990	5
Organizational Support	9.47	10.391	3.223	4
Commitment to the Position	11.31	4.856	2.204	4
Commitment to the Position*	9.78	5.359	2.315	3

Note. *Calculations exclude PIMS item 11c.

Table 23

Inter-Item Cronbach's Alpha Scale Reliabilities for Overall Job Satisfaction by Construct Variables (N = 45)

Construct Variable	PIMS Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Organizational	10a	40.47	23.800	0.316	0.494
Support	10b	40.47	26.800	0.031	0.561
	10c	39.44	21.980	0.593	0.433
	10d	40.20	21.709	0.306	0.494
Commitment to	10e	39.13	24.482	0.486	0.479
the Position	11a	39.33	25.455	0.136	0.538
	11b	39.29	25.756	0.106	0.546
	11c	40.98	28.068	0.072	0.582
Working	10g	39.29	26.801	0.228	0.523
Conditions	10h	39.22	26.995	0.200	0.526
	10i	38.80	25.982	0.427	0.503
	10j	39.09	26.901	0.104	0.539
	10k	38.91	25.174	0.432	0.492
Feedback	10f	39.49	23.437	0.420	0.474
Compensation	11d	41.04	30.453	0.282	0.608

Working conditions. The five survey items for *working conditions* have a fair level of internal consistency, as determined by a Cronbach's alpha of 0.633, which is provided in Table 20. In the Item-Total Statistics chart, all item Cronbach's alpha scores were between 0.296 and 0.536, indicating poor reliability when responding to items on this scale. There were no individual items with a Cronbach's alpha value above 0.633, this scale's Cronbach alpha's value, in the deleted column, indicating that all items belonging to this scale contributed to its reliability. There is one individual item, PIMS item 10g, with a Corrected-Item Total Correlation less than 0.300, indicating an item might not be measuring *working conditions*. In

other words, among the five variables of the job satisfaction construct, *working conditions* is the best measure of job satisfaction on the PIMS, but it still has only fair reliability. The data suggests four of the five items measure *working conditions*, but item 10g may not, which asks principals how they perceive parental support of themselves. The Individual Item Scale Statistics for *working conditions* are listed in Table 21. The Scale Statistics for *working conditions* are reported in Table 22. Table 24 provides the Inter-Item Correlation for *working conditions*.

Table 24

Inter-Item Cronbach's Alpha Scale Reliabilities for Working Conditions

PIMS Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
10g	14.02	3.068	0.296	0.619
10h	13.96	3.043	0.322	0.608
10i	13.53	2.800	0.536	0.524
10j	13.82	2.286	0.415	0.577
10k	13.64	2.643	0.419	0.562

Organizational support. The four survey items for *organizational support* have a fair level of internal consistency, as determined by a Cronbach's alpha of 0.586, which is provided in Table 20. In the Item-Total Statistics chart, all item Cronbach's alpha scores were between 0.105 and 0.598, indicating poor to fair reliability when responding to items on this scale. There is one item, PIMS item 10b, with a Cronbach's alpha value above 0.586, this scale's Cronbach alpha's value, in the deleted item column, indicating that if this item were to be deleted from the scale, reliability would increase. That same item has a Corrected-Item Total Correlation less than 0.300, indicating an item might not be measuring *organizational support.* In other words, PIMS items 10a, 10c, and 10d are all items that measure job satisfaction with fair reliability.

However, PIMS item 10b, which aims to measure new principal support groups, is a poorly-constructed question. This item could be weak for any number of reasons, such as the quality of the construction of the item or the possibility that it attempts to measure a practice not occurring in the field. The Individual Item Scale Statistics for *organizational support* are listed in Table 21. The Scale Statistics for *organizational support* are reported in Table 22. Table 25 shows the Inter-Item Correlation for *organizational support*.

Table 25

Inter-Item Cronbach's Alpha Scale Reliabilities for Organizational Support

PIMS Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
10a	7.42	6.613	0.448	0.457
10b	7.42	8.431	0.105	0.690
10c	6.40	6.427	0.598	0.368
10d	7.16	5.134	0.417	0.487

Commitment to the position. The four survey items for *commitment to the position* have a very poor level of internal consistency, as determined by a Cronbach's alpha of 0.097, which is provided in Table 20. In the Item-Total Statistics chart, the four items for *commitment to the position* have Cronbach alpha scores ranging from -0.336 to 0.269, indicating very poor reliability when responding to items on this scale. There is one item, PIMS item 11c, with a Cronbach's alpha value above 0.097, this scale's Cronbach alpha's value, in the deleted item column, indicating that if this item were to be deleted from the scale, reliability would increase. All four items for *commitment to the position* have a Corrected-Item Total Correlation less than 0.300, indicating an item might not be measuring the construct. In other words, *commitment to the* position, as a four-item variable, has significant issues, indicating that items in this variable

are either written very poorly, ambiguous, or not related to job satisfaction. The Individual Item Scale Statistics for *commitment to the position* are listed in Table 21. The Scale Statistics for *commitment to the position* are reported in Table 22. Table 26 details the Inter-Item Correlation for *commitment to the position*.

Table 26

Inter-Item Cronbach's Alpha Scale Reliabilities for Commitment to the Position

PIMS Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
10e	7.93	3.609	0.269	-.158
11a	8.13	2.664	0.213	-.261
11b	8.09	2.583	0.228	-.300
11c	9.78	5.359	-0.336	0.578

A negative Cronbach's alpha indicates items were negatively coded. The researcher reviewed the analysis again for *commitment to the position* with the new coding. The results of the second analysis yielded the same data set as the first, indicating one item may be faulty. The researcher then ran an alternative analysis with only three items for *commitment to the position*, removing PIMS item 11c from the set.

The three survey items for *commitment to the position* have a fair level of internal consistency, as determined by a Cronbach's alpha of 0.578. In the Item-Total Statistics chart, the three items for *commitment to the position* have Cronbach alpha scores ranging from 0.203 to 0.552, indicating poor reliability when responding to items on this scale. There is one item, PIMS item 10e, with a Cronbach's alpha value above 0.578, this scale's Cronbach alpha's value, in the deleted item column, indicating that if this item were to be deleted from the scale, reliability would increase. This item also has a Corrected-Item Total Correlation less than 0.300,

indicating an item might not be measuring *commitment to the position*. In other words, when item 11c is removed from the variable, there is fair reliability between the remaining three items in *commitment to the position* and job satisfaction. However, the data suggests PIMS item 10e does not effectively measure the variable. The Scale Statistics for the revised *commitment to the position* are reported in Table 22. The Individual Item Scale Statistics and Inter-Item Correlation for the revised *commitment to the position* are listed in Tables 27 and 28.

Table 27

Individual Item Scale Statistics for Commitment to the Position without PIMS Item 11c (N = 45)

PIMS Item Number	Mean	Std. Deviation
10e	3.38	0.716
11a	3.18	1.173
11b	3.22	1.185
11c	3.38	0.716

Table 28

Inter-Item Cronbach's Alpha Scale Reliabilities for Commitment to the Position without PIMS Item 11c

PIMS Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
10e	6.40	4.245	0.203	0.690
11a	6.60	2.336	0.459	0.359
11b	6.56	2.071	0.552	0.175

Conclusion

Descriptive statistics were presented with frequencies and percentages for the mentoring experiences, overall job satisfaction, and years of teaching experience reported by new elementary school principals. The practice of mentoring new principals continues to be more

common in the field, as 64.4% (N = 45) of new elementary principals reported engaging in a mentoring relationship during their first year of their principalship. This finding echoes those of Washington-Bass (2013), who reported 67% of principals had received mentoring. In the last five years, PIMS studies have identified an increase in the percentage of new principals being mentored as earlier reports with PIMS data were lower, ranging from 45% to 48% (Aycock, 2006; Jackson, 2010).

Female elementary school principals outnumber male principals 2:1. Darling-Hammond, et. al (2007) identified the same ratio with graduates of pre-service administrative programs. Perhaps this is suggestive, given the decade between the two studies, that the effects of more women entering graduate levels programs is now evidenced in more women serving as school principals. However, the ratio of women in educational leadership is still not reflective of the gender ratio (4:1) among public educators (Blackman & Fenwick, 2000; Davis, Gooden, & Bowers, 2017).

The analysis of research question one affirmed prior PIMS studies, in which Washington State principals average between six to ten (M = 2.7, SD = 0.9) years of teaching experience. However, questions remain unaddressed by the data regarding the quality of instruction the educators were provided prior to entering the principalship. Within the *working conditions* variable of job satisfaction, a majority of new principals report strong positive attitudes towards their own school with 60% (n = 27) reporting they like the size of their school, as determined by student enrollment, 68.9% (n = 31) like the grade level configuration of their school, and 73.3% (n = 33) like the school in which they lead. The most common methods for facilitating mentoring are via phone calls (89.7%) and emails (89.7%), which may be the most convenient method for two working professionals to connect as 71.4% (n = 20) of mentors are colleagues.

Research question two focused on overall job satisfaction between principals who participated in mentoring experiences, and those who did not participate in a mentoring relationship. Multiple independent *t*-tests showed that principals who are mentored have a higher level of overall job satisfaction than those who are not mentored. Overall job satisfaction was statistically significant between mentored principals (M = 44.3, SD = 4.5) and those who were not (M = 39.3, SD = 5.3). The only variable of the job satisfaction construct of statistical significance was *commitment to the position*, of which mentored principals (M = 12.0, SD =1.8) were higher than principals who were not mentored (M = 10.1, SD = 2.4). Therefore, the null hypothesis was rejected for overall job satisfaction and the *commitment to the position* variable.

Research question three sought to establish any differences between genders and overall job satisfaction that existed among new elementary school principals who were mentored and those who did not participate in a mentoring relationship. The findings from the multiple independent *t*-tests did not demonstrate any statistical significance between the variables, and therefore, the null hypothesis could not be rejected.

Similar outcomes yielded from the analyses for research question four, which was examining any differences in between years of teaching experience and overall job satisfaction that existed among new elementary school principals who were mentored and those who did not participate in a mentoring relationship. Multiple one-way between-subjects ANOVAs resulted in no statistically significant differences between years of teaching experience, overall job satisfaction, and mentoring status. Therefore, the null hypothesis could not be rejected.

Research question five examined the reliability and validity of the PIMS as a measurement tool for overall job satisfaction among school principals. The fourth assumption of a factor analysis was violated as the minimum number of cases (N = 45) was not met. As an

alternative, a set of scale analyses were conducted with job satisfaction and its five construct variables. The analysis of the PIMS presented a Cronbach's alpha of 0.540 for overall job satisfaction. Additionally, the analyses identified potential issues with several items within the construct of job satisfaction.

The findings of the analyses for the construct variables were reported as a Cronbach's alpha of 0.633 for *working conditions* and 0.586 for *organizational support,* indicating fair reliability. Within the *organizational support* scale, if item 10b were removed, Cronbach's alpha would increase. Additionally, the Corrected-Item Total Correlations for item 10b was 0.105 and for item 10g was 0.296, which indicates they may not be measuring their intended construct.

The analyses for *commitment to the position* variable indicates that this variable could be problematic. With all four items loaded in the variable, a very poor level of internal consistency was determined by a Cronbach's alpha of 0.097, and all four items for *commitment to the position* had a Corrected-Item Total Correlation less than 0.300, indicating all the items may not be measuring the construct. Item 11c was identified as problematic to the variable, necessitating a second analysis of three items loaded into the variable. It was determined the variable with three-items had a fair level of internal consistency by a Cronbach's alpha of 0.578. However, if item 10e were to be removed, reliability would further increase, and as well as it may not be measuring *commitment to the position,* as it has a Corrected-Item Total Correlation of 0.203.

Chapter 4 summarized the findings regarding the impacts of mentoring on overall job satisfaction for new elementary school principals and explored its relationships across gender and teaching experience. Furthermore, comprehensive scale analyses of PIMS items for overall job satisfaction and its related variables were presented. Chapter 5 expounds on these results, providing an interpretation and discussing their implications. Lastly, recommendations for

future research are offered so that future studies can be expanded to include a better understanding of supports for new principals, as well measuring overall job satisfaction of school principals.

CHAPTER 5

Discussion and Conclusions

This study explored the impact mentoring, as defined by formal and informal programs, has on job satisfaction of new elementary school principals. Specifically, this study examined relationships between (a) mentoring and job satisfaction of principals who were in their first five years, (b) job satisfaction between genders, and (c) job satisfaction in relation to years of teaching experience. Additionally, a set of scale analyses were applied to examine the underlying structure of the Principal Induction and Mentoring Survey (PIMS), and Cronbach's alpha assessed the reliability of the tool. In this chapter, the findings of the study are summarized. The findings have been organized into five topics, which are presented in descending order with respect to importance. The findings are then followed by a discussion of the implications for practitioners and policymakers. Additionally, the limitations of the study are explained and suggestions for future research proposed.

Summary of the Findings

Mentoring: A strong support system. Parylo et al. (2012) concluded mentoring new principals was "the 'best' system of support." Five findings from the present study provide further confirmation that mentoring is a strong system of support for new principals. The first finding suggests that overall job satisfaction is higher for principals who have been mentored during their first year. The literature in the last 15 years has identified many benefits when new principals are mentored (Schechter, 2014). The findings in this study are consistent with other studies (Bloom & Moir, 2003; J. Daresh, 2004; Washington-Bass, 2013) in which mentoring increased job satisfaction for new principals, and in 2004, when Gross & Shapiro identified mentoring as the most important factor for high job satisfaction among principals. The findings

in this study also align with an increase in morale (Felicello, 2014) and higher motivation (Bloom & Moir, 2003; Daresh, 2004; Gardner, 2016; Spiro et al., 2007) among principals who were mentored.

Study findings also indicate that increased job satisfaction seems to be a result of mentoring. This strong system of support has potential to lower principal turnover rates. Mitgang (2012) reported an association between mentoring and lower principal turnover rates. In a closer examination of the five variables of the construct of job satisfaction, there is evidence suggesting only *commitment to the position* has a positive impact on new principals. These findings suggest that mentoring increases the commitment of principals to their position. However, does that increase in commitment then translate to better rates of retention? It is a possible reasoned conclusion, and certainly the literature hints at the possible relationship, but the relationship between mentoring and retention rates of new school principals must be further examined.

A third result from this study suggests mentoring is considered helpful by new principals. PIMS item 19e was one of two mentoring experience items in which all responses were either "Sometimes," "Mostly," or "Always." The item asked principals if the advice of their mentor was helpful, of which 58.6% responded "Always," which was the most "Always" responses for any of the PIMS mentoring experience items. Mentoring is a helpful experience to new principals because it is an experience that facilitates translating theory into practice and teaches them the "tricks of the trade" (Alsbury & Hackmann, 2006; Bloom & Moir, 2003; Daresh, 2004; Ehrich et al., 2004; Schechter, 2014). Furthermore, the advice from an experienced principal shepherds new principals in a manner that attempts to avoid pitfalls and stumbling blocks as they navigate their first year (Daresh, 2004).

The strength of relationships that are developed through mentoring is another finding from this study that indicates mentoring is a strong system of support for new principals. PIMS item 19i asked new principals if they had "formed a strong, collegial relationship." The item was the second of two PIMS mentoring experience items in which all responses were "Sometimes," "Mostly," or "Always." The item also had the strongest weighted response (M = 3.4, SD = 0.63) of any PIMS mentoring experience item. The literature aligns with this finding that the mentoring process results in strongly formed relationships for new principals. Mentoring relationships have been identified as the first collegial relationship a new principal establishes (Bloom & Moir, 2003; Burk, 2012). In a mentoring relationship, maintaining confidentiality (Bakioglu et al., 2010; Gardner, 2016; Sciarappa & Mason, 2014) and a level of security (Bakioglu et al., 2010; Gardner, 2016; Schechter, 2014) between the mentor and new principal establishes trust (Bakioglu et al., 2010; Bradley, 2006; Gardner, 2016; Schechter, 2014).

Strong relationships can also provide emotional support, in which evidence from this study suggests mentoring supports new principals emotionally. Almost three-fourths (73.3%) of new principals reported being emotionally supported by their mentor during their first year of the principalship. The literature identifies emotional support as important for first year principals because the stress experienced by principals is higher for new principals (Daresh, 2007; Gardner, 2016; Holloway, 2004; Saban & Wolfe, 2009). The negative effects of stress include lower job satisfaction, poor self-efficacy (Federici & Skaalvik, 2012), and higher rates of burnout (Federici & Skaalvik, 2012; Sogunro, 2012) and turnover (Sogunro, 2012). Long-term stress eventually leads to decreased effectiveness (Boyland, 2011; Sogunro, 2012) and negative health implications (Boyland, 2011; Sogunro, 2012; West et al., 2014). Stephenson & Bauer (2010) identified that high levels of stress are accompanied by greater levels of isolation with principals.

Additionally, isolation is commonly experienced by new principals (Boerema, 2011; Jackson, 2010; Lochmiller, 2014; Weingartner, 2009), which results in feelings of loneliness (Boerema, 2011; Gill & Arnold, 2015; Weingartner, 2009), and influences principal burnout and turnover (Stephenson & Bauer, 2010). Mentoring relationships support new principals emotionally, which provides them with a "powerful socialization strategy" (Parylo et al., 2012) that aids them in reducing stress and isolation experienced throughout the first of year of their principalship.

This study of the impact of mentoring on new elementary principals in Washington State yielded five findings that indicate mentoring is a strong system of support for new principals. The evidence from this study suggest mentoring (1) increases overall job satisfaction with new principals; (2) positively affects job satisfaction, which may positively influence retention; (3) is helpful for new principals as they translate theory into practice; (4) develops strong relationships; and (5) supports new principals emotionally. These five findings from this study imply mentoring is a strong system of support that "deserves serious investment" (Mitgang, 2012, p. 25).

Mentoring trends. In *Making the Case for Principal Mentoring,* an encouraging increase in the number of new principal mentoring programs was reported (NAESP, 2003). A few years following the NAESP report, Spiro et al. (2007) ascertained more than 50% of states have adopted requirements for mentoring new principals. This study sought to identify the types of mentoring experiences new Washington State principals reported as measured by the PIMS. The implications from four findings from this study indicate mentoring that is facilitated through multiple strategies, is increasing as a practice in Washington State. The results from this study indicate that mentoring in the state of Washington are uneven at best and that embracing a

statewide mentoring requirement for new principals could hold promise for strengthening the experience of first year principals in all areas of the state.

This study suggests that the mentoring, both formal and informal, of new elementary school principals has increased. A majority (64.4%) of the respondents indicated they were mentored during their first year in the principalship. These findings align with Washington-Bass (2013), who reported 67% of principals were mentored. The literature on mentoring has identified lower rates of mentoring of new principals as recently in the 2011-12 school year when the National Center for Education Statistics found that only half of principals had been mentored (Lavigne et al., 2016). The increase in mentoring for new principals is also evident in comparison to earlier studies utilizing the PIMS; Aycock (2006) reported 45% and Jackson (2010) reported 48%.

Both formal and informal mentoring are methods to improve school leadership (Boerema, 2011). This study aligns with recent literature indicating a shift away from informal mentoring practices that were the professional standard for many years for inducting new principals. The 44.8% of respondents in this study who indicated they were formally mentored is higher than two recent studies. Duncan & Stock (2010) reported one-third of new principals in Wyoming were formally mentored, and Jackson (2010) identified the formal mentoring rates in the suburbs of Washington, D.C. to be approximately just one in eight.

Mentoring aims to support a new principal with many technical and adaptive challenges to ultimately build up a broad repertoire of leadership skills in the protégé (Augustine-Shaw & Liang, 2016; Davis et al., 2005; Holloway, 2004; Peluchette & Jeanquart, 2000). Evidence from this study suggests mentoring is facilitated through multiple methods. Of the responses to items regarding how mentoring experiences were facilitated, both the use of emails and telephone calls

were the identified by 89.7% of the mentored principals. The use of emails and telephone calls may be related to challenges associated with mentoring and practicing administrators, which include a required investment of time (Schechter, 2014; Sciarappa & Mason, 2014). Additionally, a majority of mentored principals reported they visited or held meetings at their own school site (79.3%), as well as at the school site of their mentor (65.5%). On a related note, almost half of the mentored principals met with their mentors off-site (48.3%). These findings are in concert with literature in which face-to-face communication between mentors and protégés significantly influences mentoring (Schechter, 2014).

Our current educational climate, which is focused on academic accountability, is dependent upon a model of the principalship as instructional leaders. Educational leaders are being held accountable for increasing student achievement (Hall, 2008). The literature has defined a role of principal mentoring as the facilitation of a transition from classroom teacher to school leader (Gray et al., 2007; Schechter, 2014), in which new principals translate theory into practice (Augustine-Shaw & Liang, 2016; Boerema, 2011; Ferrandino, 2006; Wells-Frazier, 2016), to positively impact teaching and learning (Augustine-Shaw & Liang, 2016). Two findings from this study indicate current mentoring practices struggle to leverage opportunities in mentoring to develop instructional leadership skills with new elementary school principals. First, most new principals are not observed by their mentors when they work with teachers and students. Thirty-one percent of respondents reported their "mentor observed them interact with teachers and students and offered feedback from the observation." Second, most new principals are not being offered the opportunity to observe effective, experienced principals. Among the responses for PIMS item 10a, only 28.7% of new principals observed the practice of highly effective, experienced principals. These two findings indicate that these promising mentoring

opportunities are being underutilized. Inversely, they highlight available opportunities in mentoring new principals as they do not come equipped with these skills when they enter the principalship (Daresh, 2007) and mentors can enhance these skills in their protégé (Augustine-Shaw & Liang, 2016; Davis et al., 2005; Holloway, 2004; Peluchette & Jeanquart, 2000).

This study reports the mentoring experiences of new principals in Washington State. Findings from this study indicate the practice of mentoring is (1) increasing as a practice with new principals; (2) is more often being conducted as formal programming; (3) facilitated through multiple strategies; and (4) not leverage all the opportunities the promise of mentoring holds to develop principals as instructional leaders. Although mentoring practices are increasing in Washington State, mentoring is a proven effective tool to support new principals to meet the demands of the principalship (Washington-Bass, 2013), including increasing student achievement (Augustine-Shaw, 2015a). Additionally, the findings of this study indicate that opportunities can be leveraged to develop instructional leadership skills among new principals in Washington State.

PIMS reliability and validity. The PIMS was developed in 2006 by Aycock and has been employed in three prior studies to examine job satisfaction of school principals. This study examined the underlying structure of the PIMS through a set of scale analyses, which was conducted because of a violation of the fourth assumption for factor analysis. The scale analyses of the PIMS presented three findings that contribute new information to understanding the PIMS reliability, as well as the effectiveness of the items on the PIMS to measure overall job satisfaction of principals.

Evidence from this study suggests the PIMS demonstrates reliability ($\alpha = 0.54$) in the low end of the fair range. The reported reliability from this study indicates the PIMS is not a strong

measurement tool of job satisfaction among school principals. Additionally, this Cronbach's alpha is much lower than the Cronbach's alpha originally reported in 2006 by Aycock. This inconsistency raises questions and concerns regarding the composition of the items on the PIMS and their effectiveness to measure job satisfaction. Evidence from this study, in tandem with previous research, indicate that the PIMS, as a tool, needs to be strengthened through further development.

Additionally, this study examined the individual variables associated with the construct of job satisfaction, contributing new information about the PIMS, as no prior study had examined the variables of job satisfaction. A finding from this study suggests two variables, *working conditions* ($\alpha = 0.633$) and *organizational support* ($\alpha = 0.586$), are scales with fair reliability. Additionally, both variables have higher reliability than overall job satisfaction. These findings reiterate those with overall job satisfaction, as they indicate the items on the PIMS are not very effective in measuring their intended variables and their composition appears to be questionable.

Another finding from this study suggests the *commitment to the position* variable may be problematic as it is constructed on the PIMS. The evidence related to the four-item variable imply it is very likely not measuring *commitment to the position*. A follow-up, deeper examination of each item yielded findings indicating PIMS item 11c appears to be a very poor item. The item asked new principals to predict five years into the future if they would be seeking a district office position. Of all PIMS items, the responses for item 11c were the most evenly dispersed ($M = 2.69$, $SD = 1.46$) across the four-point Likert scale and had the most "Don't Know" responses ($n = 7$). This evidence indicates the question posed is challenging for new principals to answer. New principals just made a major career change. Therefore, it may be difficult for a new principal to foresee or predict future steps in their career. Additionally, the

responses on item 11c do not address the diversity within the group of respondents with respect to their years of experience, as a principal with three or more years of experience is likely to think differently about their future than a principal who has just begun their first year.

Overall, this study suggests the PIMS is a weak measurement tool for job satisfaction of elementary school principals. These findings indicate a need to revise the PIMS or develop an entirely new tool to measure job satisfaction of school principals.

Gender. This study also explored the relationship between job satisfaction by the gender of new elementary school principals who are mentored and those who were not mentored. Evidence from this study suggests job satisfaction of principals does not differ between men and women. These findings are consistent with reported levels of job satisfaction being similar with male and female principals (Eckman, 2004), as well as that both genders serve successfully as school principals (Guramatunhu-Mudiwa & Bolt, 2012).

Teaching experience. Research question four examined the relationship between years of teaching experience and job satisfaction between new elementary school principals who participated in mentoring experiences, and those who did not participate in a mentoring relationship. Evidence from this study suggests job satisfaction does not differ between years of teaching experience. Crow (2006) reported the type of school, area(s) of content taught, and demographic groups during a teaching career of principal are all factors that influence how they fulfill their duties and responsibilities. Results from this study seem to contribute new information, namely that the number of years teaching experience does not seem to influence professional work of the principalship.

It is important to note that the data PIMS collected about the teaching experience of new principals is ambiguous and provides few inferences. Evidence from this study suggests

principals teach for six or more years prior to becoming a principal. Most principals (93.3%) had six or more years of teaching experience before entering the principalship. These findings are in concert with Chang et al. (2015), who reported 83.2% of principals in the United States have six or more years of teaching experience, and in there literature that identifies teaching experience as a prerequisite for the principalship (Borba, 2009; Bush, 2009; DeWitt, 2015). However, the data from the PIMS regarding the teaching experiences of new principals is specific to an aggregate number and does not address the quality of instruction provided during those years. In education today, the most important role of school leaders is instructional leadership (Cortes et al., 2017; Crow, 2006; Darling-Hammond et al., 2007; Davis et al., 2005; Gardner, 2016; Knapp et al., 2003; Mendels, 2012a; Mendels & Mitgang, 2013; Seashore Louis, Leithwood, Wahlstrom, & Anderson, 2010; Wallace Foundation, 2013). There is a need to further explore the teaching experiences of those entering the principalship, particularly their quality of instructional practices, and its relationship with the principalship, which includes job satisfaction.

Implications for Policymakers and Practitioners

This study has several implications for mentoring new school leaders. The practice of mentoring is complex, as there are a variety of activities incorporated within the definition of the construct. This results in differences among programs, as well as how mentoring is experienced by individuals and what they may identify as the most valuable components of being mentored. Yet, there is still a great promise in the practice of mentoring as a strong system of support for new elementary school principals. There are many challenges in the first year of a principalship (Augustine-Shaw, 2015b) and mentoring is helpful to new principals as it provides support in addressing technical challenges (Daresh, 2010) and develops leadership skills (Augustine-Shaw & Liang, 2016; Davis et al., 2005; Holloway, 2004; Peluchette & Jeanquart, 2000). New

principals perceive the experience of mentoring as positive and beneficial, including some who have identified mentoring as the best form of professional development (Parylo et al., 2012) they participate in during their first year in the principalship. An outcome of mentoring is increased job satisfaction for new principals. Higher job satisfaction leads to higher performance levels (Chambers, 1999; Saari & Judge, 2004) and improves retention (Federici & Skaalvik, 2012) among new principals. Mentoring also forms strong relationships between colleagues. Their mentoring relationship expands beyond assisting new principals in fulfilling their responsibilities and includes emotional support.

Additionally, mentoring is a practice that is becoming more frequently employed in the field to support new principals. The days of "sink-or-swim" (Bradley, 2006; Gray, Fry, Bottoms, & O'Neill, 2007; Mendels & Mitgang, 2013) are concluding. Mentoring in Washingon State currently occurs at a rate nearly 30% higher than the 2011-12 national average (Lavigne et al., 2016). Today more new principals are being supported through formal mentoring programs, as formal mentoring rates have increased from 12% (Jackson, 2010) to 44.8%. Plecki et al. (2017) identified mentoring as cost effective as it requires a similar investment from the state as other comparable programs.

Considering the emerging promise of mentoring as a strong system of support for new principals, as well as its many benefits, an increased frequency of implementation, and a reasonable affordability to states or districts, there is an indication that mentoring is a high value form of professional development for new principals. The need for all principals to be mentored is beginning to surface in the field and literature. The leadership of school districts and the Office of the Superintendent of Public Instruction (OSPI) should seize upon this opportunity to develop and implement comprehensive mentoring programs for all new principals.

When these mentoring programs are developed, there are many facets of a program to be considered. In this era of educational accountability, one essential outcome for any mentoring program is to develop instructional leaders. New principals do not enter the position with all the skills and knowledge required to be proficient (Daresh, 2007), but a mentoring relationship that includes observation and feedback cycles, can develop new skills with emerging principals to be incorporated into their practice. New principal induction programs should embrace mentoring and include observation and feedback cycles in the development of instructional leaders, including observing new principals by a mentor and new principals observing effective principals with staff and students. These practices should occur frequently as they hold great promise to impact instructional leadership skills with new principals.

Implications for Researchers

This study has implications regarding its measurement tool, the PIMS. The PIMS has not demonstrated its ability to measure job satisfaction with strong reliability. The Research Data Services and Sciences Library at the University of Virginia (2018) defines a "good" coefficient as being between 0.65 and 0.80, and any less than 0.50 as unacceptable. The Cronbach's alpha was 0.54 for mentoring and overall job satisfaction, which borders unacceptable. Additionally, none of the five variables of the construction for job satisfaction meet the general standard for a good alpha coefficient.

Some of the PIMS items are concerning. There are eight items which are questionable, representing more than half (53.3%) of the items used in the PIMS to measure overall job satisfaction; item 11c is the most problematic. However, all eight PIMS items identified by the scale analyses in this study indicate there are problems around (a) the wording or composition of the item; (b) the item creating confusion with the respondent; and (c) the item not measuring the

intended construct. The concerns raised through this study regarding the PIMS tool indicates that the PIMS need to be retooled to increase its reliability and validity. An enhanced PIMS tool is needed to better measure and understand job satisfaction of new school principals.

Limitations of the Research

This study has several limitations. First, the self-reported perceptions around mentoring are the sole source of data for this study. Surveys relying on self-reported data are vulnerable to false statements, misunderstanding posed question, or guessing (Privitera, 2017). The electronic presentation of the survey took intentional steps to address these liabilities, yet they could not be entirely resolved. However, the choice to solely focus on the self-reported perceptions of the new principals emphasizes the experiences of those who were being mentored in this study.

No long-term implications from this study can be inferred. Although the original intent with the PIMS was to measure job satisfaction and retention, Aycock (2006) presented a Cronbach's alpha for retention as 0.108. This low alpha indicates the PIMS as not suitable for measuring retention or making long-term inferences. The methodological approach of this study utilized a cross-sectional sample capturing the perceptions expressed during the 2017-18 school year.

The convenience sampling in this study collected a data set for multiple analyses. The sampling did not control for differences in geographic regions, district sizes, or school populations. The invitation to participate in the survey was sent to 497 principals, which included all elementary principals in the state of Washington with five years or less of experience during the 2017-18 school year. The collected responses may not be representative of the entire population of new principals in Washington State.

Similarly, the small number of responses from the sample population also impacts the ability to generalize to the entire population of new principals in the state. Of the 497 principals that made up the sample size, the 9.26% response rate yielded 46 collected in this study. The findings in this study are limited by the depth and scope of this sample size.

Recommendations for Future Study

This study offers several recommendations for future study. The most prominent one is the need for a tool with higher reliability in measuring job satisfaction of school principals. This could be accomplished in many ways, including revising the PIMS or developing an entirely new tool. Having a clearer understanding of the impact of mentoring new principals is critical as policymakers make budget decisions for new principal induction. The responsibilities of the 21st century principal have expanded with an emerging emphasis on instructional leadership and school safety. Mentoring holds promise to provide the kind of support new principals need to thrive in their work.

The further study of the impact of mentoring new principals should be expanded to include more principals in the state of Washington, as well as other regions of the United States. A limitation, as stated above, was the low response rate. Further study of principals in Washington State could provide a better understanding of the mentoring in the state. Since a joint effort to provide mentoring to new principals in Washington State began in the fall of 2017 by the Association of Washington State Principals and the Office of the Superintendent of Public Instruction, there is ample opportunity to create a better understanding of the impact of mentoring on principals in the state. It will also be critical to understand the effects of the program through future studies that revisit the impact which mentoring has on school principals. The study of the impact of mentoring new principals in other regions of the United States could

also provide additional insight and understanding of mentoring in a global context. Additionally, focusing on the longitudinal effects, including retention, should be of importance as the literature is thin regarding long-term implications for mentoring.

This study does not address structure or components of a mentoring program. In this study, only informal and formal mentoring programs were identified as a possibility for indicating the scope of a principal's mentoring experience. Future studies could explore the impact of mentoring when the two programs are isolated from the other. Informal mentoring generally has less structure, fewer established guidelines (Aycock, 2006; Washington-Bass, 2013), and less systematic implementation (Malone, 2002). The implementation of formal mentoring programs is increasing in the field. A deeper understanding of the strengths of both mentoring programs could inform the practice in the field. Additionally, future studies could examine the effectiveness of the elements of mentoring, as well as entire mentoring programs. With respect to the growth of mentoring in the field, as well as the need for instructional leaders in schools, there is a need to identify best practices that support new principals and develop them into effective instructional leaders.

Conclusion

In conclusion, this study presents five conclusions regarding the impact of mentoring new elementary school principals and the PIMS tool. The first is the establishment of mentoring as a strong system of support for new principals. New elementary school principals who are mentored report higher levels of overall job satisfaction. Additionally, mentoring is viewed as helpful by new principals; mentoring relationships provide support for the practical and emotional challenges of their new administrative position.

This study also finds there are positive trends with mentoring practices in Washington State. The practice of mentoring new elementary principals is increasing in the state. Presently almost two-thirds of new principals in the state are mentored, and more frequently they are participating in a formal program. However, more mentoring experiences should have opportunities for mentors to observe and provide feedback to new principals, and in turn, new principals should have opportunities to observe highly effective principals to better leverage opportunities to develop instructional leadership skills.

A third conclusion from this study finds the PIMS as a weak tool to measure the job satisfaction of school principals. To increase its effectiveness, the tool needs revision or the development of a new tool is necessary.

This study found no relationship between gender and job satisfaction among new elementary school principals who are mentored and those who are not. However, the number of women serving in the principalship is increasing, which seems to be reflective of more women entering graduate level preparation programs almost a decade ago.

There was also no relationship between years of teaching experience and job satisfaction among new elementary school principals who participated in mentoring experiences, and those who did not participate in a mentoring relationship. There remains a need to further explore the teaching experience of new principals and its realtionship with the principalship, which includes job satisfaction.

Educational leadership research must continue to explore mentoring as a prominent element of an induction system for new principals. This work can provide new insights and better understandings of a practice that is continuing to expand in the field. Further research should explore the effectiveness of differing elements of mentoring programs. These efforts can

lead to stronger support systems for new principals, more effective school leaders, better schools, and ultimately, increased student learning outcomes.

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APPENDICES

Appendix A: Instrument Permission from Dr. Aycock

SEAN MCGEENEY

From: Marcy Aycock <maycock@naf.org>
Sent: Sunday, August 27, 2017 12:31 PM
To: SEAN MCGEENEY
Subject: Re: Request to use PIMS for Doctoral Study

Follow Up Flag: FollowUp
Flag Status: Completed

Sean -

Thank you for reaching out. Yes, I give you permission to use the PIMS. I would definitely like to read your research findings.

I live near Wichita, KS and served 16 years as a principal. I actually have lots of family in Tacoma!

Best of luck in your research!
Marcy Aycock

Sent from my iPhone

On Aug 27, 2017, at 12:37 PM, SEAN MCGEENEY <smcgeen@Tacoma.K12.Wa.US> wrote:

> Dear Dr. Aycock,
>
> My name is Sean McGeeney and I am a doctoral student at George Fox University in Newberg, Oregon. I also have the privilege of serving as an elementary school principal in Tacoma, Washington. I just completed my precis (pre-proposal) stage of my study, which examines the impact mentoring new elementary school principals has on their job satisfaction and retention. I will be studying a large sample size from across Washington State, intending to add to the growing body of literature, and hopefully partnering with our state principal's association.
>
> I am writing to formally request usage of the Principals Induction and Mentoring Survey (PIMS) to gather data for my doctoral study. I plan to contact elementary school principals, who are serving in their first five years in this role, across the state of Washington.
>
> I would be happy to talk to you more about my research, and address any questions that might have. Please feel free to contact me via phone at my office (253) 571-5551 or cell phone (503) 550-1498 or via email at smcgeen@tacoma.k12.wa.us.

I would also like to assure you I will adhere to all guidelines for using copyrighted materials, including crediting you as a source and sharing with you a copy of the data resulting from my study.

In advance, I want to express my thanks to you for your consideration and assistance with my research. I look forward to hearing from you soon.

Sincerely,

Sean McGeeney, Ed.S.
Principal
Crescent Heights Elementary

Appendix B: AWSP Partnership Communication with Ron Sisson

SEAN MCGEENEY

From: Ron Sisson <ron@awsp.org>
Sent: Friday, September 29, 2017 10:32 AM
To: SEAN MCGEENEY
Subject: Re: Mentoring Survey Tool
Attachments: Mentor POP Model copy.docx; UW_Principal Report Jan2017.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Sean,
Great to talk with you the other day as well. We will all be back in the office on Monday and I hope to connect with our team about your research and how to move forward with this work. Will be cool!! I think we absolutely can suppor incentivizing participation. Let's stay in touch!! The dropbox link is to a bunch of different materials I pulled together that speak to mentoring. You might find some of it useful. In particular I would draw your attention to the work of Chad Lochmiller. He did some initial research at SPU(?) that kind of fell off with the passing of one of the researchers. The two docs I've attached are a report around principal mobility and churn and a document that explains our model. Happy to chat more about that.

https://www.dropbox.com/sh/s22skwpriobs75f/AAD56hNGlwj-WTj00-r0yAdia?dl=0

From: SEAN MCGEENEY <smcgeen@Tacoma.K12.Wa.US>
Date: Tuesday, September 26, 2017 at 8:21 PM
To: Ron Sisson <ron@awsp.org>
Subject: Mentoring Survey Tool

Hi Ron,

It was great to talk with you and discuss in further detail my study. I am looking forward to partnering with you and AWSP to gather some data around this important topic. As we discussed this afternoon, attached is a copy of the Principal Induction and Mentoring Survey (PIMS) which I will be utilizing in the study. In 2006, Aycock developed the tool and measured a Cronbach's alpha of .82 (high reliability) when measuring job satisfaction. This is a MS Word mock-up of the survey. The actual survey would be electronic survey, in a survey system, such as SurveyMonkey. Take a look at it, and feel free to share with your team at AWSP or OSPI.

In addition to gathering the data related to mentoring and job satisfaction for principals in the first five years of practice across the state, I will also be conducting a factor analysis of the tool, which will help review the validity and reliability of the tool. This will be valuable if the tool is used longer term, in a longitudinal manner.

A couple of thoughts and follow-ups from this afternoon:

I believe you mentioned AWSP can filter the emails so we distribute to principals who are in their first five years of the principalship. If this is the case, you will see I developed a contingency plan if this could not be done. It would be not be included in the survey, if this was to be the case.

The idea of attracting a larger *n* with an incentive is a great idea. Let me know what you think AWSP might find appropriate and be able to provide. The research methods supports this as a good way to increase responses. Once I know, I can then also write it up formally for my study.

Ideally, I would like to aim for a distribution of the survey on November 28 and keep the window open through the winter break, closing on January 3. Just to give you an idea of time.

Looking forward to continue to collaborate on this project. Let's keep in touch and talk/email soon.
Thanks!
Sean McGeeney

SEAN MCGEENEY

From: Ron Sisson <ron@awsp.org>
Sent: Monday, August 28, 2017 11:42 AM
To: SEAN MCGEENEY
Cc: David Morrill; Gary Kipp
Subject: Re: Partnership Proposal for Doctoral Study

Follow Up Flag: Follow up
Flag Status: Flagged

Sean,
Your timing on this is great, as AWSP in conjunction with OSPI has just begun formalizing principal mentoring. Our first cohort was trained last May and paired this fall. We are training another cohort in October. We have had several conversations internally as we get up and running about collecting data around the effects of our mentoring program. Let's set up a time to chat or meet to talk more about this. Exciting stuff!!

Ron

From: SEAN MCGEENEY <smcgeen@Tacoma.K12.Wa.US>
Date: Sunday, August 27, 2017 at 10:58 AM
To: David Morrill <david@awsp.org>, Ron Sisson <ron@awsp.org>
Subject: Partnership Proposal for Doctoral Study

Dear Mr. Sisson and Mr. Morrill,

My name is Sean McGeeney and I have the privilege of serving as the principal at Crescent Heights Elementary in Tacoma, as well as being a member of AWSP. I am also a doctoral student at George Fox University in Newberg, Oregon and this fall I am beginning my dissertation phase. I just completed my precis (pre-proposal) stage of my study, which examines the impact mentoring new elementary school principals has on their job satisfaction and retention. I would like to contact elementary principals from across our entire state.

I am writing today to you to explore the possibility of partnering with AWSP with regards to my research. I am interested in knowing if there might be a possibility to working together to distribute the survey to elementary school principals across the state. Upon conclusion of my study, I would be happy to present my research at AWSP conferences, meet with Washington State school district leaders, and submit material for publication consideration.

My study focuses on the impacts of mentoring new elementary principals on their levels of job satisfaction and increased rates of retention. In 2006, Dr. Aycock developed the Principals Induction and Mentoring Survey

I would also like to assure you I will adhere to all guidelines for using copyrighted materials, including crediting you as a source and sharing with you a copy of the data resulting from my study.

In advance, I want to express my thanks to you for your consideration and assistance with my research. I look forward to hearing from you soon.

Sincerely,

Sean McGeeney, Ed.S.
Principal
Crescent Heights Elementary

Appendix C: AWSP Distribution of Survey Communication with David Morrill

SEAN MCGEENEY

From: David Morrill <david@awsp.org>
Sent: Monday, August 28, 2017 9:00 PM
To: SEAN MCGEENEY
Cc: Ron Sisson; Gary Kipp
Subject: Re: Partnership Proposal for Doctoral Study

Follow Up Flag: FollowUp
Flag Status: Flagged

Thanks for reaching out, Sean. Once you and Ron discuss the survey contents and our mentoring work, we'll help you distribute your survey via Principal Matters and AWSP News. Good data helps us better support principals, so we will gladly help.

David Morrill
Communications Director
Association of Washington School Principals
O: 360.357.7951 - 800.562.6100
M: 360.970.9557
www.awsp.org - @AWSP_Principals

AWSP
ASSOCIATION OF WASHINGTON SCHOOL PRINCIPALS

On Aug 28, 2017, at 8:09 PM, SEAN MCGEENEY <smcgeen@Tacoma.K12.Wa.US> wrote:

Ron,

That is great news about the timing. The principal mentoring program sounds fantastic. I am very excited to hear about that partnership between AWSP and OSPI. I think we could most definitely be able to work together to gather data about the impacts of mentoring on new principals. I would be happy to discuss things further with you and others at AWSP or OSPI. Let's keep in touch and definitely let me know what might work for your calendars to connect and chat further.

Thanks!
Sean McGeeney
Principal
Crescent Heights Elementary

From: Ron Sisson <ron@awsp.org>
Sent: Monday, August 28, 2017 11:41:35 AM
To: SEAN MCGEENEY
Cc: David Morrill; Gary Kipp
Subject: Re: Partnership Proposal for Doctoral Study

Sean,

Your timing on this is great, as AWSP in conjunction with OSPI has just begun formalizing principal mentoring. Our first cohort was trained last May and paired this fall. We are training another cohort in October. We have had several conversations internally as we get up and running about collecting data around the effects of our mentoring program. Let's set up a time to chat or meet to talk more about this. Exciting stuff!!

Ron

From: SEAN MCGEENEY <smcgeen@Tacoma.K12.Wa.US>
Date: Sunday, August 27, 2017 at 10:58 AM
To: David Morrill <david@awsp.org>, Ron Sisson <ron@awsp.org>
Subject: Partnership Proposal for Doctoral Study

Dear Mr. Sisson and Mr. Morrill,

My name is Sean McGeeney and I have the privilege of serving as the principal at Crescent Heights Elementary in Tacoma, as well as being a member of AWSP. I am also a doctoral student at George Fox University in Newberg, Oregon and this fall I am beginning my dissertation phase. I just completed my precis (pre-proposal) stage of my study, which examines the impact mentoring new elementary school principals has on their job satisfaction and retention. I would like to contact elementary principals from across our entire state.

I am writing today to you to explore the possibility of partnering with AWSP with regards to my research. I am interested in knowing if there might be a possibility to working together to distribute the survey to elementary school principals across the state. Upon conclusion of my study, I would be happy to present my research at AWSP conferences, meet with Washington State school district leaders, and submit material for publication consideration.

My study focuses on the impacts of mentoring new elementary principals on their levels of job satisfaction and increased rates of retention. In 2006, Dr. Aycock developed the Principals Induction and Mentoring Survey (PIMS) to measure these outcomes in across the state of Kansas. Her work has been replicated in the states of Virginia and Georgia. It is my sincere hope to add to the literature and expand consideration to the west coast. The professors at George Fox University have expressed excitement and enthusiasm for the possible contributions my study holds to the literature.

I am more than happy to talk to you more about my research and this partnership proposal, as well as address any questions you might have. Please feel free to contact me via phone at my office (253) 571-5551 or cell phone (503) 550-1498 or via email at smcgeen@tacoma.k12.wa.us.

I want to express my thanks to you for your consideration. I look forward to hearing from you soon.

Sincerely,

Sean McGeeney, Ed.S.

Principal
Crescent Heights Elementary

Appendix D: Survey Instrument

Principal and Induction Mentoring Survey (PIMS)

Thank you for taking the time from your busy schedule to open this survey. First, you will be asked several demographic questions, to help with data disaggregation. Next, you will be asked to answer a series of questions about your induction and mentoring experiences. As you answer the questions, please reflect on your experiences during your **FIRST YEAR** as a building principal. The survey will take approximately 10-15 minutes to complete.

1. This is my _____ year as a building principal.

    - First
    - Second
    - Third
    - Fourth
    - Fifth
    - Sixth or more

2. Indicate your total years of TEACHING experience. (Do not count administrative experience).

    - Less than 3 years
    - 3-5 years
    - 6-10 years
    - 11-15 years
    - 16+ years

3. Indicate the subjects you taught prior to beginning your career as a building principal. (Mark all that apply).

    - Elementary – classroom
    - Elementary – enrichment (PE, Music, Art, etc.)
    - Secondary – core subject
    - Secondary – elective (PE, Band, Art, Industrial Arts, etc.)
    - Other: [ ]

4. Have you served as the PRINCIPAL in a building you taught in?

    - Yes
    - No

5. How many years (including this year) have you served as the principal in the CURRENT build you work in?

- One
- Two
- Three
- Four
- Five

6. Please indicate your gender.

   - Male
   - Female

7. With consideration to configuration, what grade levels does your school currently serve? (Mark all that apply.)

   - Pre-K
   - K
   - First
   - Second
   - Third
   - Fourth
   - Fifth
   - Sixth
   - Seventh
   - Eighth
   - Other: ☐

8. What is the current enrollment of the BUILDING you serve?

   - 100 or less
   - 101-200
   - 201-300
   - 301-400
   - 401-400
   - 501-1,000
   - 1,000+

9. What is your school district's student enrollment?

    - 0-999
    - 1,000-4,999
    - 5,000-9,999
    - 10,000+

10. Read each statement carefully; mark the response that most accurately reflects the experiences you had during your **FIRST YEAR** as a building principal.

	Absolutely	**Mostly**	**Sometimes**	**Never**	**Don't Know**
I was given the opportunity to observe the practice of highly effective, experienced principals so I could learn from them.	○	○	○	○	○
I was part of a support group made up of other beginning principals.	○	○	○	○	○
I received emotional support/encouragement from colleagues during my first year as a building principal.	○	○	○	○	○
My support system continued after the first year.	○	○	○	○	○
I know I made the right decision to become a principal.	○	○	○	○	○
My superintendent/supervisor offers feedback concerning my professional performance	○	○	○	○	○
I believe the parents at my school have confidence in my abilities as a principal.	○	○	○	○	○
I believe the staff at my school has confidence in my abilities as a principal.	○	○	○	○	○
I like my current school.	○	○	○	○	○
I like my current school's size.	○	○	○	○	○
I like the grade configuration/grade levels of the building I serve.	○	○	○	○	○

11. Read each statement carefully; mark the response that most accurately reflects your future career plans.

	Absolutely	Mostly	Sometimes	Never	Don't Know
I plan to stay at this school, in this administrative position, for the foreseeable future.	○	○	○	○	○
Thinking five years ahead, I hope to still be serving as a building principal.	○	○	○	○	○
Thinking five years ahead, I'm planning on moving to a district office position.	○	○	○	○	○
If I could earn as much money in another profession, I would leave the principalship.	○	○	○	○	○

12. I am a member of the following professional organizations. (Mark all that apply.)

- ○ AWSP
- ○ WASA
- ○ WSSDA
- ○ NAESP
- ○ NASSP
- ○ ASCD
- ○ Other: [ ]

13. I received support as I began the principalship from: (Mark all that apply)

- ○ Other principals in my district
- ○ Another principal outside my district
- ○ Other beginning principals
- ○ Central office administrators
- ○ Service Center consultants
- ○ Other outside consultants
- ○ College or university professors
- ○ State professional organizations
- ○ National professional organizations
- ○ Other: [ ]

14. For the purposes of this study, a **MENTOR** is defined as an experienced individual that provides support, modeling, and other services to a beginning principal.
    As a beginning principal, I received the support/assistance of an individual I consider to be a mentor.
    - o Yes
    - o No

15. Generally, two types of mentoring take place: formal and informal.

    For the purposes of this study…
    a **FORMAL MENTORING** program is defined as a structured support system designed to provide planned, organized training and assistance to the beginning principal for a period of at least one year.

    INFORMAL MENTORING is defined as mentoring without established guidelines. This type of mentoring is usually between two individuals. The person serving as a mentor generally has a vested interest in the protégé, such as a co-worker or friend.

    According to the definitions listed above, the type of mentoring I was involved in as a first-year principal is best described as:

    - o A **FORMAL** mentoring program
    - o **INFORMAL** mentoring

16. The person who served as my primary mentor is best described as:

    - o A colleague in my school district
    - o An administrator from another school district assigned to me
    - o An administrator from another school district that I knew prior to starting my principalship
    - o A college/university professor
    - o A representative from a professional organization
    - o An employee from an educational service district
    - o Other: ☐

17. Was the gender of your mentor a match to your gender?

    - o Yes
    - o No

18. Mentoring can be provided using a variety of approaches (i.e. e-mail, phone conversations, and face-to-face meetings).

    Please identify **ALL** the mentoring methods you and your mentor utilized.

    - ○ Visits and meeting at the job site of my mentor
    - ○ Personal visits from my mentor to my school
    - ○ Visits and meeting at a site off of school grounds
    - ○ Telephone calls
    - ○ Emails
    - ○ Other: [ ]

19. Read each statement carefully; mark the response that most accurately reflects the experiences you had with your **MENTOR** during your **FIRST YEAR** as a building principal.

	Absolutely	**Mostly**	**Sometimes**	**Never**	**Don't Know**
My mentor provided an orientation where information was provided to help me know how to function in the school district.	○	○	○	○	○
My mentor helped me develop strategies to meet my individual strengths/needs.	○	○	○	○	○
At various times throughout my first year, my mentor helped me to reevaluate my changing strengths/needs.	○	○	○	○	○
My mentor observed me interact with teachers and students and offered feedback from the observation.	○	○	○	○	○
My mentor's advice truly helped me as a beginning principal.	○	○	○	○	○
The roles and responsibilities of my mentor were clear to me.	○	○	○	○	○
My mentor and I met on a regularly scheduled basis.	○	○	○	○	○
My mentor helped me gain an understanding of the community and its culture.	○	○	○	○	○
My mentor and I formed a strong, collegial relationship.	○	○	○	○	○

20. Would you like to receive a copy of the results from this study?

    - Yes
    - No

21. You've indicated you would like to receive a copy of the results from this study. Please enter your email in the text box below.

22. Thank you participating in this survey. If you would like to enter for the raffle for the INCENTIVE, please enter your email in the text box below:

Appendix E: Lavene's Tests for Equality of Variances

Table E1

Lavene's Test for Equality of Variances for Overall Job Satisfaction

Dependent Variable	F	Sig.
Job Satisfaction	1.402	0.243
Working Conditions	4.609	0.037
Organizational Support	0.373	0.545
Commitment to the Position	2.857	0.098
Feedback	0.882	0.353
Compensation	1.559	0.219

Table E2

Lavene's Test for Equality of Variances for Gender and Job Satisfaction for Mentored Principals

Dependent Variable	F	Sig.
Job Satisfaction	0.148	0.703
Working Conditions	0.003	0.958
Organizational Support	2.191	0.150
Commitment to the Position	1.598	0.217
Feedback	0.302	0.587
Compensation	4.025	0.055

Table E3

Lavene's Test for Equality of Variances Gender and Job Satisfaction for Principals who were Not Mentored

Dependent Variable	F	Sig.
Job Satisfaction	0.937	0.350
Working Conditions	0.049	0.827
Organizational Support	1.029	0.327
Commitment to the Position	1.848	0.195
Feedback	0.024	0.880
Compensation	0.613	0.447